



Federal Subsistence Board Meeting

**Review of Fisheries Proposals
January 18–20, 2011**

**Discuss and Develop Approach
to Tribal Consultation
January 21, 2011**

**Egan Civic and
Convention Center,
555 West 5th Avenue
Anchorage, Alaska**

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DRAFT
FEDERAL SUBSISTENCE BOARD
PUBLIC MEETING AGENDA

10:00 a.m. – 5:00 p.m. January 18, 2011
8:30 a.m. – 5:00 p.m. January 19–20, 2011

Egan Civic and Convention Center, 555 West 5th Avenue
Anchorage, Alaska

- 1. Call to Order and Introductions**
- 2. Corrections/Additions to the Agenda**
- 3. Board Discussion of Council Topics with Regional Advisory Council Chairs or their Designees**
- 4. Public Comment Period on Non-Agenda Items**
(This opportunity is available at the beginning of each day)
- 5. Tribal Consultation on Fisheries Regulatory Proposals**
(This will occur on the first day)
- 6. Public Comment Period on Consensus Agenda Items**
(This opportunity is available at the beginning of each day)
- 8) 2011–2013 Subparts C&D Proposals (Fisheries Regulations)**
 - A. Announcement of Consensus Agenda
 - B. Board deliberation and action on Non-Consensus Proposals
 - C. Adoption of Consensus Agenda
- 7. Other Business**
- 8. Adjourn**

Note: *The meeting will begin at 10:00 a.m. on the first day and 8:30 a.m. on the second and third days. Each day the meeting is scheduled to end at 5:00 p.m., however, the Board may call a recess prior to this time.*

If you are unable to attend in person, but would like to listen in or to provide testimony, please contact Gary Goldberg by January 12, 2011 at gary_goldberg@fws.gov, or (907) 786-3834/800-478-1456. He will provide you information on how to participate by teleconference.

The Federal Subsistence Board is committed to providing access to this meeting for all persons interested in attending. Please direct requests for accommodation of disabilities, such as sign language interpreting, to gary_goldberg@fws.gov, or call (907) 786-3834/800-478-1456 no later than 5:00 p.m. Thursday, January 6, 2011.

DRAFT
FEDERAL SUBSISTENCE BOARD
PUBLIC MEETING AGENDA
9:00 a.m. – 5:00 p.m. January 21, 2011

- 1. Call to Order and Introductions**
- 2. Scope and Develop Programmatic Approach to Tribal Consultation**
 - A. Background and Purpose
 - B. Board listening session with Tribal leaders
 - C. Next steps
- 3. Adjourn**

Note: The meeting is scheduled to end at 5:00 p.m., however, the Board may call a recess prior to this time.

If you are unable to attend in person, but would like to listen in or to provide testimony, please contact Gary Goldberg by January 12, 2011 at gary_goldberg@fws.gov, or (907) 786-3834/800-478-1456. He will provide you information on how to participate by teleconference.

The Federal Subsistence Board is committed to providing access to this meeting for all persons interested in attending. Please direct requests for accommodation of disabilities, such as sign language interpreting, to gary_goldberg@fws.gov, or Gary Goldberg (907) 786-3834/800-478-1456 no later than 5:00 p.m. Thursday, January 6, 2011.

**FEDERAL SUBSISTENCE BOARD
REGULATORY CONSENSUS AGENDA ITEMS**

The following proposals have been included on the consensus agenda. These are proposals for which there is agreement among Federal Subsistence Regional Advisory Councils, the Federal Interagency Staff Committee, and the Alaska Department of Fish and Game concerning Board action. Anyone disputing the recommendation on a proposal may request that the Board remove the proposal from the consensus agenda and place it on the regular agenda. The Board retains final authority for removal of proposals from the consensus agenda. The Board will take final action on the consensus agenda after deliberation and decisions on all other proposals.

Proposal	Recommendation	Page
Yukon-Northern Area		
FP11-04: Prohibit use of fishwheels to harvest salmon in Yukon River Districts 4 and 5	Oppose	155
FP11-06*: Restrict depth of gillnets	Oppose	63

**FP11-01/-06 were combined for the purposes of analysis; however, for purposes of Board action -01 is on the non-consensus agenda, while -06 is part of the consensus agenda.*

**FEDERAL SUBSISTENCE BOARD
REGULATORY NON-CONSENSUS AGENDA PROPOSALS**

Procedure for considering proposals:

- 1) Analysis presentation (lead author)
- 2) Summary of written public comments (Regional Council Coordinator)
- 3) Open floor to public testimony
- 4) Regional Council recommendation (Chair or designee)
- 5) Alaska Department of Fish and Game comments
- 6) Interagency Staff Committee comments (ISC Chair)
- 7) Board discussion with Council Chairs and State Liaison
- 8) Federal Subsistence Board deliberation and action

Proposal	Page
Yukon-Northern Area	
FP11-05 Prohibit customary trade of salmon and use of salmon for dog food in Yukon River Districts 4 and 5 (David Jenkins)	8
FP11-08 Prohibit customary trade of salmon in the Yukon River Fisheries Management Area in any year Chinook subsistence harvests are restricted (David Jenkins)	31
FP11-09 Limit customary trade of Chinook salmon in the Yukon River Fisheries Management Area and require a customary trade record keeping form (David Jenkins)	46
FP11-01* Restrict depth of gillnets (Rich Cannon)	63
FP11-02 Yukon River Chinook salmon conservation plan (Rich Cannon)	84
FP11-03 Define additional subdistricts for the upper Yukon River (Rich Cannon)	120
FP11-07 Prohibit use of drift gillnets to harvest salmon in Yukon River Districts 4 and 5 (Rich Cannon)	137
Chignik Area	
FP11-10 Open closed sections of Chignik River fishery and expand allowable gear (Alicia Davis)	169
Kodiak Area	
FP11-11 Reduce harvest limit of King crab (Steve Fried)	196
FP11-12 <i>Withdrawn by proponent:</i> Establish harvest limit of herring	NA

**FP11-01/-06 were combined for the purposes of analysis; however, for purposes of Board action -01 is on the non-consensus agenda, while -06 is part of the consensus agenda.*

Proposal	Page
Kodiak Area (Continued)	
FP11-13 Revise harvest limit of salmon (Steve Fried)	209
FP11-14 <i>Withdrawn by proponent:</i> Clarify use of subsistence caught salmon	NA
FP11-15 <i>Withdrawn by proponent:</i> Revise fishing times for salmon to align with State regulations	NA
Southeast Alaska and Yakutat Areas	
FP11-16/-17 Extend Klawock sockeye salmon fishery season (Jeff Reeves)	230
FP11-18 Eulachon closure for Sections 1C and 1D, Unuk River (Robert Larson)	244
FP11-19 <i>Withdrawn by proponent:</i> Customary and traditional use in District 13	NA
FP09-05 Deferred <i>Request from proponent to further defer:</i> Makhnati Island herring (Terry Suminski)	255
FP09-15 Deferred Customary and traditional use in the Juneau road system area (Pippa Kenner)	277

NOTE TO THE READER: For proposal analyses that affect the Yukon River management area, 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.

FP11-05 Executive Summary	
General Description	<p>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. <i>Submitted by Mountain Village Working Group</i></p>
Proposed Regulation	<p>§ ____. 27(c)(11) <i>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></p> <p style="text-align: center;">(iii) In Yukon River Districts 4 and 5, salmon may not be sold under customary trade.</p> <p>§ ____. 27(c)(12) <i>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></p> <p style="text-align: center;">(iii) In Yukon River Districts 4 and 5, salmon may not be sold under customary trade.</p> <p>§ ____. 27(i)(3)(xxi) <i>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, 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:</i></p> <p style="padding-left: 40px;"><i>(A) After July 10 in the Koyukuk River drainage;</i></p> <p style="padding-left: 40px;"><i>(B) After August 10, in Subdistrict 5D, upstream of Circle City.</i></p>

continued on next page

FP11-05 Executive Summary (continued)	
OSM Conclusion	Oppose
Yukon/Kuskokwim Delta Regional Council Recommendation	Oppose
Western Interior Regional Council Recommendation	Oppose
Seward Peninsula Regional Council Recommendation	Oppose
Eastern Interior Regional Council Recommendation	Oppose
Interagency Staff Committee Comments	See comments following the analysis.
ADF&G Comments	See comments following the analysis.
Written Public Comments	<p>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.</p> <p>10 Oppose</p>

STAFF ANALYSIS FP11-05

ISSUES

Proposal FP11-05, submitted by 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.

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

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(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) includes customary trade as a subsistence use (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 customary trade or a significant commercial enterprise, which is illegal. 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 and to prevent abuses under 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. 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.

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

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

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 the first page 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 Moncrieff'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 Moncrieff (2007), indicate similar patterns of customary trade. Some of the key findings from these studies include the following (Krieg 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 and requested clarification from the Federal Subsistence Board regarding customary trade. Specific concerns were 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 a 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 and the Eastern Interior Alaska Subsistence Regional Advisory Council were also concerned with customary trade in the context of low salmon runs. The Fairbanks Fish and Game Advisory Committee 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 Fairbanks Fish and Game Advisory Committee 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 a joint meeting of the Western and Eastern Interior Alaska Subsistence Regional Advisory Councils on February 23–26, 2010, a number of concerns were 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 and 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 and 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 and 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 and 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).

Over the last several years concern has been expressed over potential abuses occurring related to the customary trade of subsistence harvested salmon, primarily Chinook salmon. In response, and in light of poor returns of salmon and decreased opportunities for both commercial and subsistence fishing, the USFWS Office of Law Enforcement initiated an investigation to document potential violations. The investigation became public when officers and agents conducted interviews in many villages along the Yukon River, in Anchorage and Fairbanks and other locations. Several search warrants were served on individuals who may have been involved in illegal sales. Documented violations include the sale of fish caught from state waters, interstate sales to business, and sales of salmon strips in violation of State health requirements. The investigation is ongoing.

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 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 (See **Table 1**):

- 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):

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,

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

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 transportation; 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 transportation; 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 as subsistence uses in ANILCA. 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.

This section reads as follows:

Except as otherwise provided in this Act and other Federal laws, the taking on public lands of fish and wildlife for nonwasteful subsistence uses shall be accorded priority over the taking on such lands of fish and wildlife for other purposes. Whenever it is necessary to restrict the taking of populations of fish and wildlife on such lands for subsistence uses in order to protect the continued viability of such populations, or to continue such uses, such priority shall be implemented through appropriate limitations based on the application of the following criteria:

- (1) customary and direct dependence upon the populations as the mainstay of livelihood;
- (2) local residency; and
- (3) the availability of alternative resources.

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 in Districts 4 and 5. However, the target of the proposal appears not to be 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 rise to the level of significant commercial enterprise.

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 might accelerate.

Moreover, under ANILCA, no subsistence use takes precedence over any other subsistence use. 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 CONCLUSION

Oppose Proposal FP11-05.

Justification

The proposal would prohibit customary trade of salmon. Customary trade is included as a subsistence use in ANILCA. The target of the proposal appears not to be customary trade, but rather sales that may rise to the level of significant commercial enterprise, which is not defined for the Yukon Region.

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 might accelerate.

Based on discussions in all three Regional Advisory Council meetings this fall, it may be timely to develop regulations to define significant commercial enterprise for the Yukon River. A solution to the problem of defining significant commercial enterprise would need to be worked out by all three Councils as a unified approach applicable to the entire river. The proposal as written is not such a vehicle, evidenced by its rejection by all three Regional Advisory Councils.

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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 recognize 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.

REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Yukon/Kuskokwim Delta Regional Council Recommendation

Oppose Proposal FP11-05. Written comments from the affected area oppose the proposal.

Western Interior Alaska Regional Advisory Council

Oppose Proposal FP11-05. This proposal is restrictive and targets Districts Y4 and Y5 subsistence users.

Seward Peninsula Regional Council Recommendation

Oppose Proposal FP11-05. If something were to be done, it should be done drainage wide and this proposal only addresses Districts 4 and 5. The Council supports limits on significant commercial enterprise, but is opposed to limits on customary trade. Managers should manage and not worry about what people do with the fish after it is legally harvested.

Eastern Interior Alaska Regional Council Recommendation

Oppose Proposal FP11-05. The Council acknowledges that the use of salmon for dog food is an established traditional subsistence use of salmon, particularly salmon that are not as highly valued by humans for food. The Council considered personal knowledge of the declining numbers of both mushers and dogs in the affected area, and that current trends indicate that salmon is rarely, if ever, the sole source of food for dog teams, resulting in a very limited salmon take for this purpose. The proposal would not accomplish a significant conservation objective.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a complete and accurate evaluation of the proposal and the recommendations of all four Regional Advisory Councils to be supported by substantial evidence, consistent with recognized principles of conservation, and appropriately allow for the continuation of subsistence uses. The Interagency Staff Committee notes that this proposal requests the elimination of two subsistence uses, namely the use of salmon to feed dogs, and customary trade of salmon. The Board may want to consider the two uses separately.

Alaska Department of Fish and Game
Comments to Federal Subsistence Board

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 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 expressly prohibit sale of subsistence-harvested fish² while federal regulations allow for cash sales. 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, both processed and whole, is occurring in both urban and rural communities in Alaska, contrary to existing state and federal regulations. A US Fish and Wildlife Service law enforcement officer provided information at the November 2010 Federal Subsistence Board meeting regarding a federal investigation. Discrepancies in state and federal regulations, plus state requirements regarding processing of fish to protect public health and safety, may leave some subsistence fishermen 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,

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;

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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.

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. 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. 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

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

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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).

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

Recommendations: This proposal consists of two components:

1. The department opposes prohibiting use of salmon, other than Chinook salmon, for dog food in subdistricts 4 and 5 and restricting use of Yukon River Chinook salmon harvested incidental to other fisheries for dog food beyond that which is already provided by state regulation.
2. The department supports the modification recommended by Yukon Kuskokwim Delta Regional Advisory Council to establish a \$750 limit of sales between “federally qualified and others” and to require a permit and reporting of this customary trade between “federally qualified and others” as a first step. The department recommends that limits be established by numbers of salmon. The department also supports the proposed joint meeting of the regional councils in the Yukon River drainage and supports the Western and Eastern Interior councils recommendation to form a subcommittee/workgroup to address all three proposals regarding customary trade of salmon in the Yukon River drainage. We support the Eastern Interior Regional Advisory Council request that the subcommittee/workgroup meet in Fairbanks on March 1 and 2, 2011, in advance of the regularly scheduled winter council meeting. The department urges that this workgroup and joint Regional Advisory Council meeting process, including final action by the Federal Subsistence Board, be completed prior to the 2011 salmon season.

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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 life, 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 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 ourselves, 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 life if we couldn't feed 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

FP11-08 Executive Summary	
General Description	<p>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. <i>Submitted by the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council</i></p>
Proposed Regulation	<p>§ __. 27(c)(11) <i>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></p> <p style="padding-left: 40px;"><i>(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.</i></p> <p style="padding-left: 40px;"><i>(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.</i></p> <p style="padding-left: 40px;"><i>(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.</i></p>
OSM Conclusion	Oppose

continued on next page

FP11-08 Executive Summary (continued)	
Yukon/Kuskokwim Delta Regional Council Recommendation	<p>Support Proposal FP11-08 with Modification to delete all proposed language under (iii) and replace with the following:</p> <p><i>(iii) Yukon River Fishery Management Area—The total cash value per household of salmon taken within Federal jurisdiction in the Yukon River Fishery Management Area and exchanged in customary trade to rural residents may not exceed \$750.00 annually.</i></p>
Western Interior Regional Council Recommendation	Oppose
Seward Peninsula Regional Council Recommendation	Took no action
Eastern Interior Regional Council Recommendation	Oppose
Interagency Staff Committee Comments	See comments following the analysis.
ADF&G Comments	Support with modification. The department supports the modification recommended by Yukon Kuskokwim Delta Regional Advisory Council to establish a \$750 limit of sales between “Federally qualified and others” and to require a permit and reporting of this customary trade between “Federally qualified and others” as a first step. The department recommends that limits be established by numbers of salmon.
Written Public Comments	1 Support 4 Oppose

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 Staff Analysis FP11-05.

Customary Trade

See Staff Analysis FP11-05.

Recent Concerns

See 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.

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.

This section reads as follows:

Except as otherwise provided in this Act and other Federal laws, the taking on public lands of fish and wildlife for nonwasteful subsistence uses shall be accorded priority over the taking on such lands of fish and wildlife for other purposes. Whenever it is necessary to restrict the taking of populations of fish and wildlife on such lands for subsistence uses in order to protect the continued viability of such populations, or to continue such uses, such priority shall be implemented through appropriate limitations based on the application of the following criteria:

- (1) customary and direct dependence upon the populations as the mainstay of livelihood;*
- (2) local residency; and*
- (3) the availability of alternative resources.*

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 CONCLUSION

Oppose Proposal FP11-08.

Justification

Customary trade is recognized as a subsistence use in 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. 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. The threshold for a significant commercial enterprise, however, 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]n 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.”

In order to align the proposal with the apparent concern over the conduct of customary trade in urban centers of Alaska, the Federal Subsistence Board 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 as a subsistence use in ANILCA. 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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REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Yukon/Kuskokwim Delta Regional Council Recommendation

Support Proposal FP11-08 **with Modification** to delete all proposed language under (iii) and replace with the following:

(iii) Yukon River Fishery Management Area—The total cash value per household of salmon taken within Federal jurisdiction in the Yukon River Fishery Management Area and exchanged in customary trade to rural residents may not exceed \$750.00 annually.

The Council supports proposals to prohibit customary trade until salmon runs rebound. This issue needs to be addressed for both Chinook and chum salmon. This is a river wide issue and it is up to the people to conserve salmon. There are also reports of abuse of customary trade.

Western Interior Alaska Regional Advisory Council

Oppose Proposal FP11-08. The Council moved to request the Board to establish a subcommittee to further address the customary trade issue. The subcommittee would be charged to address Yukon River Chinook salmon customary trade regulation development and would consist of participants from each of the three Yukon River Regional Advisory Councils and relevant State fish and game advisory committees. The Council named Robert Walker and Mickey Stickman to serve on this subcommittee, with Ray Collins and Jenny Pelkola named as alternates. The Council also recommended that a second subcommittee be charged to address Yukon River Chinook salmon management for improved escapement abundance and quality, and that this second subcommittee should meet immediately following meetings of the customary trade subcommittee for purposes of efficiency.

Seward Peninsula Regional Council Recommendation

Took no action on Proposal FP11-08. The Council voted to take no action, but supported the idea of a working group that includes representatives from all three affected Regional Advisory Councils to address this long standing and ongoing issue.

Eastern Interior Alaska Regional Council Recommendation

Oppose Proposal FP11-08. The Council recognizes the need for conservation measures, but has serious concerns with the potential for this proposal, as written, to negatively impact the ability of subsistence users to obtain enough fish if unable to personally do so — especially elders. There are additional concerns about the proposal's effect of inequity, as lower river users have access to disproportionately larger harvests even when total numbers are low. The Council also noted that trade of processed fish products is already regulated. The Council recommends that the Federal Subsistence Board establish a subcommittee consisting of representatives of the Eastern Interior Alaska, Western Interior Alaska and Yukon/Kuskokwim Delta Regional Advisory Councils to consider the customary trade issue on a compressed time frame.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a complete and accurate evaluation of the proposal. Discussions at recent Regional Advisory Council meetings clearly recognize both

the importance of customary trade to subsistence users along the Yukon River, as well as the need for achieving river-wide resolution to address this complex and controversial issue. Without further discussion by all three Councils, the Interagency Staff Committee feels that it is premature to establish limits on customary trade by defining what constitutes a significant commercial enterprise and is supportive of the request from two of the Regional Advisory Councils to have representatives of all three Regional Advisory Councils meet to discuss and develop possible solutions to this ongoing issue. The Interagency Staff Committee suggests that the Federal Board could either oppose the proposal, or it could defer the proposal until a mutually agreed upon solution is offered by the three Councils.

This proposal requests that customary trade be prohibited only when the Chinook salmon run is not sufficient to meet subsistence needs and the harvest is restricted, thus suggesting that if a conservation concern exists, the Board could eliminate a specific subsistence use. Customary trade is a subsistence use identified in ANILCA and eliminating that particular use rather than prioritizing among Federally qualified subsistence users to address a conservation concern would represent a departure from both Board practice and ANILCA. Section 804 of ANILCA provides a subsistence priority for the taking of fish and wildlife on Federally administered lands and waters. Whenever it is necessary to restrict the subsistence uses of populations of fish and wildlife on these lands, in order to protect the continued viability of fish and wildlife populations, or to continue the use of these populations, such a priority will be implemented through appropriate limitations. These limitations are based on the application of three criteria, including: customary and direct dependence upon the populations as a mainstay of livelihood; local residency or proximity to the resource; and availability of alternative resources.

ADF&G Comments on FP11-08
November 30, 2010; Page 1 of 3

Alaska Department of Fish and Game
Comments to Federal Subsistence Board

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 trade¹ 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 expressly prohibit sale of subsistence harvested fish² while federal regulations allow for cash sales. 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, both processed and whole, is occurring in both urban and rural communities in Alaska, contrary to existing state and federal regulations. A US Fish and Wildlife Service law enforcement officer provided information at the November 2010 Federal Subsistence Board meeting regarding a federal investigation. 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

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;

ADF&G Comments on FP11-08
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regarding existing levels of harvest and actual sales of subsistence harvested Chinook salmon. 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 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 clarify federal subsistence law, facilitate enforcement against unlawful sales of subsistence harvested salmon, and reduce the risk of citation of law-abiding subsistence fishermen in the Yukon River drainage.

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,

⁴ 5 AAC 01.188 and 5 AAC 01.717

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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 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 numbers of fish sold and 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 clarity and education on state and federal regulations and an enforceable definition on what constitutes a significant commercial enterprise are needed.

Recommendation: Support with modification. The department supports the modification recommended by Yukon Kuskokwim Delta Regional Advisory Council to establish a \$750 limit of sales between “federally qualified and others” and to require a permit and reporting of this customary trade between “federally qualified and others” as a first step. The department recommends that limits be established by numbers of salmon.

The department also supports the proposed joint meeting of the regional councils in the Yukon River drainage and supports the Western and Eastern Interior councils recommendation to form a subcommittee/workgroup to address all three proposals regarding customary trade of salmon in the Yukon River drainage. We support the Eastern Interior Regional Advisory Council request that the subcommittee/workgroup meet in Fairbanks on March 1 and 2, 2011, in advance of the regularly scheduled winter council meeting. The department urges that this workgroup and joint Regional Advisory Council meeting process, including final action by the Federal Subsistence Board, be completed prior to the 2011 salmon season.

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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)

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 here 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 on 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 anywhere 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. <i>Submitted by the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council</i>
Proposed Regulation	<i>See the analysis for the proposed regulation.</i>
OSM Conclusion	Oppose
Yukon/Kuskokwim Delta Regional Council Recommendation	Support Proposal FP11-09 with Modification to delete all proposed language under (iii) and replace with the following: <i>Yukon River Fishery Management Area—The total cash value per household of salmon taken within Federal jurisdiction in the Yukon River Fishery Management Area and exchanged in customary trade between rural residents and individuals other than rural residents may not exceed \$750.00 annually. These customary trade sales must be immediately recorded on a customary trade record keeping form. The recording requirement and the responsibility to ensure the household limit is not exceeded rest with the seller.</i>
Western Interior Regional Council Recommendation	Oppose
Seward Peninsula Regional Council Recommendation	Oppose
Eastern Interior Regional Council Recommendation	Take no action
Interagency Staff Committee Comments	See comments following the analysis.
ADF&G Comments	Support with modification. The department supports the modification recommended by Yukon Kuskokwim Delta Regional Advisory Council to establish a \$750 limit of sales between “Federally qualified and others” and to require a permit and reporting of this customary trade between “Federally qualified and others” as a first step. The department recommends that limits be established by numbers of salmon.
Written Public Comments	1 Support 5 Oppose

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 from 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 Staff Analysis FP11-05

Customary Trade

See Staff Analysis FP11-05

Recent Concerns

See Staff Analysis FP11-05

Customary Trade Reporting Requirement

As noted in the 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 requested for the Bristol Bay Fishery Management Area since the February 2004 regulation was published requiring use of such a form. Jerry Berg (2010, pers. comm.), subsistence coordinator for U.S. Fish and Wildlife Service, however, reports that three customary trade forms were requested and returned in 2004.

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 requested 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 regulations.

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. Three recordkeeping forms were requested for the Bristol Bay Area in 2004. Since then, there have been no further requests for recordkeeping forms 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 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.

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

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 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 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.

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 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. Bristol Bay and the Upper Copper River have such reporting requirements. The number of recordkeeping forms requested and returned remains very small in both the Upper Copper River and the Bristol Bay Area. Similar limited use of the recordkeeping form may occur in the Yukon River Management Area.

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

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)
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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

REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Yukon/Kuskokwim Delta Regional Council Recommendation

Support Proposal FP11-09 **with Modification** to delete all proposed language under (iii) and replace with the following:

Yukon River Fishery Management Area—The total cash value per household of salmon taken within Federal jurisdiction in the Yukon River Fishery Management Area and exchanged in customary trade between rural residents and individuals other than rural residents may not exceed \$750.00 annually. These customary trade sales must be immediately recorded on a customary trade record keeping form. The recording requirement and the responsibility to ensure the household limit is not exceeded rest with the seller.

There is a need for measurable enforcement tools to address commercial advertisements that are escalating under the guise of subsistence customary trade. There should be a dollar limit of \$750.00 annually because there is no limit now.

Western Interior Alaska Regional Advisory Council

Oppose Proposal FP11-09. The Council moved to request the Board to establish a subcommittee to further address the customary trade issue. The subcommittee charge would be as noted for FP11-08.

Seward Peninsula Regional Council Recommendation

Oppose Proposal FP11-09. The Council opposed the proposal, but supports the idea of having representatives from the three affected Regional Advisory Councils get together and try to resolve these long standing contentious issues.

Eastern Interior Alaska Regional Council Recommendation

Take no action on Proposal FP11-09. Given the desire of the Council to work with the other affected Councils in a subcommittee related to this proposal, the Council feels that a full examination of the proposal is not warranted at this time. It was noted that there is some merit to the proposal objective, but specifics regarding poundage and record keeping requirements were insufficient. The Council also questioned the possible commitment of managers to enforce the proposal, if adopted.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a complete and accurate evaluation of the proposal. Discussions at recent Regional Advisory Council meetings clearly recognize both the importance of customary trade to subsistence users along the Yukon River, as well as the need for achieving river-wide resolution to address this complex and controversial issue. Without further discussion by all three Councils, the Interagency Staff Committee feels that it is premature to establish limits on customary trade by defining what constitutes a significant commercial enterprise and is supportive of the request from two of the Regional Advisory Councils to have representatives of all three Regional Advisory Councils meet to discuss and develop possible solutions to this ongoing issue. The

Interagency Staff Committee suggests that Federal Board could either oppose the proposal, or it could defer the proposal until a mutually agreed upon solution is offered by the three Councils.

ADF&G Comments on FP11-09
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Alaska Department of Fish and Game
Comments to Federal Subsistence Board

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 trade¹ 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 expressly prohibit sale of subsistence harvested fish² while federal regulations allow cash sales. 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. A US Fish and Wildlife Service law enforcement officer provided information at the November 2010 Federal Subsistence Board meeting regarding a federal investigation. Discrepancies in state and federal regulations and state requirements regarding processing of fish to protect public health and safety may leave subsistence fishermen 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 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

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;

ADF&G Comments on FP11-09
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of each sale, type of processing used, and any other information the federal agency requires for 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.

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 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 clarify federal subsistence law, facilitate enforcement against unlawful sales of subsistence harvested salmon, and reduce the risk of citation of law-abiding 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 Alaska⁴.

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,

⁴ 5 AAC 01.188 and 5 AAC 01.717

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November 30, 2010, Page 3 of 4

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 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: This proposal may provide needed enforceable customary trade regulations that specify limits on cash sales and establish reporting requirements. 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 clarity and education on state and federal regulations and an enforceable definition of “significant commercial enterprise” are needed.

Recommendation: Support with modification. The department supports the modification recommended by Yukon Kuskokwim Delta Regional Advisory Council to establish a \$750 limit of sales between “federally qualified and others” and to require a permit and reporting of this customary trade between “federally qualified and others” as a first step. The department recommends that limits be established by numbers of salmon.

The department also supports the proposed joint meeting of the regional councils in the Yukon River drainage and supports the Western and Eastern Interior councils recommendation to form a subcommittee/workgroup to address all three proposals regarding customary trade of salmon in the Yukon River drainage. We support the Eastern Interior Regional Advisory Council request that the subcommittee/workgroup meet in Fairbanks on March 1 and 2, 2011, in advance of the regularly scheduled winter council meeting. The department urges that this workgroup and joint Regional Advisory Council meeting process, including final action by the Federal Subsistence Board, be completed prior to the 2011 salmon season.

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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 single Native person who cannot share what she/he has. Whoever thought of this is crazy.

Letter Signed by Thirty-seven Residents of Galena

FP11-01/06 Executive Summary	
General Description	<p>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. <i>Submitted by the Eastern Interior Alaska Subsistence Regional Advisory Council</i></p> <p>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. <i>Submitted by the Mountain Village Working Group</i></p>
Proposed Regulation	<p>§ __.27(i)(3)(xiii) <i>You may take salmon only by gillnet, beach seine, fish wheel, or rod and reel, subject to restrictions set forth in this section.</i></p> <p style="padding-left: 40px;"><i>(A) In the Yukon River drainage, the maximum gillnet size is 7.5 inch stretch mesh for subsistence salmon fishing in Federal public waters.</i></p> <p style="padding-left: 40px;"><i>(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.</i></p> <p style="padding-left: 40px;"><i>(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.</i></p> <p>§ __.27(i)(3)(xv) <i>In Districts 4, 5, and 6, you may not take salmon for subsistence purposes by drift gillnets, except as follows:</i></p> <p style="padding-left: 40px;"><i>(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;</i></p> <p style="padding-left: 40px;"><i>(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.</i></p> <p style="padding-left: 40px;"><i>(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)</i></p>
OSM Conclusion	Oppose Proposals FP11-01/06.

continued on next page

FP11-01/ 06 Executive Summary (continued)	
Yukon/Kuskokwim Delta Regional Council Recommendation	Oppose Proposals FP11-01/06.
Western Interior Regional Council Recommendation	Oppose Proposals FP11-01/06.
Seward Peninsula Regional Council Recommendation	Oppose Proposals FP11-01/06.
Eastern Interior Regional Council Recommendation	Defer Proposal FP11-01. Oppose Proposal FP11-06.
Interagency Staff Committee Comments	See comments following the analysis.
ADF&G Comments	Oppose Proposals FP11-01/06.
Written Public Comments	3 Support Proposal FP11-01. 4 Oppose Proposal FP11-01. 8 Oppose Proposal FP11-06.

STAFF ANALYSIS FP11-01/06

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 FP11-02.

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 equivalent 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

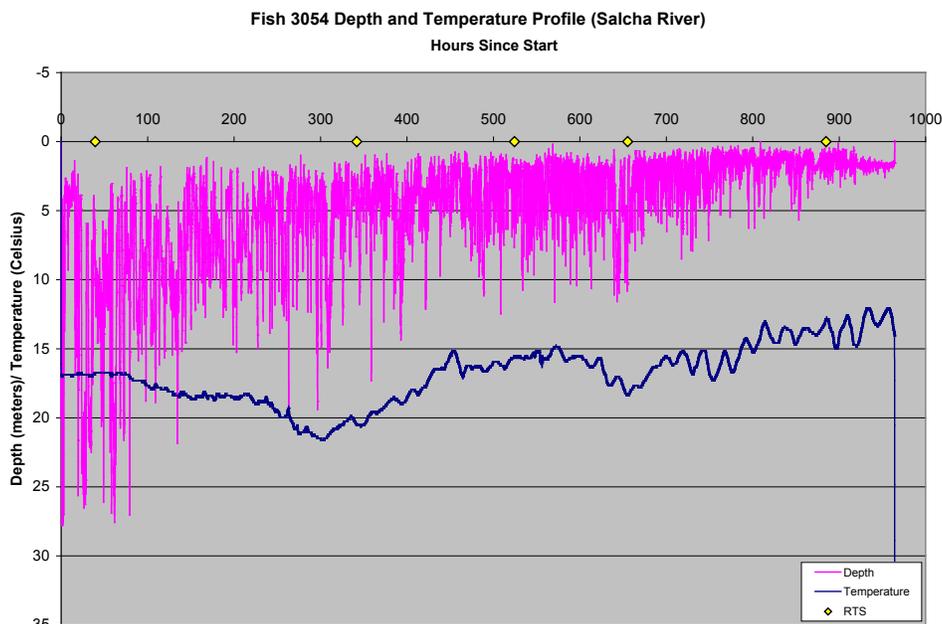


Figure 1. Depth and temperature recordings from an archival tag placed in a Yukon River Chinook salmon near Russian Mission and tracked upriver to the Salcha River, characteristic of the pattern seen for other similarly tagged Chinook salmon in this study. Temperature in C° (lower data) and depth in 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 depths¹, 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 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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REGIONAL ADVISORY COUNCIL RECOMMENDATION

Yukon/Kuskokwim Delta Regional Council Recommendation

Oppose Proposals FP11-01/06. It does not make sense to restrict mesh depth when water can be 70–100 feet deep. The Council is also opposed to the proposals due to the burden to subsistence users because of the cost to alter nets.

Western Interior Alaska Regional Advisory Council Recommendation

Oppose Proposals FP11-01/06. The Council stated that current data shows salmon will swim in various depths in the water column. Weather will also affect the migration pattern of the salmon swimming upriver and fishermen will adapt and fish in different depth of water.

Seward Peninsula Regional Council Recommendation

Oppose Proposals FP11-01/06. The proposals do not address the issue of concern. The proposals would no have much impact other than cost to the subsistence user to alter their nets. Also, there is opposition to the proposals from people that would be affected.

Eastern Interior Alaska Regional Council Recommendation

Defer Proposal FP11-01. Action on this proposal was deferred until the results of relevant study is completed in 2011 and presented to the council.

Oppose Proposal FP11-06. The Council expressed concerns regarding the accuracy of the data available for analysis of the proposal, and the inherent inequity in targeting certain sections of the river to bear the burden of conservation measures. The Council also considered the unanimous opposition of each community, entity and individual motivated to write in objections to the proposal. Although the Council is interested in exploring the potential benefits of gillnet depth restrictions, having submitted a proposal of its own, it believes more information is necessary to make an informed decision.

INTERAGENCY STAFF COMMITTEE COMMENTS

Proposal FP11-01—The Interagency Staff Committee found the staff analysis to be a complete and accurate evaluation of the proposal and the recommendations of all four Regional Advisory Councils to be supported by substantial evidence, consistent with recognized principles of conservation, and appropriately allow for the continuation of subsistence uses.

Proposal FP11-06— The Interagency Staff Committee found the staff analysis to be a complete and accurate evaluation of the proposal and the recommendations of all four Regional Advisory Councils to be supported by substantial evidence, consistent with recognized principles of conservation, and appropriately allow for the continuation of subsistence uses.

ADF&G Comments on FP11-01 and FP11-06
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Alaska Department of Fish and Game
Comments to Federal Subsistence Board

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. 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

ADF&G Comments on FP11-01 and FP11-06
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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: 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.

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

ADF&G Comments on FP11-01 and FP11-06
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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.

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 as 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 short of working together will enable us to see the long term benefits.

Council of Athabaskan 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 if 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 they 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 past 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, Loudon 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	<p>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. <i>Submitted by Jack Reakoff</i></p>
Proposed Regulation	<p>Yukon-Northern Area—Salmon</p> <p>§ __.27(i)(3)(xiii) <i>You may take salmon only by gillnet, beach seine, fish wheel, or rod and reel, subject to restrictions set forth in this section.</i></p> <p><i>(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.)</i></p> <p><i>(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.</i></p>
OSM Conclusion	Oppose
Yukon/Kuskokwim Delta Regional Council Recommendation	Oppose
Western Interior Regional Council Recommendation	<p>Support Proposal FP11-02 with modification to reduce the effective period from 12 years to four years, and to modify the language. Implementing a closure for 12 years will create an undue hardship and will be too restrictive for rural residents. The Council supports a four year closure to protect the run and to restore it to a level that supports historic commercial and subsistence fisheries.</p>

continued on next page

FP11-02 Executive Summary (continued)

Western Interior Regional Council Recommendation (Continued)	<p>Modify the language to read as follows:</p> <p><i>(B) Federal Public waters of the Yukon River will be closed, or predominantly closed, to the taking of Chinook salmon by all users sequentially from the river mouth to the Canadian border during the first pulse of Chinook salmon, through very short or no openings, using statistical area closures to provide greater protection, to expressly protect the U.S./Canadian Yukon River Panel agreed upon escapement goal, without negatively impacting conservation of other stocks. This regulation will be in place for 4 years.</i></p>
Seward Peninsula Regional Council Recommendation	<p>Oppose</p>
Eastern Interior Regional Council Recommendation	<p>Oppose</p>
Interagency Staff Committee Comments	<p>See comments following the analysis.</p>
ADF&G Comments	<p>Oppose</p>
Written Public Comments	<p>1 Support 5 Oppose</p>

**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 (YR DFA) 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 (YR DFA 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.

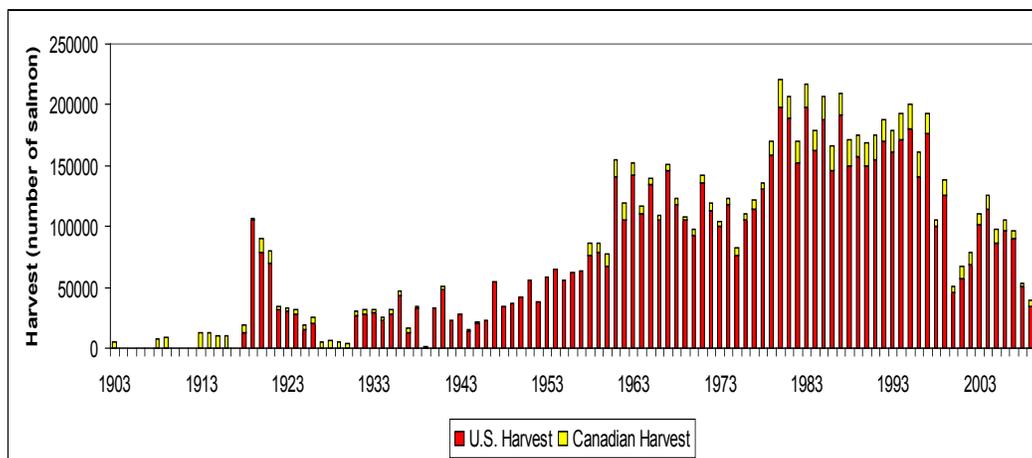


Figure 1. Reported Yukon River Chinook salmon total harvests 1910 - 2009 (JTC 2010). Harvest data prior to 1960 is not complete and may underestimate actual harvest levels.

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).

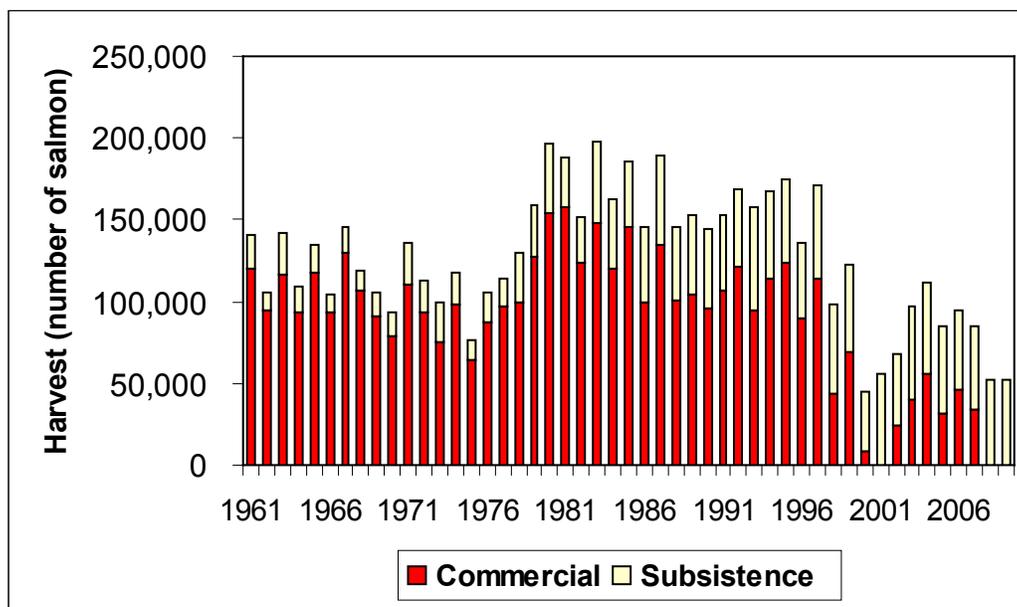


Figure 2. Chinook salmon commercial and subsistence harvests in Alaska from 1961-2009. Since 2008 and 2009 subsistence harvest data are unavailable, the average 2002-2008 subsistence harvest was substituted in the stacked bar graphic (Hayes 2008 pers. comm., JTC 2010).

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 2010).

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.

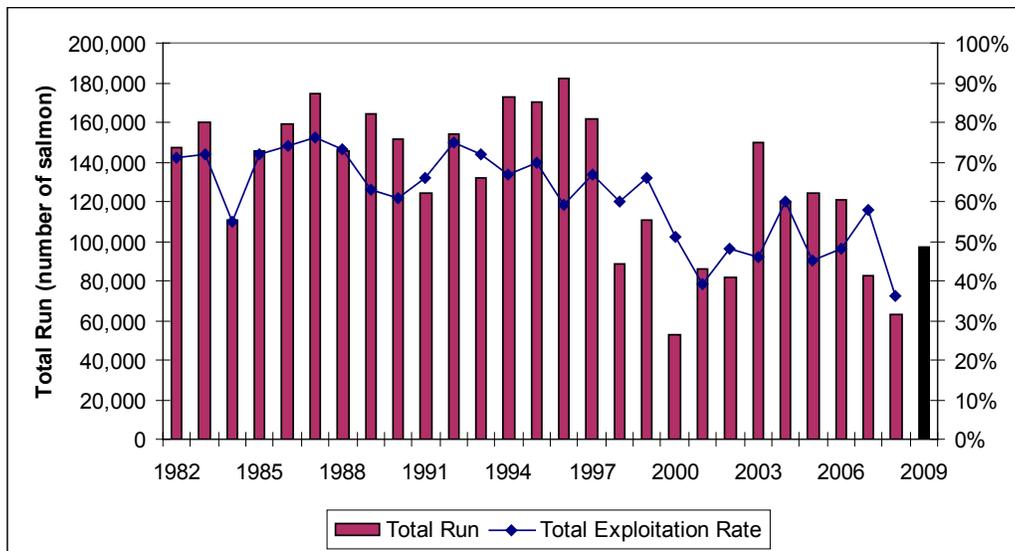


Figure 3. Total run and exploitation rates of Canadian-origin Yukon River Chinook salmon, 1982-2009. 2009 data are preliminary (black bar). Data from Evenson 2008 and Howard et al. 2009.

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**).

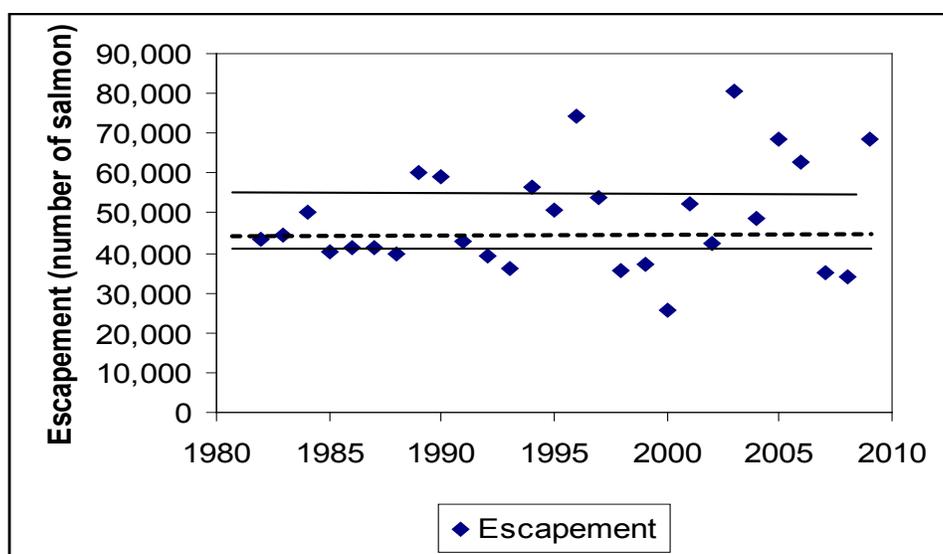


Figure 4. Escapement of Yukon River Canadian-origin Chinook salmon, 1982-2009. 2007 data are preliminary. Interim minimum escapement goals of 45,000 set by JTC for 2008 - 2009 (black dashed line) and 42,500-55,000 for 2010 (solid lines). Data from Evenson 2008 and Howard et al. 2009.

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

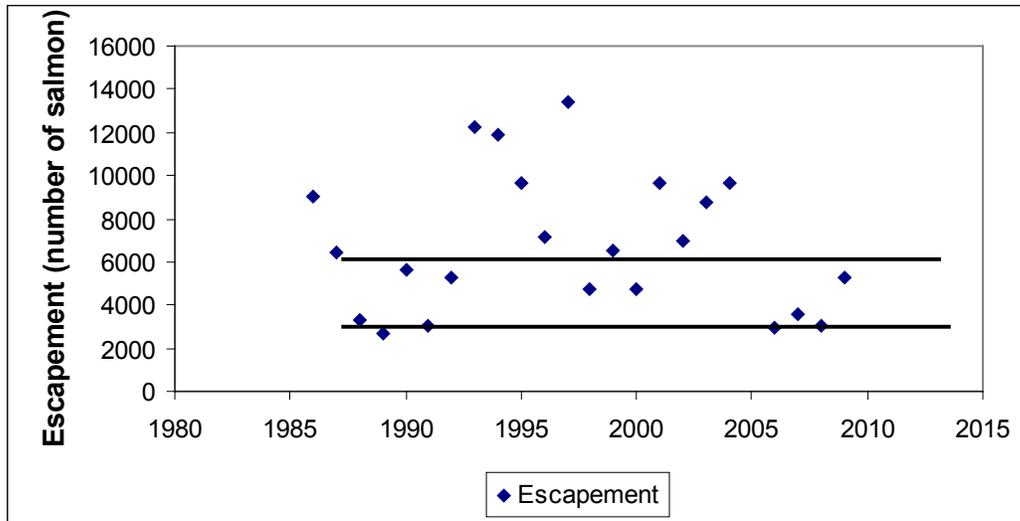


Figure 5. Chinook salmon escapement for the Chena River 1986 - 2009. Biological Escapement Goal (BEG) range = 2,800–5,700 (black bars). Data from JTC 2008 and JTC 2010.

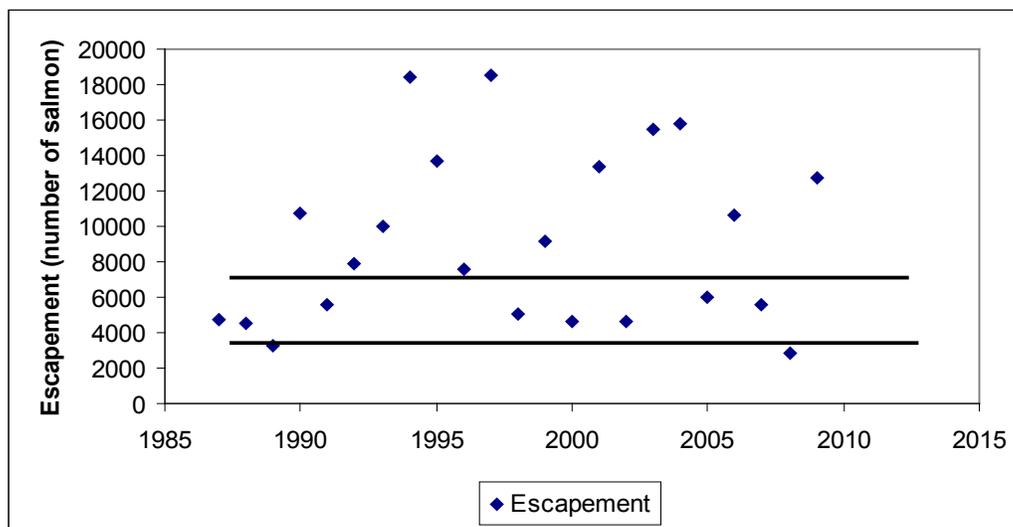


Figure 6. Chinook salmon escapement for the Salcha River 1987–2009. Biological Escapement Goal (BEG) range = 3,300 – 6,500 (black bars). Data from JTC 2010.

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 research (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.

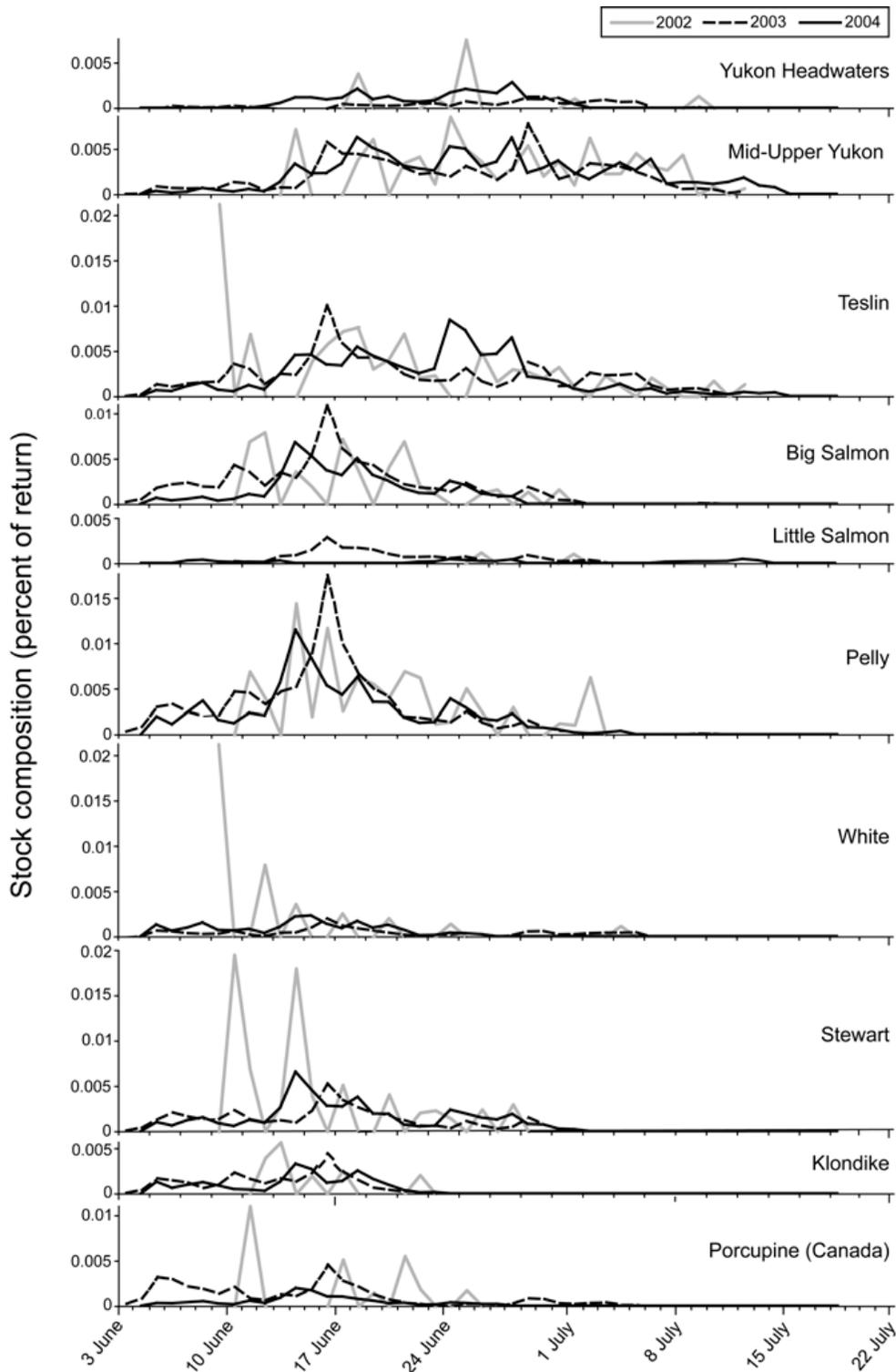


Figure 7. Lower river run timing (Russian Mission) of major Chinook salmon stocks returning to Canadian spawning areas (2002-2004) based on composition estimates for the returns derived from radio-tagged fish weighted by catch per unit effort at the tagging site and adjusted for harvest of tagged fish. 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.

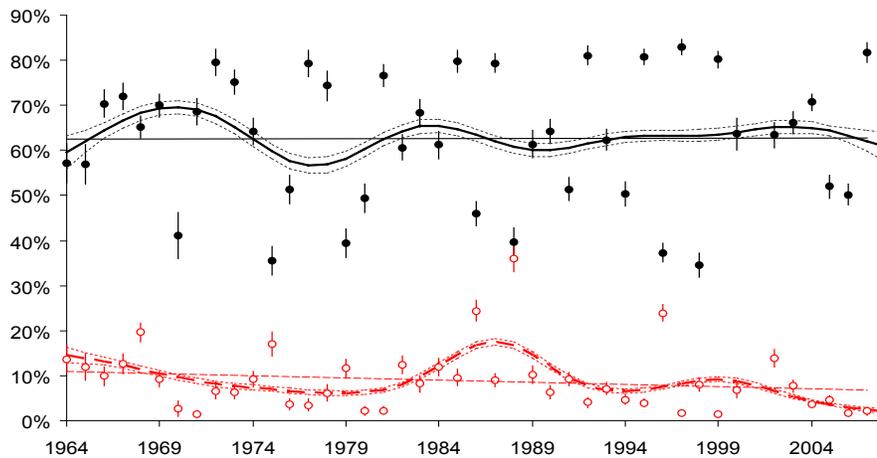


Figure 8. Trends in Chinook salmon harvested in unrestricted District Y-1 commercial fisheries from 1962-2007. The upper trend line shows age 6 fish and in the red lower trend line are age 7 fish. Data from Hamazaki 2010.

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

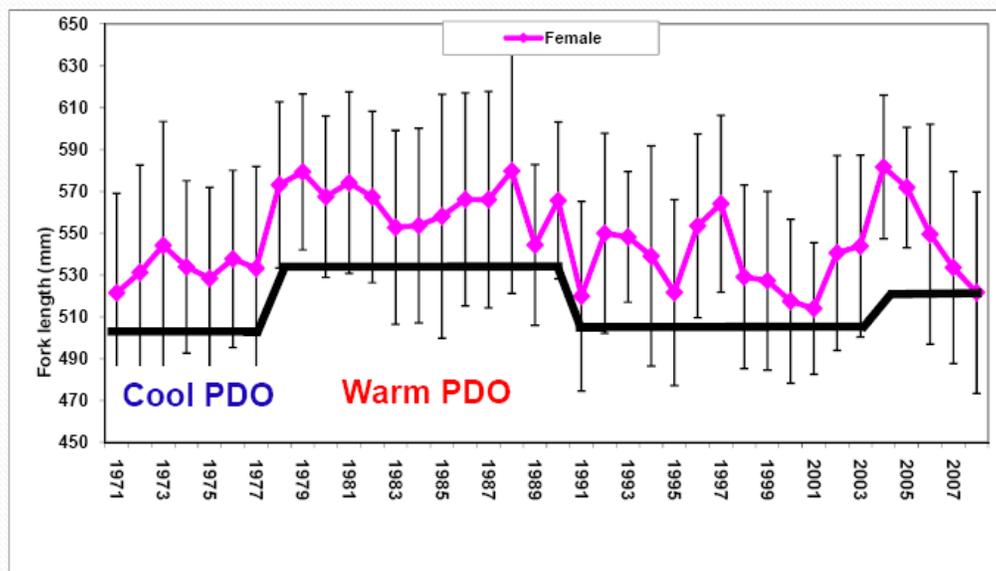


Figure 9. Comparison of ocean temperature regime shifts and trends in growth of immature Chinook salmon in the Bering Sea (Meyers et al. 2010).

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 %.

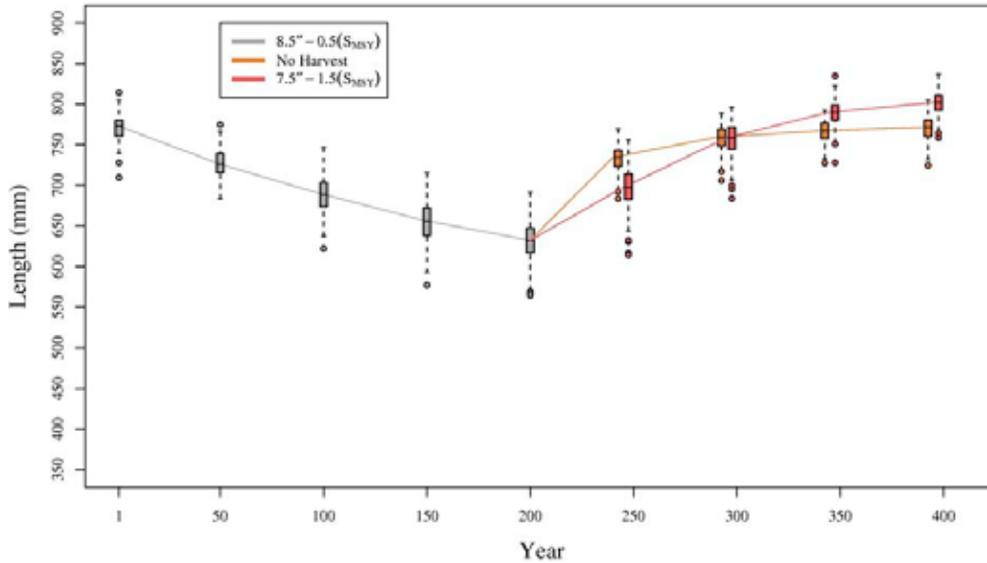


Figure 10. Box-plots of mean length observed in a low productivity ($\alpha=0.5$), moderate exploitation (0.50), high management precision ($\pm 15\%$) with high escapement simulation (1.50SMSY) and two extended simulations under alternative fishing scenarios, with an unchanged escapement goal of 1.50(SMSY) 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 $\gamma = 0.50$ (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 of Yukon River salmon is based on sustained yield principles and is subject to the State's subsistence priority (AS 16.05.258). Sustained yield is generally accomplished by managing for sustainable escapement goals, which are levels of escapement known to sustain yield over a five to ten year time period (5 AAC 39.222 (f)(36)). Run strength is assessed inseason by a variety of stock assessment projects; that assessment is used to set subsistence and commercial fishery openings aimed at allowing escapement sufficient to achieve those sustainable escapement goals.

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 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.

FP11-02 ADDENDUM

The following addendum to the analysis of FP11-02 is based on data that became available in September 2010 after regulatory analyses were completed for the Regional Advisory Council fall meeting schedule. This information is provided as a supplement in an addendum for the Federal Subsistence Board meeting so that it is clearly identified as an addition following the Council meeting edition. The information has been added to the analysis because it provides additional insight about Yukon River Chinook salmon stock run timing and composition during the 2009 fishing season. This information demonstrates that the spawning migration of Yukon River Canadian stocks is highly overlapped with other stocks throughout the run requiring considerable management flexibility to effectively conserve these stocks while allowing subsistence fishing. Consideration of this information does not change the OSM Conclusion.

Stock Timing and Composition in 2009

Analysis of genetic markers provides estimates of relative stock composition of Chinook salmon in test fishery catches and harvests in the U.S. portion of the Yukon River. Significant variation in migration timing and abundance has been shown among stocks of Chinook salmon in the Yukon River (DeCovich and Howard 2010).

The contribution of Canadian stocks to harvests in Alaskan fisheries is influenced by the timing and relative abundance of lower and middle Yukon River stock groups that migrate with them. Proportions of major stock groups are compared among four time periods in **Figure 1** in test fishery samples collected at Pilot Station sonar during 2009. Run timing as determined at Pilot Station sonar during 2009 suggests a late, compressed run timing with the central 50% of the run occurring between June 24 – July 1; however, fisheries biologists believe that run timing may be biased towards a later run timing by counting difficulties resulting from unusually high water early in the 2009 run. Therefore, comparing relative proportions as presented in this figure to historic timing data may be more informative and provides a prospective about stock composition, abundance and timing during 2009. The central 50% of the run as assessed at Pilot Station sonar from 1986-2008 occurs from June 19 – July 1 with 75% of the run passing this site by July 1 (Hildebrand 2009). Based on historic timing, it is reasonable to assume that most of the central 50% of the run in 2009 passed by Pilot Station during the second and third time strata (June 17 -29) depicted in **Figure 1**. The analysis indicates that Canadian stocks contributed between 70% and 43% of the catch over the first three time strata (June 9 – 29) representing the main pulses of the 2009 run (DeCovich and Howard 2010).

Pulse protection was implemented in 2009; subsistence closures were initiated in District 1 on June 15. Two subsistence fishing periods were closed and similar actions were implemented in upriver districts and

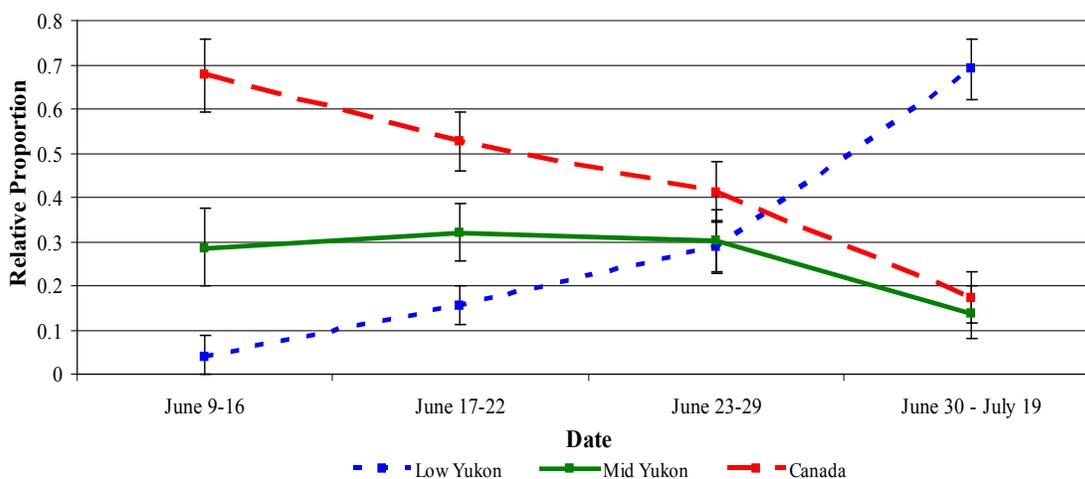


Figure 1. Relative stock composition of 3 broad scale reporting groups of Chinook salmon caught in the Pilot Station Test Fishery, as analyzed postseason, 2009 (DeCovich and Howard 2010).

subdistricts based on migratory timing. Following the pulse closures, each fishing district was allowed to subsistence fish on a reduced windows schedule until at least 80% of the run had passed (JTC 2010).

Despite the below average run strength observed in 2009, genetic analysis indicated that the Canadian stock proportion was stronger in 2009 than in 2007 and 2008 (DeCovich and Howard 2010). Shifting the subsistence harvest later in the run was intended to target more of the lower and middle river stock groups in Districts 1, 2, 3 and 4 while conserving Canadian stocks. Overall, this management strategy was effective; the Canadian component of the harvest appeared to be reduced in 2009 compared to previous years when harvests from communities are compared (Howard 2010 pers.comm.). However, a significant contribution of Canadian stocks were observed in subsistence harvests even with pulse protection restrictions. Contribution of Canadian stocks varied among geographic locations ranging from 16% to 95% of the 2009 harvest (DeCovich and Howard 2010).

Figure 2 provides an estimate of Canadian Chinook salmon stock abundance in 2009 at the Eagle sonar project near the U.S./Canada border. Similar to stock timing data presented in **Figure 7** of the staff analysis, this data shows considerable variation in stock contribution over time of major Canadian stock groupings. Stocks which tended to migrate earlier in the run included those from the Pelly River, Stewart River, and lower Yukon tributaries (Chandindu River, Klondike River).

The mainstem spawning stock returned noticeably later than the other stocks. Teslin River and Carmacks area stocks (Big and Little Salmon rivers) were relatively abundant throughout the run. Chinook salmon from the Carmacks area tributaries accounted for about 19% of total 2009 run past the sonar site, with the Klondike River (18%), the Teslin River (16%), the mainstem spawning stock (13%), the Stewart River (11%), White River (11%), lower Yukon River tributaries (10%), and upper Yukon River tributaries (3%) accounting for the remainder of the run (Beacham and Candy 2009).

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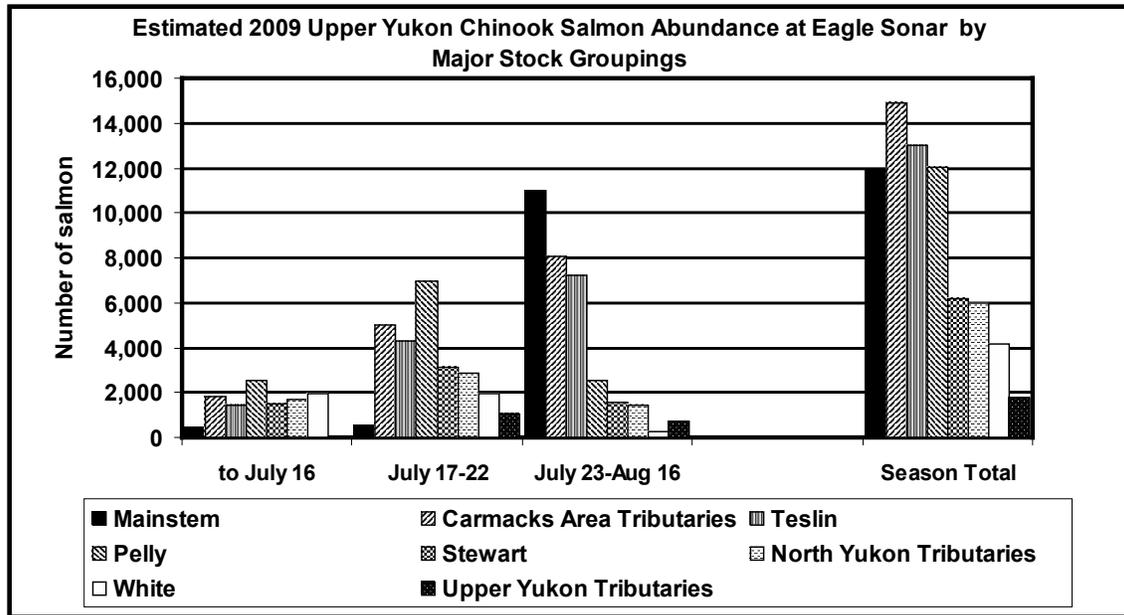


Figure 2. Relative abundance of upper Yukon Chinook salmon stocks at Eagle sonar site in 2009 determined by Genetic Stock Identification analyses. This figure shows the abundance for each sample period as well as total seasonal abundance for 8 regional stock aggregates (JTC 2010).

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REGIONAL ADVISORY COUNCIL RECOMMENDATION

Yukon/Kuskokwim Delta Regional Council Recommendation

Oppose Proposals FP11-02. Closing subsistence fishing when the first pulse arrives will not address the problem. Restrictions are not necessary given current regulation and ability of in-season managers.

Western Interior Alaska Regional Advisory Council Recommendation

Support Proposal FP11-02 **with modification** to reduce the effective period from 12 years to four years, and to modify the language. Implementing a closure for 12 years will create an undue hardship and will be too restrictive for rural residents. The Council supports a four year closure to protect the run and to restore it to a level that supports historic commercial and subsistence fisheries.

Modify the language to read as follows:

(B) Federal Public waters of the Yukon River will be closed, or predominantly closed, to the taking of Chinook salmon by all users sequentially from the river mouth to the Canadian border during the first pulse of Chinook salmon, through very short or no openings, using statistical area closures to provide greater protection, to expressly protect the U.S./Canadian Yukon River Panel agreed upon escapement goal, without negatively impacting conservation of other stocks. This regulation will be in place for 4 years.

Seward Peninsula Regional Council Recommendation

Oppose Proposal FP11-02. This would bring a fragmented management approach to the river and would restrict needed management flexibility. Also, this proposal would prevent subsistence fishers from fishing even if there is a harvestable surplus.

Eastern Interior Alaska Regional Council Recommendation

Oppose Proposal FP11-02. The Council felt that the proposal is too restrictive. The Council has concerns about managers' ability to effectively execute this proposal, given that early run projections have been overly optimistic over the past four years, and that there are not enough data to confidently ensure the predominant presence of specific stocks in a given pulse in a timely manner. The Council heard some anecdotal observations that the first pulse consists primarily of males, so the Council does not feel confident that implementation of the proposal would enhance passage of females. There are also concerns that implementation of this proposal could put undue pressure on other Yukon River stocks. There are additional concerns that, because it would only apply to Federally managed sections of the river, its overall effectiveness would be diluted while negatively impacting only federal subsistence fishing opportunities. There is also a concern that prescribed closures could restrict options for in-season managers who already have the tool of emergency closure when warranted.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee appreciates the Western Interior Regional Advisory Council's concerns over Yukon River Chinook stocks, especially those of Canadian origin. However, this proposal only addresses Federal public waters, and if it were supported by the Federal Subsistence Board, State waters could potentially remain open to the harvest of Canadian-bound Chinook salmon, thus possibly reducing

the intended benefits of the closures. A better approach might be to have State and Federal managers continue to work with the users to develop a unified approach to Chinook salmon management. Yukon Salmon Management meetings between the managers and users are scheduled to occur this winter will provide an opportunity to discuss management options, including closures to the first pulse of Chinook salmon for the 2011 season.

ADF&G Comments on FP11-02
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Alaska Department of Fish and Game
Comments to Federal Subsistence Board

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).

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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: 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. Because a large percentage of the lands along and under the Yukon River are not federal lands, federal administrators need to provide detailed maps that depict land ownership and specific boundaries of areas where federal regulations are claimed to apply.

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

ADF&G Comments on FP11-02
November 30, 2010; Page 3 of 3

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

Recommendation: Oppose.

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-Scarborough, 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.

JTC SSS (Joint Technical Committee Salmon Size Committee of the Yukon River US/Canada Panel). 2006. Potential causes of size trends in Yukon River Chinook salmon populations. ADF&G, Division of Commercial Fisheries, Regional Information Report No. 3A06-07, Anchorage, AK.

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 can 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. <i>Submitted by Andrew Firmin</i>
Proposed Regulation	<p><i>(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.</i></p> <p><i>(xxii) In the Yukon River drainage District 5:</i></p> <p><i>(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.</i></p> <p><i>(B) Sub-district 5F consists of the Yukon River drainage from Hadweenzic River upstream to 22 Mile Slough.</i></p> <p><i>(C) Sub-district 5G consists of the Yukon River drainage from 22 Mile Slough upstream to the United States-Canada border.</i></p>
OSM Conclusion	Oppose
Yukon/Kuskokwim Delta Regional Council Recommendation	Oppose
Western Interior Regional Council Recommendation	Defer
Seward Peninsula Regional Council Recommendation	Took no action
Eastern Interior Regional Council Recommendation	Support
Interagency Staff Committee Comments	See comments following the analysis.
ADF&G Comments	Oppose
Written Public Comments	1 Support

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 boundaries¹ (**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

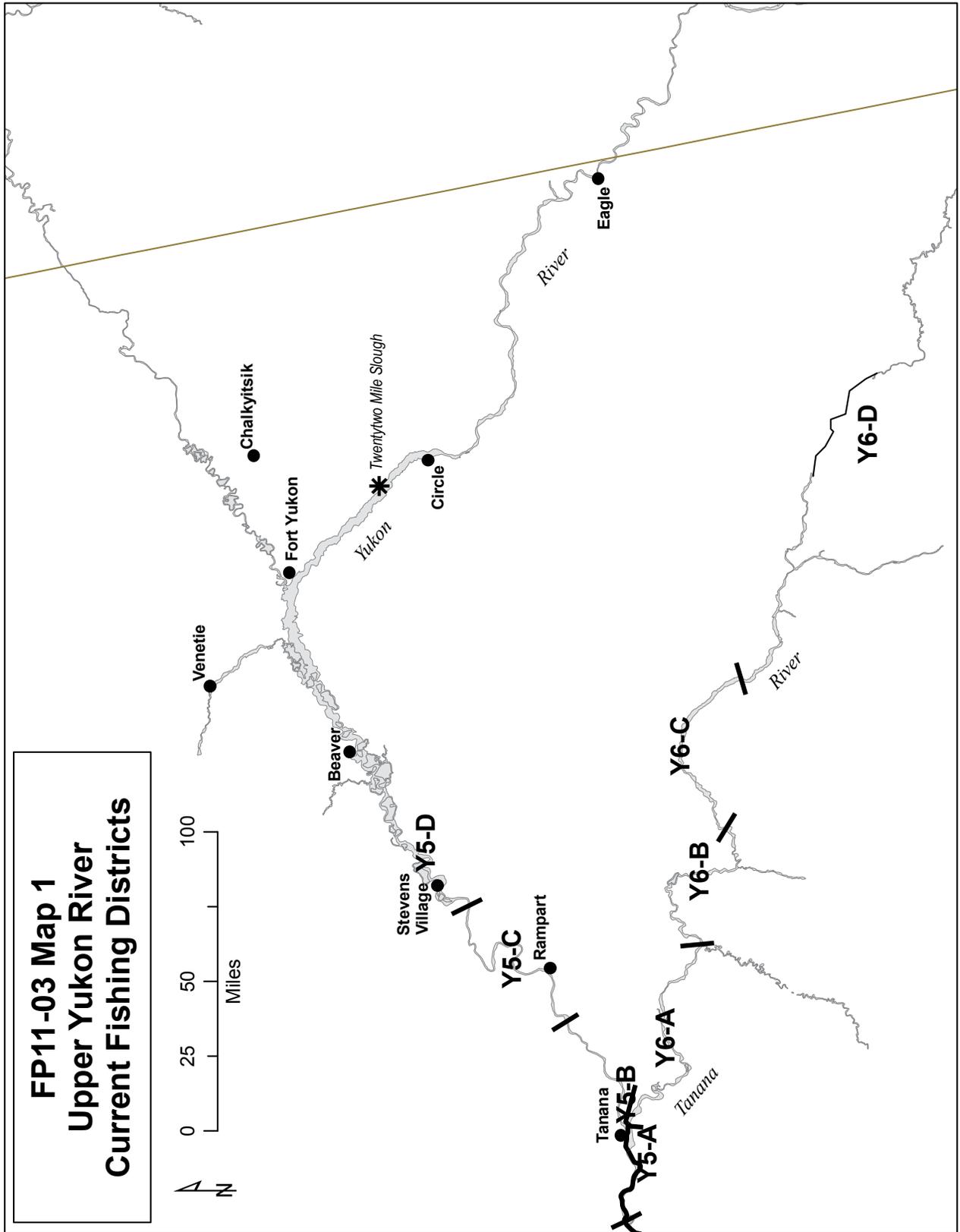
The proponent submitted the proposal to change existing State fishing boundaries in District 5 (See **Attachment A**). The proposed Federal regulation could accomplish this by adding “boundaries” to the existing Federal regulation with exceptions for District 5 (**Map 2**).

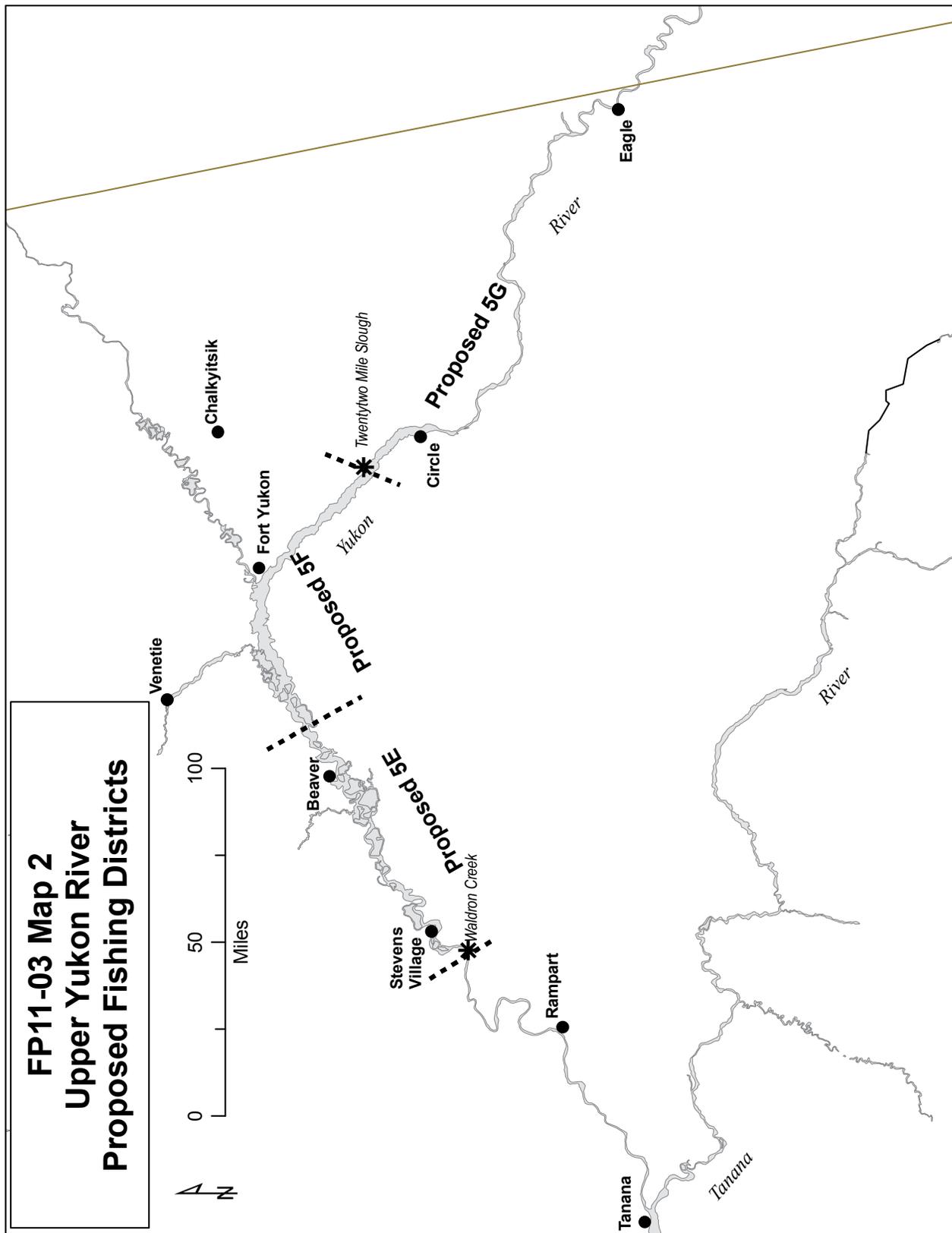
¹ CFR 50 § 100.4 Definitions.

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.





(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, Darwin, 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.

Current Events Involving Species

See staff analysis for FP11-02

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 subdistrict are broken out in **Table 1** above.

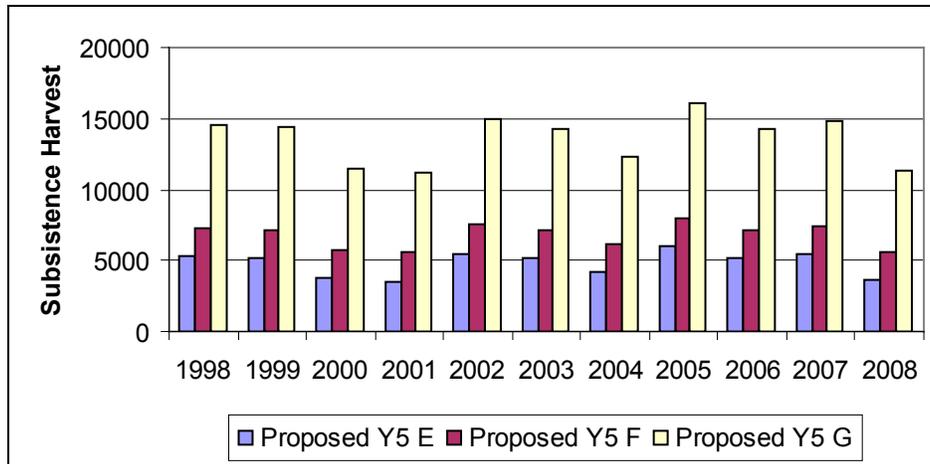


Figure 1. Subsistence harvests (1998-2008) in Yukon River Subdistrict 5-D combined by revised Subdistrict boundaries as requested in FP11-03. (Source Busher et al. 2008)

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 agree 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 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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U.S. Census 2008 <http://www.census.gov/>

YK Delta RAC 2010. Resolution of the Eastern Interior and Western Interior Subsistence Regional Advisory Council, March 2-4, 2010 in Bethel, Alaska. Office of Subsistence Management, FWS. Anchorage, AK.

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.

REGIONAL ADVISORY COUNCIL RECOMMENDATION

Yukon/Kuskokwim Delta Regional Council Recommendation

Oppose Proposal FP11-03. The proposal is unnecessary.

Western Interior Alaska Regional Advisory Council Recommendation

Defer Proposal FP11-03 to allow for more local input and submission to the State process while the proposal is considered in the Federal regulatory process.

Seward Peninsula Regional Council Recommendation

Took no action on Proposal FP11-03. This is an issue that is far removed from the Bering Straits Region. This proposal is better addressed by the people that are affected.

Eastern Interior Alaska Regional Council Recommendation

Support Proposal FP11-03. The Council believes that this proposal would benefit conservation by targeting closures as needed more effectively than currently, and benefit subsistence users by allowing fishing when fish are available. It aligns with traditionally recognized regional boundaries, which will facilitate enforcement. It is a positive stewardship measure that appears to enjoy the support of the affected subsistence users.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee believes that the idea of dividing public waters in Yukon River District 5D into three separate subdistricts has merit, but that such a strategy would also benefit from increased discussion between managers and affected subsistence users. State and Federal managers already have the authority to do what is being requested, but placing such additional subdivisions into regulation could reduce management flexibility for the Federal in-season manager. In addition, adoption of this proposal could lead to differing State and Federal sub-district boundaries, potentially increasing regulatory complexity and confusion. The Western Interior Regional Council's recommendation to defer action on this proposal would allow for more discussion on the issue. If the Federal board decides to defer action on this proposal, it may want to consider deferring until on or before the next fisheries regulatory cycle.

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Alaska Department of Fish and Game
Comments to Federal Subsistence Board

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 defines 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

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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 Subsistence Board does not have authority to establish regulatory boundaries for state-regulated subsistence and commercial fisheries. If the Federal Subsistence Board adopts fisheries subdistrict boundaries that differ from existing boundaries authorized by the Alaska Board of Fisheries, subsistence users will be responsible for knowing where the different federal regulations apply in areas of claimed federal jurisdiction.

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. Because a large percentage of the lands along and under the Yukon River are not federal lands, federal administrators need to provide detailed maps that depict land ownership and specific boundaries of areas where federal regulations are claimed to apply.

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

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Subdistrict 5-D could be developed through the Fish and Game local advisory committee process.

Recommendation: Oppose.

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-Scarborough, 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 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 Athabaskan Tribal Governments (James Kelly, Acting Natural Resource Director)

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). <i>Submitted by Mountain Village Working Group</i>
Proposed Regulation	<p>§ __.27(i)(3)(xv) <i>In Districts 4, 5, and 6, you may not take salmon for subsistence purposes by drift gillnets, except as follows:</i></p> <p><i>(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;</i></p> <p><i>(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.</i></p> <p><i>(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.</i></p>
OSM Conclusion	Oppose
Yukon/Kuskokwim Delta Regional Council Recommendation	Oppose
Western Interior Regional Council Recommendation	Oppose
Seward Peninsula Regional Council Recommendation	Took no action
Eastern Interior Regional Council Recommendation	Oppose
Interagency Staff Committee Comments	See comments following the analysis.
ADF&G Comments	Support with modification. The department opposes prohibition of drift gillnets in Subdistrict 4-A and continues its long-standing opposition to the expanded drift gillnet fishery in subdistricts 4-B and 4-C.
Written Public Comments	11 Oppose

**STAFF ANALYSIS
FP11-07**

ISSUES

Proposal FP11-07, submitted by 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.

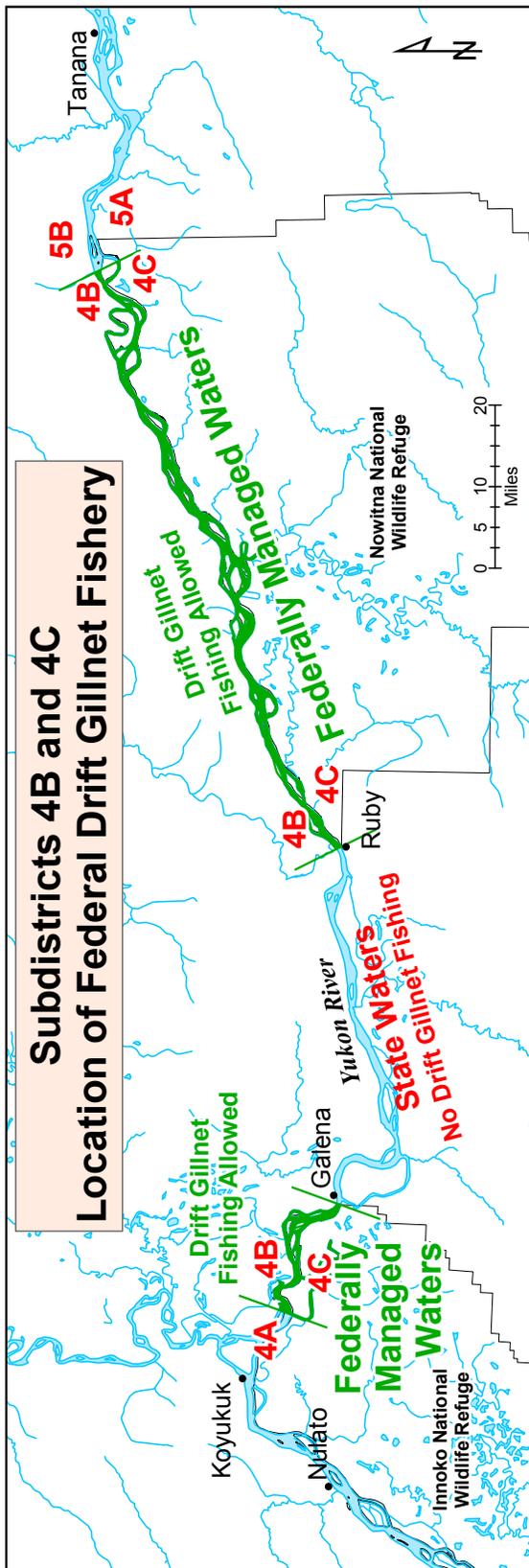
(C) In the Yukon River mainstem, Subdistricts 4B and 4C, with a Federal subsistence fishing permit, you may take Chinook salmon during the weekly subsistence fishing opening(s) by drift gillnets no more than 150 feet long and no more than 35 meshes deep from June 10 through July 14.

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:

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 allocation 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 concern¹” and summer chum salmon was designated as a stock of “management concern²”.

¹Yield 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).

²Management 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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	11-year Average
Community												
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
Kaitag	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
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 District 4 harvest								0.40%	0.16%	0.11%	0.43%	0.28%
												4-year Avg

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.

Year	Number of permits issued	Number of permits returned	Total permits fished	Total hours fished	Reported Harvest	
					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 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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REGIONAL ADVISORY COUNCIL RECOMMENDATION

Yukon/Kuskokwim Delta Regional Council Recommendation

Oppose Proposal FP11-07. Written public comments indicated that there would be a problem if the proposed regulation was adopted. There would not be enough space for subsistence set nets in limited, small areas.

Western Interior Alaska Regional Advisory Council

Oppose Proposal FP11-07. Written public comments from the area indicated that there would be some problems if this proposed regulation is adopted. If this proposed regulatory change is adopted, there would be not enough space for subsistence set nets in limited small areas.

Seward Peninsula Regional Council Recommendation

Took no action on Proposal FP11-07. This proposal addresses an issue for an area far outside the region.

Eastern Interior Regional Council Recommendation

Oppose Proposal FP11-07. The Council felt that this was a cross-over proposal from someone outside the region, which would negatively impact primarily the subsistence users of the villages of Galena and Ruby, where an insignificant number of fish have been harvested for subsistence use since this fishery opportunity became available in 2005. There appears to be no real conservation benefit from the proposal. The Council noted that the proponent appears to want to be able to fish with nets, but deny that opportunity to others, and that there was vigorous objection from affected subsistence users.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a complete and accurate evaluation of the proposal and the recommendations of the Regional Advisory Council to be supported by substantial evidence, consistent with recognized principles of conservation, and appropriately allows for the continuation of subsistence uses.

ADF&G Comments on FP11-07
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Alaska Department of Fish and Game
DRAFT Comments to Federal Subsistence Board

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

Introduction: 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 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

ADF&G Comments on FP11-07
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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: 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. Because a large percentage of the lands along and under the Yukon River

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are not federal lands, federal administrators need to provide detailed maps that depict land ownership and specific boundaries of areas where 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.

Recommendations: Support with modification. The department opposes prohibition of drift gillnets in Subdistrict 4-A and continues its long-standing opposition to the expanded drift gillnet fishery 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 of 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 can 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 to 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 gillnetting, District 4 should be allowed to continue this practice. Districts 5 and 6 do not drift gillnet, 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 past 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, Loudon 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

FP11-04 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. <i>Submitted by Mountain Village Working Group</i>
Proposed Regulation	§ ____.27(i)(3)(xiii) <i>You may take salmon only by gillnet, beach seine, fish wheel, or rod and reel, subject to the restrictions set forth in this section.</i> <i>(A) Fish wheels may not be used in Yukon River Districts 4 and 5.</i>
OSM Conclusion	Oppose
Yukon/Kuskokwim Delta Regional Council Recommendation	Oppose
Western Interior Regional Council Recommendation	Oppose
Seward Peninsula Regional Council Recommendation	Took no action
Eastern Interior Regional Council Recommendation	Oppose
Interagency Staff Committee Comments	See comments following the analysis.
ADF&G Comments	Oppose
Written Public Comments	12 Oppose

**STAFF ANALYSIS
FP11-04**

ISSUE

Proposal FP11-04, submitted by 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 (**Map 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.

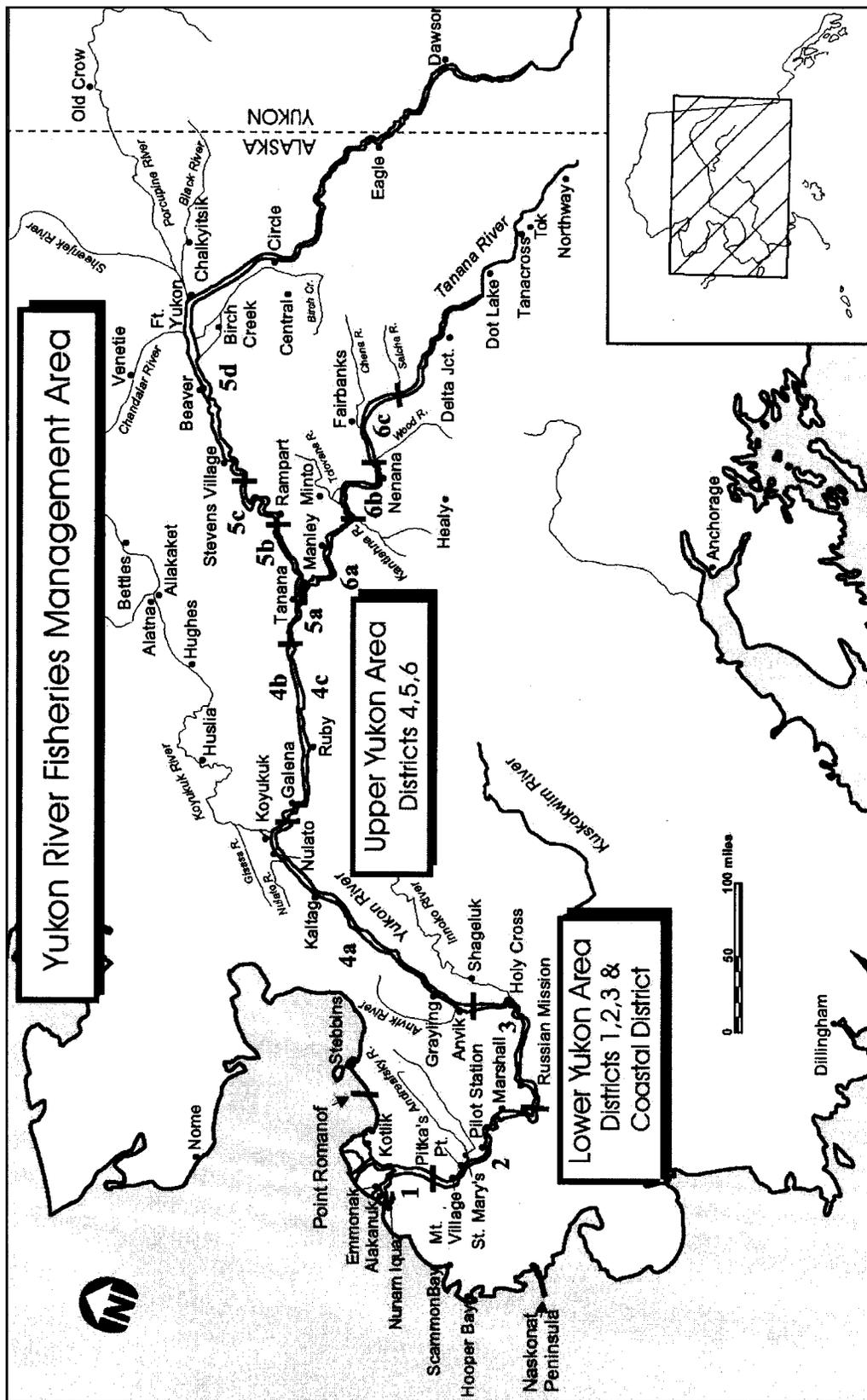
(A) Fish wheels may not be used in Yukon River Districts 4 and 5.

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...” (Sullivan 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 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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REGIONAL ADVISORY COUNCIL RECOMMENDATION

Yukon/Kuskokwim Delta Regional Council Recommendation

Oppose Proposal FP11-04. The Council opposes the proposal as it is unnecessary, unproductive and would potentially create controversy.

Western Interior Alaska Regional Advisory Council

Oppose Proposal FP11-04. This proposal is counterproductive and does not address Yukon River drainage conservation efforts.

Seward Peninsula Regional Council Recommendation

Took no action on Proposal FP11-04. This proposal addresses an issue for an area that is far outside the Bering Straits Region. Also, taking away fishwheels from some users is taking away a customary and traditional practice.

Eastern Interior Alaska Regional Council Recommendation

Oppose Proposal FP11-04. The Council feels strongly that this proposal would negatively impact the subsistence users that rely on this method, and would not be an effective tool to achieve the proponent's objective. The Council recognized the use of fishwheels as a traditional harvest method that generally seems to target the smaller fish, usually males, which tend to travel further from the center of the river. The Council noted that the proposal appeared to be retaliatory and lacked sound rationale, and that there was a robust opposition record from all but the proponent.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a complete and accurate evaluation of the proposal and the recommendations of the Regional Advisory Council to be supported by substantial evidence, consistent with recognized principles of conservation, and appropriately allows for the continuation of subsistence uses.

ADF&G Comments on FP11-04
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Alaska Department of Fish and Game
Comments to Federal Subsistence Board

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

Introduction: 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

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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: 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. Because a large percentage of the lands along and under the Yukon River are not federal lands, federal administrators need to provide detailed maps that depict land ownership and specific boundaries of areas where federal regulations are claimed to apply.

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 can 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 to 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 past 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 nets 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 nowhere 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 than 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 of fish 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 Chinook 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 the 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

FP11-10 Executive Summary	
General Description	Proposal FP11-10 requests that all drainages in the Chignik Area be opened to the harvest of salmon by seine, gillnet, spear, and hook and line that may be attached to a rod or pole or with gear specified on a subsistence fishing permit, except that hook and line gear may not be used in Chignik River. The proposal also would: 1) restrict power purse seine gear from Mensis Point downstream; 2) permit hand seining only in Chignik River and Chignik Lake; 3) permit gillnets to be used only in Chignik River, Chignik Lake, and in the waters of Clark River and Home Creek, from each of their confluences with Chignik Lake to a point one mile upstream; and 4) restrict a gillnet from being staked or anchored or otherwise fixed in a stream, slough, or side channel to where it obstructs more than one half the width of that stream, slough or side channel. <i>Submitted by the Chignik Lake Traditional Council</i>
Proposed Regulation	<i>§ __.27(i)(8)(ii) Salmon may be taken by seine, gillnet, spear, and/or hook and line that may be attached to a rod or pole or with gear specified on a subsistence fishing permit, except that hook and line gear may not be used in Chignik River and power purse seine gear is permitted only in Chignik River from Mensis Point downstream and hand seining is permitted only in Chignik River and Chignik Lake and gillnets may be used only in Chignik River, Chignik Lake, and in the waters of Clark River and Home Creek, from each of their confluences with Chignik Lake to a point one mile upstream. A gillnet may not be staked or anchored or otherwise fixed in a stream, slough or side channel to where it obstructs more than one half the width of that stream, slough or side channel.</i>
OSM Conclusion	Support Proposal FP11-10 with modification to: 1) open the areas of Black Lake and its tributaries to certain subsistence gear types; 2) remove the requested restriction for using “hook and line” gear in the Chignik River; 3) leave in the current restrictions to taking salmon in the Chignik River from upstream of the ADF&G weir; 4) leave in the restrictions for taking salmon in Clark River and Home Creek; and 5) move language from subsection (vi) to subsection (ii). In addition, fishing permit language has been made consistent throughout the regulation, removing the references to State permits.
Bristol Bay Regional Council Recommendation	Support Proposal FP11-10 with modification as presented in the OSM Conclusion. The Council supports a long standing subsistence fishery and FP11-10 will provide additional harvest opportunities for rural residents of the Chignik Area. Subsistence users have a long established customary and traditional use of salmon in the Black Lake and the tributaries of Black and Chignik Lakes. The proposal will allow access, with some restrictions, to areas in all drainages in the Chignik area to harvest salmon from January 1 to December 31 and allow additional gear types.

continued on next page

FP11-10 Executive Summary (continued)	
Interagency Staff Committee Comments	See comments following the analysis.
ADF&G Comments	Defer until the similar proposal is addressed by the Alaska Board of Fisheries.
Written Public Comments	None

STAFF ANALYSIS FP11-10

ISSUES

Proposal FP11-10, submitted by the Chignik Lake Traditional Council, requests that all drainages in the Chignik Area be opened to the harvest of salmon by seine, gillnet, spear, and hook and line that may be attached to a rod or pole or with gear specified on a subsistence fishing permit, except that hook and line gear may not be used in Chignik River. The proposal also would: 1) restrict power purse seine gear from Mensis Point downstream; 2) permit hand seining only in Chignik River and Chignik Lake; 3) permit gillnets to be used only in Chignik River, Chignik Lake, and in the waters of Clark River and Home Creek, from each of their confluences with Chignik Lake to a point one mile upstream; and 4) restrict a gillnet from being staked or anchored or otherwise fixed in a stream, slough, or side channel to where it obstructs more than one half the width of that stream, slough or side channel.

DISCUSSION

The proponent requests that all drainages in the Chignik Area be opened to the harvest of salmon by Federally qualified subsistence users. Currently State sport fishing regulations allow for sport fishing throughout the Chignik Area, including sections of Chignik River, Clark River and Home Creek, Black Lake and its tributaries, and other areas which are closed to Federally qualified subsistence users. The proponent requests that these tributaries be opened to Federally qualified users and not just open to those fishing under State sport fishing regulations. These restrictions to Federally qualified users were adopted by the Federal Subsistence Board (Board) from State regulations in 1999 when the Federal Subsistence Management Program assumed management authority for subsistence fisheries in Federal public waters. The proponent states the proposal would put into regulation existing fishing practices of local residents, while providing additional harvest opportunities. These areas are only utilized by a limited number of individuals, for example, only one family currently uses Black Lake and access is difficult and possible only by airboat (Lind 2010, pers. comm.).

A Bristol Bay Regional Advisory Council (Council) member spoke at the September 2010 meeting to the fact that some of the issues brought up in the proposal, most notably the use of Black Lake and its tributaries, have been a topic of discussion and effort for a long time. The Council member stated: “We’ve been working a long time on this. The traditional usage has been taking place for a long time and it’s time that it got formally stated and covered in our regulations” (BBRAC 2010: 66). Another Council member noted that:

“. . .there were quite a few traditional practices that were overlooked by the State. This is kind of a long-term practice. It’s not going to cause any major disruption. Maybe it’s worth trying to push the State. I think also for Al [a member of the Chignik Lagoon Traditional Council] to encourage all the Chigniks to get behind this and take it to the Board of Fish in a really strong way and hopefully we can end up with a lined up thing. Our cycles are just enough off that the State and Feds can be a long time getting things lined up. I’m inclined to support this with the modifications” (BBRAC 2010: 67).

The proponent also requests that in the Chignik River power purse seine gear be permitted only from Mensis Point downstream. Finally the proponent requests that hook and line gear be prohibited in the Chignik River, in order to exclude a method used in sport fishing. However, in the Chignik Area,

Federally recognized methods and means for subsistence include snagging (by handline or rod and reel), using a spear, bow and arrow, or capturing by bare hand.

Existing Federal Regulations

§ __.27(c) Subsistence taking of fish: methods, means, and general restrictions

(4) Except as otherwise provided for in this section, you may not obstruct more than one-half the width of any stream with any gear used to take fish for subsistence uses.

(10) You may not take fish for subsistence uses within 300 feet of any dam, fish ladder, weir, culvert or other artificial obstruction, unless otherwise indicated.

§ __.27(i)(8) Subsistence taking of fish: Chignik Area

(i) You may take fish other than salmon, rainbow/steelhead trout, or char at any time, except as may be specified by a subsistence fishing permit. For salmon, Federal subsistence fishing 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.

(ii) You may not take salmon in the Chignik River, from a point 300 feet upstream of the ADF&G weir to Chignik Lake from July 1 through August 31. You may not take salmon in Black Lake or any tributary to Black or Chignik Lakes, except those waters of Clark River and Home Creek from their confluence with Chignik Lake upstream 1 mile.

(A) In the open waters of Clark River and Home Creek you may take salmon by gillnet under the authority of a State permit.

(B) In the open waters of Clark River and Home Creek you may take salmon by snagging (handline or rod and reel), spear, bow and arrow, or capture by hand without a permit. The daily harvest and possession limits using these methods are 5 per day and 5 in possession.

(iii) You may take salmon, trout, and char only under the authority of a subsistence fishing permit [see Appendix A].

(iv) You must keep a record on your permit of subsistence-caught fish. You must complete the record immediately upon taking subsistence-caught fish and must return it no later than October 31.

(v) If you hold a commercial fishing license, you may only subsistence fish for salmon as specified on a State subsistence salmon fishing permit.

(vi) You may take salmon by seines, gillnets, rod and reel, or with gear specified on a subsistence fishing permit, except that in Chignik Lake, you may not use purse seines. You may also take salmon without a permit by snagging (by handline or rod and reel), using a spear, bow and arrow, or capturing by bare hand.

(vii) You may take fish other than salmon by gear listed in this part unless restricted under the terms of a subsistence fishing permit.

Proposed Federal Regulations

§ __.27(i)(8)(ii) Salmon may be taken by seine, gillnet, spear, and/or hook and line that may be attached to a rod or pole or with gear specified on a subsistence fishing permit, except that hook and line gear may not be used in Chignik River and power purse seine gear is permitted only in Chignik River from Mensis Point downstream and hand seining is permitted only in Chignik River and Chignik Lake and gillnets may be used only in Chignik River, Chignik Lake, and in the waters of Clark River and Home Creek, from each of their confluences with Chignik Lake to a point one mile upstream. A gillnet may not be staked or anchored or otherwise fixed in a stream, slough or side channel to where it obstructs more than one half the width of that stream, slough or side channel.

Existing State Regulation

5 AAC 01.010 Methods, means, and general provisions

(e) Fishing for, taking or molesting any fish by any means, or for any purpose, is prohibited within 300 feet of any dam, fish ladder, weir, culvert or other artificial obstruction, unless otherwise indicated.

5AAC 01.470 Lawful gear and gear specifications: Chignik Area

(a) Salmon may be taken by seines and gillnets, or with gear specified on a subsistence fishing permit, except that in Chignik Lake salmon may not be taken with purse seines. A gillnet may not be set, staked, anchored, or otherwise fixed in a stream while it obstructs more than one-half of the width of the waterway and any channel or side channel of the waterway.

5 AAC 01.475. Waters closed to subsistence fishing: Chignik Area

Salmon may not be taken

(1) from July 1 through August 31, in the Chignik River from a point 300 feet upstream from the Chignik weir to Chignik Lake;

(2) in Black Lake, or any tributary to Black Lake or Chignik Lake, except the waters of Clark River and Home Creek, from each of their confluences with Chignik Lake to a point one mile upstream.

5 AAC 01.480. Subsistence fish permit: Chignik Area

(a) Salmon, trout and char may only be taken under the authority of a subsistence fishing permit [see Appendix A].

(b) Not more than 250 salmon may be taken for subsistence purposes unless otherwise specified on the subsistence fishing permit.

(c) A subsistence fishermen (sic) shall keep a record of the number of subsistence fish taken by that subsistence fisherman each year. The number of subsistence fish taken shall be recorded on the reverse side of the permit. The record must be completed immediately upon landing

subsistence-caught fish, and must be returned to the local representative of the department by December 31 of the year the permit was issued.

Other Relevant State Regulations

State Sport Fishing Regulations

5 AAC 65.010. Fishing seasons for Alaska Peninsula and Aleutian Islands Area

(a) Except as otherwise provided in this section and 5 AAC 65.051, sport fishing is permitted year round in the Alaska Peninsula and Aleutian Islands Area.

(b) King salmon may be taken in fresh waters only from January 1 through July 25, except that king salmon may be taken in the Chignik River from January 1 through August 9.

5 AAC 65.020. Bag limits, possession limits, and size limits for Alaska Peninsula and Aleutian Islands Area

(a) Except as otherwise provided in this section, bag limits, possession limits, and size limits for finfish and shellfish in the Alaska Peninsula and Aleutian Islands Area are as follows:

Species: (1) king salmon: in fresh waters: 20 inches or greater in length, 2 per day, 2 in possession; 5 fish annual limit; harvest record is required as specified in 5 AAC 75.006; less than 20 inches in length, 10 per day, 10 in possession; no annual limit. (2) other salmon: 5 per day, 5 in possession, no size limit.

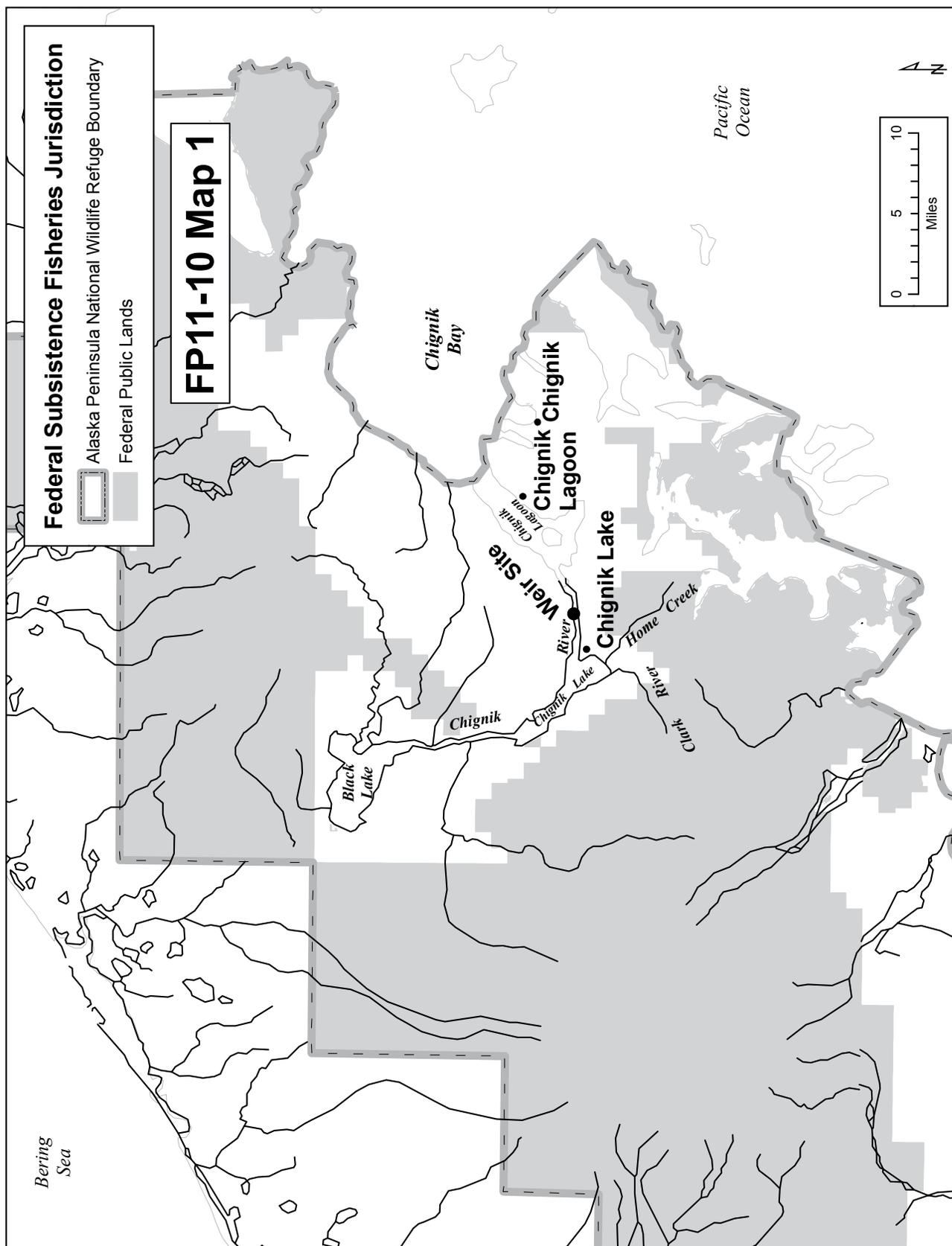
The Chignik River is open to Chinook salmon sport fishing January 1–August 9 (an extension of Alaska Peninsula Fresh Water regulations that otherwise have an open season of January 1–July 25). While spawning grounds are usually closed to sport fishing: “All fresh waters in the Alaska Peninsula/ Aleutian Islands area (except the Chignik River) are closed to king salmon fishing July 26–December 31” (ADF&G 2010a).

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. Federal public waters within the Chignik Management Area include all waters south of the Alaska Peninsula that are within the area and within or adjacent to the Alaska Peninsula National Wildlife Refuge, Aniakchak National Monument and Preserve, and Alaska Maritime National Wildlife Refuge (**Map 1**). Chignik Lake, Chignik River, Black Lake, Clark River, and Home Creek are all within the boundary of the Alaska Peninsula National Wildlife Refuge (Map 2). The Chignik and Black Lake drainages are within the external boundary of the Alaska Peninsula National Wildlife Refuge. As such, the Federal Subsistence Management Program has responsibility and jurisdiction to provide for subsistence uses for Federally qualified users.

Customary and Traditional Use Determinations

Residents of the Chignik Area which include the communities of Perryville, Chignik Bay, Chignik Lagoon, Chignik Lake, and Ivanof Bay, have a customary and traditional use determination to harvest salmon in the Chignik Area (**Map 2**). Ivanof Bay has no residents at present.



Regulatory History

The State has not allowed subsistence fishing in some Chignik Area waters prior to 1985, including upstream of the weir in Chignik River and in Chignik Lake, Black Lake or any tributary to these lakes (Alaska Legal Resource Center 2010, Morris 1987). Other State subsistence fishing regulations for the Chignik Area were adopted in 1985 and were amended in 1993, 2005, and 2008 (ADF&G 2008). The State Fisheries Management Report for the Chignik Area for 2008 (Jackson & Anderson 2009: 10–11) stated that from 2004 to 2008, large pulses of salmon did not build in Chignik Lagoon or pass through the weir. Early-season subsistence fishing opportunities were also limited by the slow movement of fish. In 2005, in order to provide additional subsistence fishing opportunity for sockeye salmon, the Alaska Board of Fisheries (BOF) opened the Chignik River to subsistence fishing above the weir, but kept this area closed between July 1 through August 31 to protect Chinook salmon.

According to ADF&G staff comments at the 2008 Alaska Board of Fisheries meeting (ADF&G 2008), subsistence users had reported difficulties in obtaining late season sockeye salmon and also wanted a means to harvest an occasional fresh salmon for immediate consumption. In 2008, ADF&G opened Clark River and Home Creek upstream to one mile from their confluence with Chignik Lake. This allowed additional subsistence fishing opportunity while still protecting salmon spawning areas above the fishing area. ADF&G further stated that local residents have traditionally used both the Clark River and Home Creek for subsistence fishing.

The State fisheries regulations were adopted by the Federal Subsistence Management Program in 1999, including the existing closures to subsistence fishing.

In 2008, Proposal FP09-11 was submitted to the Federal Subsistence Board (Board) by the Bristol Bay Regional Advisory Council (Council) that sought to align Federal and State regulations by allowing Federally qualified subsistence users to fish for salmon in Clark River and Home Creek upstream one mile from their confluence with Chignik Lake. At the Council meeting, ADF&G staff stated that, “There was a lot of discussion about Black River, Alec River, Black Lake, to open that up, and it was rejected by the Board of Fish” (BBRAC 2008: 264). The Council recommended adopting FP09-11 with a small modification (removal of the word “linear”). Following the Council’s recommendations, the Board adopted the regulatory change with an amendment at its January 2009 meeting. The Board amendment allowed the harvest of salmon in Clark River and Home Creek one mile upstream from its confluence with Chignik Lake without a permit when snagging (using handline or rod and reel), or when using spear, bow and arrow, or capture by hand. To address concerns with the lack of reporting by allowing fishing without a permit, the Board further modified the regulation to include a daily harvest and possession limit of 5 salmon per day and 5 in possession when snagging (handline or rod and reel), or using spear, bow and arrow, or capture by hand without a permit.

There have been discussions by the Council, the Board, and the Alaska Board of Fisheries about opening up Black Lake and its tributaries to subsistence fishing (see BBRAC 2007: 34; BBRAC 2008: 242). However regulations that allow subsistence fishing in these areas have not been adopted by either the Board or the Alaska Board of Fisheries.

This year, a parallel proposal to FP11-10 was submitted to the Alaska Board of Fisheries by the Chignik Lake Traditional Council (Pappas 2010, pers. comm.). The Alaska Board of Fisheries will meet January 16–19, 2011 to review Chignik proposals.

Background

The village of Chignik Lake is one of several communities located in the Chignik Management Area on the Alaska Peninsula. In 1990, the community had 34 households (Hutchinson-Scarborough and Fall 1996). Ten years later, the number of households had risen to 40, with a total population of 145 (U.S. Census Bureau 2010). By 2003, the population had dropped to 110 persons in 31 households. Davis (2006) suggests that between 2000 and 2003, some residents left the area seeking jobs and access to better health care. Since 2003, the population appears to have been relatively stable. Other communities in the area include Chignik Bay, Chignik Lagoon, Perryville, and Ivanof Bay. Ivanof Bay, currently, has no residents.

Chignik Lake lies in between Bristol Bay/Bering Sea to the north and the Pacific Ocean to the south (Alaska Community Database 2010; **Map 1**). The Chignik River is the main drainage system in the management area (Wright et al. 1985). The area is also marked by constant wind blowing off the waters. These winds are denoted in the place name Chignik, which means “windy place” in the Alutiiq language (Davis 2006). The proximity to these waters, the maritime climate, and the abundance of harvestable species have influenced and shaped the local communities both in the archaeological and historic past as well as in the present.

Every household in the Chignik Management Area harvested subsistence foods in 2003 and in prior years (Davis 2006). Sockeye salmon is an especially important species, accounting for over 50% of the subsistence harvest in 1984 and 1989. Residents of Chignik Lake, Chignik Bay, and Chignik Lagoon focus on sockeye because of its availability and personal preference. Residents of Perryville (and, formerly, Ivanof Bay) harvest mostly coho, pink and chum salmon; sockeye are rarely found in rivers near these villages. Some residents of Perryville spend portions of spring and summer at Chignik Lake or at fish camps on Chignik Lagoon, where they subsistence fish for sockeye and Chinook salmon (Hutchinson-Scarborough and Fall 1996).

Subsistence harvesting of salmon by residents of Chignik Lake occurs in the waters of Chignik Lake, Chignik River and its tributaries (including Home Creek and Clark River) as well as in Black Lake and its tributaries (Morris 1987, Hutchinson-Scarborough and Fall 1996, Lind, pers. comm. 2010). Subsistence fishing also occurs in these waters when people are participating in other subsistence activities. Hunting of caribou, moose, waterfowl, and bear occurs especially along waterways—suggesting the potential importance of small scale subsistence fishing in these streams at these times (Wright et al. 1985). On occasion, a few local residents use Black Lake and its tributaries for subsistence fishing (Lind 2010, pers. comm.). Transcripts for the Council and for the Federal Subsistence Board indicate that Black Lake and its tributaries have had limited use (BBRAC 2007, 2008, 2009; FSB 2009a, b).

The residents of Chignik Lake, Chignik Bay, Chignik Lagoon, and Perryville are primarily “Alutiiq” (Hutchinson-Scarborough and Fall 1996, Fall 2006, Partnow 1993). The present day Alutiiq ethnicity arose out of a shared common language and ethnic identity (Sugpiaq or Sugcestun) and the many years of interaction with non-indigenous people (i.e., Russians and Americans) (Partnow 1993; Crowell et al. 2001; Luehrmann 2008).

Language, alongside subsistence foods, represents an important theme in characterizing Alutiiq identity and ethnicity (Partnow 1993, Crowell et al. 2001). Partnow describes the importance of Native foods in area celebrations, rituals, and gatherings. These foods go beyond subsistence and are a link to Alutiiq identity and a link to the land and sea from which they are obtained (Partnow 1993: 320). Partnow insists that these foods act as more than subsistence as they bring together people, strengthen social ties and are symbolic of elements of culture that are “seen to be endangered” (Partnow 1993: 320). Some of the

foods may or may not be used entirely for subsistence purposes, but are linked to tradition, ancestors, and people's pasts. As Virginia Aleck, a resident of Chignik Lake noted, "my Dad always told me that before you go out on any kind of hunt, you have to cleanse yourself. And this was like a ritual. And you kept yourself quiet. In order to catch what you're going to get, you have to get your whole body, mind and soul ready" (Crowell & Laktonen 2001: 142). Food and the subsistence activities used to obtain food are in and of themselves an important part of local beliefs, identity, and ties to Alutiiq culture. Reflecting on Alutiiq life, Shauna Lukin expressed that, "I have come to understand that although my family gathers and preserves our subsistence food differently than my ancestors used to, we are still sustaining a main component of our Alutiiq culture" (Lukin 2001: 178).

Biological Background

All five species of salmon spawn in the Chignik Area, but most of the harvests for both subsistence and commercial fisheries are typically comprised of sockeye salmon (Jackson and Anderson 2009). Salmon escapement is monitored at a site in the lower Chignik River using a weir and associated video equipment, while spawner distribution is documented through aerial surveys of the drainage. The Chignik River drainage produces most of the sockeye salmon in the Chignik Area, and the spawning population consists of both an early and late run. Since the Chignik River weir is not operated throughout the duration of the late run, which extends into September, total escapement has been estimated using time-series analysis. ADF&G has set separate sustainable escapement goals for these runs (early run: 350,000–400,000 sockeye salmon; late run: 200,000–400,000 sockeye salmon) as well as in-river run goals to support subsistence fishing for the late run (August: 25,000 sockeye salmon; September: 25,000 sockeye salmon). However, no escapement goals have been set for individual tributaries or lakes within the system. While sockeye salmon also spawn within other Chignik Area systems, their numbers are relatively small (less than 1,000 sockeye salmon are usually counted during aerial surveys), and no escapement goals have been set.

In 2009, the total escapement into the Chignik River system was 720,062 sockeye salmon, and was comprised of 391,476 early-run and 328,586 late-run sockeye salmon. The 2009 early-run escapement was slightly below the 1999–2008 average of 429,235 sockeye salmon, while the 2009 late-run escapement was slightly above the 1999–2008 average of 302,944 sockeye salmon (Anderson 2009). Both 2009 escapements were within the desired escapement goal ranges.

Within the Chignik River system, sockeye salmon spawn in Chignik Lake and its tributaries and Black Lake and its tributaries. Aerial surveys of Black Lake and its tributaries have documented concentrations of early-run spawning sockeye salmon in the Alec River. The most recent five-year average escapement estimate for sockeye salmon in Black Lake tributaries (151,688) has been less than either the ten- (274, 844) or twenty- (293, 927) year averages (Jackson and Anderson 2009). Due to sedimentation, Black Lake is declining in volume and dissolved oxygen levels over the winter months have been low (Westley et al. 2010). This has created problems for juvenile survival in Black Lake, and a portion of the juveniles produced from spawning in Black Lake has been migrating to Chignik Lake to rear (Westley et al. 2010, Simmons 2009). This is probably a factor contributing to greater fluctuations observed in adult returns. Although spawning and rearing conditions have been changing due to sedimentation of Black Lake, no conservation concerns have been identified for either run.

The Chignik River is also the only notable stream in the Chignik Area with Chinook salmon production, and the run extends from about mid-June to late August with a peak in mid-July. ADF&G has set a biological escapement goal of 1,300–2,700 Chinook salmon for this run (Jackson and Anderson 2009). The 2009 escapement of 1,680 Chinook salmon was within the escapement goal range, although

subsistence and sport harvests above the weir will not be known until this fall (Anderson 2009). The 2009 escapement was well below the 1999–2008 average of 4,259 Chinook salmon. No conservation concerns have been identified for Chinook salmon.

Coho salmon spawn in drainages throughout the Chignik Area, and runs extend from mid-August through November (Anderson 2009). In 2009, the number of coho salmon counted through the Chignik River weir was 7,670. Annual counts for the period 1999–2009 have ranged from 103 to 37,113 coho salmon, and the 1999–2008 mean was 12,486 coho salmon. Since the run is often still increasing when the weir is dismantled for the season, time-series analysis cannot usually be used to estimate the total run. ADF&G has not set an escapement goal for the Chignik River coho salmon run. While aerial surveys have been used to monitor escapements into other systems within the Chignik Area, the total number counted is usually less than 2,000 coho salmon. ADF&G considers coho salmon runs to be at sustainable levels in the Chignik Area.

Both pink and chum salmon spawn in drainages throughout the Chignik Area, and runs generally reach their peak abundance in August (Jackson and Anderson 2009). While both species are counted at the Chignik River weir, most spawning is scattered among numerous drainages monitored by aerial surveys. Pink salmon runs can greatly vary in abundance between odd- and even-years, and ADF&G has set area-wide sustainable escapement goals of 200,000 to 600,000 pink salmon for even years and 500,000 to 800,000 pink salmon for odd years. For the period 1999–2009, the number of pink salmon counted through the Chignik River weir has ranged from 1,464 to 20,464 for odd-years and from 2,243 to 22,341 for even-year runs (Anderson 2009). In 2009, the area-wide escapement was estimated to be 856,190 pink salmon. For chum salmon, the number counted through the Chignik River weir has ranged from 48 to 483 for the period 1999–2009. ADF&G has set an area-wide sustainable escapement goal of 57,400 chum salmon. In 2009, the area-wide escapement was estimated to be 214,850 chum salmon, which was well above the escapement goal.

Dolly Varden and rainbow trout/steelhead are also found in the Chignik Management Area. Stickleback and pond smelt are also present in the Chignik Lake system (Witteveen et al 2007; Westley 2010). Data on populations of these resident and anadromous species is very limited, and none of these species is actively managed.

Harvest History

Methods and Means of Harvesting Salmon

Residents of local communities take salmon through subsistence, commercial, and sport fish opportunities with seines, gillnets, and/ or rod and reel (Hutchinson-Scarborough and Fall 1996). A 2003 ADF&G survey revealed that subsistence methods account for 71% of salmon harvested for subsistence purposes in Chignik Lake, while 29% was removed from commercial catches (**Table 1**). The 2003 survey also revealed that the following methods were used to harvest salmon for subsistence in usable weight: 69% by set gillnets, 16% from commercial catches, 9% by seine, and 5% via rod and reel.

Commercial fishing of salmon occurs in Chignik Bay and Chignik Lagoon and seines are the only legal commercial fishing gear allowed in the area (Hutchinson-Scarborough and Fall 1996). The involvement of Chignik Lake community residents in commercial fishing has varied over the past few decades. Some of the most prominent factors affecting participation in commercial fishing include the impacts of the Exxon Valdez oil spill, the establishment of a fishing co-operative (co-op), and then the subsequent dissolution of the co-op. Prior to the implementation of the co-op in 2002, ADF&G managed the fishery as a competitive limited entry permit system (Fall et al. 2009). Before the co-op, subsistence fishing would

Table 1: Method of salmon harvest by residents of Chignik Area by usable weight in 2003 (Fall 2006).

Method	% by usable weight			
	Chignik Bay	Chignik Lagoon	Chignik Lake	Perryville
Commercial Catch	*	36	29	*
Other/Subsistence Method:	*	60	71	*
Set Gillnet	*	*	69	*
Seine	*	*	9	*
Rod & Reel	*	4	8	*

* Data not available

occur in early June, preceding the commercial opening. As such, subsistence fishers who also participated in commercial fishing were able to harvest and smoke early-run sockeye salmon before flies hatched and ruined the fish.

Between 2002–2006, the Chignik commercial salmon fishery was managed based on a harvest allocation between the competitive fishery and the co-op fishery. After the co-op was established, the key early June subsistence fishing pattern changed. During the co-op period, ADF&G did not require a minimum of 40,000 sockeye salmon escapement and a strong build up of sockeye in Chignik Lagoon before opening the commercial fishing season. The removal of these requirements resulted in a smaller, steadier passage of fish and not the larger pulses of fish that subsistence users in the Chignik Area had traditionally targeted. Therefore, commercial fishing opened earlier in June leading to “a decrease in efficiency and an increase in effort for harvesting subsistence salmon in Chignik Lagoon” (Fall et al. 2009: 78). Because the co-op fishery opened during a key subsistence fish processing period (drier weather), it was reported that traditional subsistence harvest patterns were disrupted to allow for commercial (co-op) fishing. Some residents stated that commercial fishing was taking precedence over subsistence uses. Additionally, people who pooled resources to participate in the co-op had to fish much more or much less than other participants in the co-op depending on the resources they pooled. However, some participants felt that they had lost their commercial permits when they essentially became ‘inactive’ (Kenner & Krieg 2006). Those not participating in the co-op faced other limitations including reduced fishing time. Additionally, some residents blamed the co-op for further conservation based regulations after co-op members were said to use leads (nets or fish-traps) across streams (Kenner & Krieg 2006).

It is likely that the removal of fish from commercial harvests has varied in importance to subsistence harvesters. The ratio of salmon taken for subsistence by commercial removal has decreased over the past few decades (see Davis 2006:325–327 for detailed analysis). In 1984, 20% of subsistence harvest came from commercial removal and 15% in 1989 and remained at that level through 2003 (16%) (Davis 2006: 327). Participation in removal of salmon from commercial catches by household has also decreased from 67% of households in 1991 to 29% of households in 2003 removing fish (Davis 2006). In 2007, commercial fishing tickets revealed 285 sockeye, 56 coho, 16 Chinook, 1 chum, and 0 pink salmon were taken for subsistence use from commercial catches. This is compared to overall subsistence totals of 10,191 sockeye, 1,936 coho, 84 Chinook, 996 pink, and 165 chum salmon for the entire management area (Fall et al. 2009). The ability to access home packs was affected by the co-op fishery and later commercial fishing enterprises, potentially leading subsistence users to seek new subsistence areas.

Subsistence harvesting of salmon is done with seines, gillnets, and rod and reel in the areas described above (Wright et al. 1985). The most recent household survey by ADF&G in 2003 suggests there has been a “significant effect on the subsistence economy of the average household in Chignik Lake” due to salmon harvest decreases in pounds per capita (see Davis 2006). “Salmon harvests decreased 32% from 203.7 pounds per capita in 1991 to 138.4 pounds in 2003” (Davis 2006: 326). Subsistence methods for harvesting have become increasingly important since commercial harvesting by residents has decreased. ADF&G reports also suggest that rod-and-reel fishing has decreased between 1991–2003 (see Davis 2006). Households surveyed in 2003 revealed that salmon use was affected by decreased salmon returns, in part, caused by oil spill contamination. Overharvesting by commercial fishing (and the co-op) was also given as a reason for decreased subsistence harvests (Davis 2006). “The large decreases in salmon and caribou harvests drastically reduced the amount of subsistence food available to the average household” (Davis 2006: 327). While salmon harvested via commercial removal decreased from 1991–2003 (23% to 16% of salmon coming out of commercial harvests) there was a corresponding increase in subsistence methods used to harvest salmon. This period overlaps with the co-op and it is likely the co-op impacted both commercial and subsistence harvests. The ADF&G household survey in 2003 also revealed 67% of households retained fish from commercial catches in 1991 versus only 29% of households in 2003. Approximately 71% of households used beach seine and set gillnet and 35% of households used rod and reel in both 1991 and 2003.

Subsistence Harvests

In 2006, the State subsistence salmon harvest was below both the recent 5 and 10 year averages (**Table 2**) (Stichert 2007). Subsistence users reported difficulty in obtaining late season salmon. Addressing these concerns, the Alaska Board of Fisheries (January 2008) adopted a proposal to allow for subsistence salmon fishing in the Chignik Lake tributaries of Clark River and Home Creek. A significant increase in the subsistence harvest was not anticipated. In 2007, above average subsistence harvests in the Chignik Management Area were estimated to be 13,372 fish. The subsistence harvests in 2007 included 76% sockeye, 14% coho, 7% pink, and 1% Chinook salmon (see Fall et al. 2009). However, the 2008 harvests were under the historical (11,000) and 5 year average (12,000) at approximately 8,000 fish (**Table 2**).

In 2008, the subsistence salmon harvest was below both the previous 5 and 10 year average. Also in 2008, there were only 89 subsistence permits issued by ADF&G, the lowest number issued or returned since 1990 (Jackson and Anderson 2009). The 2009 subsistence harvest numbers are not yet available. During the last five years, large pulses of salmon did not build up in Chignik Lagoon and there was a slow movement of fish upriver which limited early-season subsistence opportunities (Jackson and Anderson 2009).

Federal regulations require that Federally qualified subsistence users have a subsistence fishing permit (issued by the State of Alaska) to take salmon with seines or gillnets in the Chignik Management Area. However, Federally qualified subsistence users are not required to have a State permit to take salmon by snagging (hand line, rod and reel), spear, bow and arrow, or capture by hand in the Chignik Management Area, because State regulations do not allow the subsistence take of salmon by these methods. However, according to residents and managers, subsistence salmon harvests using these methods are likely low since most people use these methods to catch an occasional fresh fish (BBRAC 2008: 238–240; Lind pers. comm. 2010).

Available data on subsistence uses of other anadromous and resident species is very limited. In 2003, the most recent year for which data could be found, the combined harvest of Dolly Varden/char and rainbow

Table 2: Chignik Management Area—number of subsistence permits issued and returned and estimated subsistence harvest, by species and year, 1980-2008.

Year	Permits		Estimated Salmon Harvest					
	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	Total
1977	NA	NA	50	9,700	2,400	600	1,800	14,550
1978	NA	NA	50	6,000	500	600	2,100	9,250
1979	NA	NA	14	7,750	34	0	262	8,060
1980	82	37	6	12,475	32	169	478	13,160
1981	29	7	0	2,049	0	0	0	2,049
1982	59	15	3	8,532	12	0	2	8,548
1983	32	21	0	3,078	1,319	850	1,250	6,497
1984	77	64	23	8,747	464	204	330	9,768
1985	59	48	1	7,177	50	25	26	7,279
1986	74	38	4	10,347	205	77	98	10,730
1987	NA	NA	10	7,021	278	204	261	7,774
1988	80	34	9	9,073	1,455	142	54	10,733
1989	68	23	24	7,551	384	147	81	8,187
1990	72	23	103	8,099	210	115	470	8,996
1991	95	58	42	11,483	13	81	275	11,893
1992	98	19	55	8,648	709	145	305	9,862
1993	201	141	122	14,710	3,765	642	1,265	20,503
1994	219	122	165	13,978	4,055	382	1,720	20,300
1995	111	95	98	9,563	1,191	150	723	11,726
1996	119	104	48	7,357	2,126	355	2,204	12,089
1997	126	103	28	13,442	2,678	840	2,035	19,024
1998	104	72	91	7,750	1,390	186	1,007	10,424
1999	106	88	243	9,040	1,679	136	1,191	12,290
2000	130	112	163	9,561	1,802	517	1,185	13,227
2001	135	122	171	8,633	1,859	213	2,787	13,663
2002	120	86	74	10,092	1,401	23	390	11,980
2003	146	127	267	10,989	2,256	286	1,597	15,394
2004	104	57	88	7,029	1,981	202	1,047	10,347
2005	119	100	224	8,171	2,112	353	730	11,590
2006	113	79	259	8,079	1,539	275	1,035	11,187
2007	128	83	84	10,191	1,936	165	996	13,372
2008	89	69	41	7,189	877	57	619	8,783
5-year average 2004-2008	111	78	139	8,132	1,689	211	885	11,056
10-year average 1999-2008	119	92	161	8,897	1,744	223	1,158	12,183
Historical average 1977-2008	103	70	80	8,859	1,272	254	885	11,351

Source: Scarbrough-Hutchinson 2010. See also Stichert 2007, Stichert et al. 2009; and Quimby and Owen 1994 for 1976-1979 and 1987. Note: NA = data not available. Information regarding the number of permits issued and returned was collected; however, the records containing this information no longer exist. Harvest data for these years are also recorded in ADF&G Division of Commercial Fisheries and Division of Sport Fish area management reports.

trout/steelhead was 18 pounds per person for the communities of Chignik Bay, Chignik Lagoon, and Chignik Lake (ADF&G 2010b).

Effects of the Proposal

If this proposal is adopted, Federally qualified subsistence users would be provided additional opportunities to harvest salmon for subsistence in areas currently closed to fishing under both State and Federal subsistence regulations, but which are open to sport fishers such as Black Lake and its tributaries.

In a subsistence harvest survey conducted in 2003, subsistence users reported that subsistence harvests have decreased over the past few decades (see Fall et al. 2006). Additionally, harvest averages of the past five years are below the 10 year and historical average for sockeye (and the recent 5 year average of Chinook salmon is below the 10 year average). Opening more areas for subsistence fishing would provide additional opportunities for subsistence harvests, but is not expected to significantly increase the harvest because of the anticipated low numbers of people using these areas.

If the proposal is adopted as proposed, the use of hand seines in Chignik Lake has the potential of increasing the efficiency of harvest of sockeye salmon, however, it is not anticipated to increase the overall harvest.

If the proposal is adopted as proposed it would require a permit for subsistence activities which do not currently need permitting as it removes the language in § _____.27(i)(8) (vi) which allows for subsistence fishing without a permit in certain areas. As proposed, the restrictions on power purse seine gear in Chignik River from Mensis Point downstream would only affect Federally qualified subsistence users, but would not address concerns about non-Federally qualified subsistence or other uses.

If the proposal is adopted as proposed, subsistence fishing for salmon would be allowed in the Chignik River from a point 300 feet upstream of the ADF&G weir to Chignik Lake from July 1 through August 31. When the Chignik River was opened for fishing opportunities in 2005, this restriction was added to address conservation concerns for spawning Chinook salmon.

If the proposal is adopted as proposed, a restriction would be added on “hook and line” gear in Chignik River, which would create more restrictive regulations for Federally qualified users than for non-Federally qualified users. Snagging by use of a handline or rod and reel—which is essentially the same as “hook and line” (under the Federal definition)—is already allowed in Federal subsistence regulations.

If the proposal is adopted as proposed, opening Black Lake and its tributaries to additional fishing opportunities is not expected to have any significant effect on resident species, including Dolly Varden and rainbow trout. However, the potential exists that the use of gillnets in these tributaries could create a conservation concern for these species, and other salmon species, which cannot withstand the same high exploitation as the more abundant sockeye salmon.

The State currently administers subsistence fishing permits for this area. This proposal would lead to significant differences between the State and Federal subsistence fishing regulations. A Federal subsistence permit would need to be implemented for Federally qualified subsistence users who use gear types or fish in areas that are not allowed under State regulations. Requiring separate Federal and State subsistence fishing permits may complicate enforcement, increase confusion, and encumber Federally qualified subsistence users. The Federal Subsistence Management Program would need to administer the Federal permit. A dual Federal/State permit would reduce the burden on subsistence users.

OSM CONCLUSION

Support Proposal FP11-10 with modification to: 1) open the areas of Black Lake and its tributaries to certain subsistence gear types; 2) remove the requested restriction for using “hook and line” gear in the Chignik River; 3) leave in the current restrictions to taking salmon in the Chignik River from upstream of the ADF&G weir; 4) leave in the restrictions for taking salmon in Clark River and Home Creek; and 5) move language from subsection (vi) to subsection (ii). In addition, fishing permit language has been made consistent throughout the regulation, removing the references to State permits.

The modified regulation should read:

§ _____.27(c) Subsistence taking of fish: methods, means, and general restrictions

(4) Except as otherwise provided for in this section, you may not obstruct more than one-half the width of any stream with any gear used to take fish for subsistence uses.

(10) You may not take fish for subsistence uses within 300 feet of any dam, fish ladder, weir, culvert or other artificial obstruction, unless otherwise indicated. § _____.27(i)(8)

Subsistence taking of fish: Chignik Area

(i) You may take fish other than salmon, rainbow/steelhead trout, or char at any time, except as may be specified by a subsistence fishing permit. For salmon, Federal subsistence fishing 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.

(ii) You may take salmon by seine, spear, and/or snagging (handline or rod and reel) or with gear specified on a subsistence fishing permit. You may also take salmon without a permit by snagging (by handline or rod and reel), using a spear, bow and arrow, or capturing by bare hand. You may not take salmon in the Chignik River from a point 300 feet upstream of the ADF&G weir to Chignik Lake from July 1 through August 31. You may not take salmon in Black Lake or any tributary to Black or Chignik Lakes.

(A) You may take salmon by gillnet in Chignik River, Chignik Lake, and in the open waters of Clark River and Home Creek under the authority of a State subsistence fishing permit;

(B) In the open waters of Clark River and Home Creek you may take salmon by snagging (handline or rod and reel), spear, bow and arrow, or capture by hand without a permit. The daily harvest and possession limits using these methods are 5 per day and 5 in possession.

(C) You may not use purse seines in Chignik Lake.

(iii) You may take salmon, trout, and char only under the authority of a subsistence fishing permit unless otherwise indicated.

(iv) You must keep a record on your permit of subsistence-caught fish. You must complete the record immediately upon taking subsistence-caught fish and must return it no later than the due date listed on the permit.

(v) If you hold a commercial fishing license, you may only subsistence fish for salmon as specified on a State subsistence salmon fishing permit.

(vi) You may take salmon by seines, gillnets, rod and reel, or with gear specified on a subsistence fishing permit, except that in Chignik Lake, you may not use purse seines. You may also take salmon without a permit by snagging (by handline or rod and reel), using a spear, bow and arrow, or capturing by bare hand.

(vii) You may take fish other than salmon by gear listed in this part unless restricted under the terms of a subsistence fishing permit.

Justification

Adoption of Proposal FP11-10 would allow Federally qualified subsistence users to continue long-established fishing practices while providing additional harvest opportunities in Black Lake and the tributaries of Black and Chignik lakes. Federally qualified subsistence users would be allowed to access areas in all drainages in the Chignik Area to harvest salmon from January 1 to December 31, and additional gear types, excluding gillnets, would be legal, except where noted in the regulations (notably from July 1 through August 31 on the Chignik River above the weir). Opening these areas to Federally qualified users would allow them to access areas (currently open to those fishing under State sport fishing regulations) while upholding a subsistence priority.

The OSM Conclusion suggests that the language in subsection (ii) be moved from subsection (vi). Moving this portion of the regulation does not alter the effect of the regulation. Adopting the OSM Conclusion for this proposal would allow Federally qualified subsistence users to harvest fish by snagging, which is a recognized method of subsistence fishing. Restricting subsistence users from harvesting fish with a hook and line would be an unnecessary restriction to Federally qualified subsistence users and it would not limit sport fishing.

The OSM Conclusion suggests removing the proposed language to restrict using power purse seine gear in the Chignik River from Mensis Point downstream, because it is outside of Federal jurisdiction for subsistence fishing, as only Federally qualified subsistence users would be restricted. The expressed goal of limiting non-Federally qualified users would not be achieved with this restriction.

The proposed language regarding the subsistence permit is inconsistent in current regulations, where permits are referred to as “State permit,” “State subsistence fishing permit,” “State subsistence salmon fishing permit,” and “subsistence fishing permit.” This language is confusing and inconsistent. Creating a Federal permit has been discussed in the past by the Council and the Board. Language suggested in the OSM Conclusion would provide the flexibility for a State, Federal, or dual State/Federal permit. Similarly, deleting the reference to a specific date to return the permit allows for flexibility if the date changes.

The State currently administers subsistence fishing permits for this area. This proposal would lead to significant differences between the State and Federal subsistence fishing regulations, unless similar changes are also adopted by the Alaska Board of Fisheries. Federally qualified subsistence users who wished to use gear types or fish in areas that are not allowed under State regulations would likely need to obtain a Federal subsistence permit. Requiring separate Federal and State subsistence fishing permits may complicate enforcement, increase confusion, and encumber Federally qualified subsistence users. The Federal Subsistence Management Program would need to administer this permit. A dual Federal/State permit could be issued to reduce the burden on subsistence users.

Because the potential exists that the use of gillnets in Black Lake and its tributaries could create a conservation concern, the OSM Conclusion suggests that gillnet use remains restricted to Chignik River, Chignik Lake, and in the open waters of Clark River and Home Creek.

The existing closure of the Chignik River from a point 300 feet upstream of the ADF&G weir to Chignik Lake from July 1 through August 31 should continue as it addresses conservation concerns posed by the State in 2005. Although the proponent asked that power purse seine gear be prohibited in Chignik Lake, this restriction already occurs in current regulations and is not needed. The proponent also requested that hand seining be permitted only in Chignik River and Chignik Lake. The OSM Conclusion suggests that

the prohibition of purse seines (both power and hand) in Chignik Lake remain. These restrictions address concerns for potential overharvest with a specific gear type.

The Bristol Bay Council and conversations with the proponents indicate that both were satisfied with the modifications as presented in the staff analysis. The opening of Black Lake and its tributaries is an issue that has been revisited numerous times by the Council. At the Fall 2010 meeting, Council members expressed satisfaction that the proposal with modification addressed this long-standing issue. They were also pleased that the modification allowed flexibility in the subsistence permits. The Council discussed deferring the Federal proposal until after the Board of Fish addresses an identical proposal, however, the Council decided to pass the proposal with modification with the intent to push alignment at the Board of Fish meetings in January 2011.

The proposed opening of Black Lake and its tributaries, and Chignik Lake tributaries would coincide with areas traditionally used by local residents. Since harvests have diminished over the past decade, this proposal, as modified, would increase subsistence opportunities for the residents of Chignik Lake, by allowing Federally qualified subsistence users in the area more time and locations to harvest fish. Increasing subsistence opportunities would also allow residents of Chignik Lake to maintain and strengthen critical components of their Alutiiq identity, culture, and relationships.

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SELECT SUBSISTENCE FISHING REGULATIONS

These listed regulations are not inclusive of all the regulations that apply to subsistence salmon fishing in the Chignik Area.

5 AAC 01.015. SUBSISTENCE FISHING PERMITS AND REPORTS. (b)(3) Permits must be retained in the possession of the permittee and be readily available for inspection while taking fish. A person who transports subsistence-taken fish shall have a subsistence fishing permit in their possession.

5AAC 01.460. FISHING SEASONS. Fish, other than rainbow trout and steelhead trout, may be taken at any time, except as may be specified by a subsistence fishing permit. Rainbow trout and steelhead trout, taken incidentally in other subsistence finfish net fisheries, are lawfully taken and may be retained for subsistence purposes.

5 AAC.01.470. LAWFUL GEAR AND GEAR SPECIFICATIONS. (a) Salmon may be taken by seines and gillnets, or with gear specified on a subsistence fishing permit, except that salmon in Chignik Lake may not be taken with purse seines. A gillnet may not be set while staked, anchored, or otherwise fixed in a stream while it obstructs more than one-half of the width of the waterway and any channel or side channel of the waterway.

5 AAC 01.475. WATERS CLOSED TO SUBSISTENCE FISHING. Salmon may not be taken (1) from July 1 through August 31, in the Chignik River from a point 300 feet upstream from the Chignik weir to Chignik Lake; (2) in Black Lake or any tributary to Black Lake or Chignik Lake except in the waters of Clark River and Home Creek from their confluence with Chignik Lake to a point one mile upstream.

5 AAC 01.480. SUBSISTENCE FISHING PERMITS. (a) Salmon, trout and char may only be taken under the authority of a subsistence fishing permit.

- (b) Not more than 250 salmon may be taken for subsistence purposes unless otherwise specified on the subsistence fishing permit.
- (c) A record of subsistence-caught fish must be kept on the reverse side of the permit. The record must be completed immediately upon taking subsistence-caught fish and must be returned to the local representative of the department no later than December 31 of the year issued.

5 AAC 01.485. RESTRICTIONS ON COMMERCIAL FISHERMEN. (a) In the Chignik Area, a commercial salmon fishing license holder may not subsistence fish for salmon during the 12 hours before the first commercial salmon fishing period and the 12 hours following the closure of a commercial salmon fishing period. However, a commercial salmon fishing license holder may subsistence fish for salmon during a commercial salmon fishing period.

SPECIAL PERMIT PROVISIONS

1. The adipose fin must be removed from all subsistence-caught salmon immediately upon capture.
2. A commercial license holder may not fish for both subsistence and commercial salmon at the same time. Further, a commercial salmon vessel may not carry both subsistence and commercially caught salmon at the same time.
3. A commercial fishing vessel may not simultaneously carry both commercial seine and subsistence gillnet gear.
4. Commercial fishermen may always remove salmon from their commercial catch for home pack. Mark the number of salmon taken by species for home pack use on your fish ticket.
5. This permit can be withdrawn at any time.

NOTICE TO FISHERS:

Before you fish, be sure you know whose land you are on and check the regulations: State regulations apply on all state, private, and federal lands where authorized. Private landowners may restrict entry on their land. Federal lands may be closed to fishing except by certain rural residents. Persons standing on state or private lands should be sure their fishing activities are legal under state regulations. If you have questions regarding the federal subsistence fisheries, please contact the Federal Office of Subsistence Management at (800) 478-1456.

REGIONAL ADVISORY COUNCIL RECOMMENDATION

Bristol Bay Subsistence Regional Advisory Council Recommendation

Support Proposal FP11-10 **with modification** as presented in the OSM Conclusion. The Council supports a long standing subsistence fishery and FP11-10 will provide additional harvest opportunities for rural residents of the Chignik Area. Subsistence users have a long established customary and traditional use of salmon in the Black Lake and the tributaries of Black and Chignik Lakes. The proposal will allow access, with some restrictions, to areas in all drainages in the Chignik area to harvest salmon from January 1 to December 31 and allow additional gear types.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a complete and accurate evaluation of the proposal. The Alaska Board of Fisheries will have a similar proposal before it at its January 2011 meeting, which will occur just prior to the Federal Subsistence Board meeting. If the State Board of Fisheries takes positive action on the proposal, the Federal Board could decide to align with that action, which would result in the continuation of using one permit to cover both State and Federal subsistence fisheries. If State and Federal regulations are not aligned there will be a need for separate State and Federal permits, which would be an added burden to Federally qualified subsistence users.

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Alaska Department of Fish and Game
Comments to Federal Subsistence Board

Fisheries Proposal FP 11-10: Remove closure for federal subsistence fishing in Chignik River watershed and liberalize legal gear types used for subsistence harvest of salmon.

Introduction: Chignik Traditional Council submitted this proposal to:

1. Open the entire Chignik River watershed to federal subsistence fishing, exception waters more than one mile upriver from Chignik Lake in both Clark River and Home Creek.
2. Expand legal gear types for federal subsistence fishing in tributaries of Black and Chignik lakes (except not in Clark River and Home Creek) to include spear, hook and line that may be attached to a pole, or other gear as specified on a subsistence fishing permit.
3. Restrict use of hand seines to Chignik River and Chignik Lake and use of gillnets to Chignik River, Chignik Lake, and the lower one mile of Clark River and Home Creek.
4. Prohibit fishing with hook and line for federal subsistence in Chignik River and prohibit use of a power purse seine upstream of Mensis Point in Chignik River.
5. Eliminate the July 1 through August 31 subsistence fishery closure in Chignik River, which was originally established to protect spawning Chinook salmon.
6. Eliminate the 300-foot closure upstream of Chignik River weir, which was established for safety reasons and to prevent interference with weir operations.

Impact to Subsistence Users: If adopted as proposed, federally qualified subsistence users would be allowed to subsistence fish in the Chignik River watershed with gear types that include spear, hook and line attached to a pole, or other gear specified on a subsistence fishing permit. If adopted, federal subsistence users who choose to use a power purse seine would be restricted to fishing downstream from Mensis Point, and those who fish with a gillnet would be restricted to Chignik River, Chignik Lake, and the lower one mile of Clark River and Home Creek. The Federal Subsistence Board authorized expanded methods and means and eliminated some permit and reporting requirements in the Chignik River watershed. If this proposal is adopted, federal regulations would allow federally qualified subsistence users to utilize methods and means significantly different from those allowed under state regulations in the tributaries of Chignik and Black lakes (with the exception of Clark River and Home Creek, neither of which require a federal subsistence permit or other reporting method). Though this proposal does not request that all gear types be allowed for federal subsistence fishing in the tributaries of Chignik and Black lakes, as allowed in the Clark River and Home Creek, state regulations prohibit using spears and hook and line for subsistence fishing. Adoption of this proposal would expose federally qualified users to state citation because there are no federal public lands in the Chignik River watershed. Fishermen using methods and means not authorized under state law or who fish in areas closed to subsistence fishing in state regulations would risk being cited while standing on state and private land, including state-owned submerged lands and shorelands.

Opportunity Provided by State: Gillnets and purse seines are allowable gear under state subsistence regulations. The State of Alaska provides a subsistence preference on all lands and provides liberal salmon subsistence fisheries on the Alaska Peninsula. Subsistence fisheries in the Chignik area provide an annual household limit of 250 fish, and subsistence fishermen can be authorized to take more if needed. For the Chignik area subsistence salmon fishery, gear types

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allowed include gillnets and seines, except purse seines may not be used in Chignik Lake. Gillnets may be used in Clark River and Home Creek one linear mile upstream from their confluences with Chignik Lake. Additional gear types can be added to the state subsistence permit (5 AAC 01.470).¹

State subsistence permits for each management area carry stipulations specific to that area, such as timing restrictions to separate subsistence and commercial fishing, gillnet length limits in areas open to commercial fishing, and waters closed to subsistence fishing. Commercial salmon license holders and Commercial Fisheries Entry Commission (CFEC) salmon permit holders may subsistence fish for salmon during a commercial salmon fishing period (5AAC01.485) but may not subsistence fish 12 hours before or 12 hours after each commercial fishing period. Commercial salmon license holders and CFEC permit holders in the Chignik Management Area that subsistence fish in Chignik Lagoon, Lake, or River are required to contact department staff at the Chignik weir in order to separate the reporting of subsistence and commercial harvests.

The Alaska Board of Fisheries established a combined amount reasonably necessary for subsistence for communities in the Alaska Peninsula area as 34,000—56,000 salmon annually. The combined amount necessary for subsistence for the Chignik Area (Chignik Bay and the Central and Eastern districts of the Chignik Management Area) is 7,700—14,250 salmon annually. Liberal state subsistence fisheries are allowed on all lands (state, federal, and private), so adoption of this proposal is not necessary to provide a meaningful subsistence opportunity.

Conservation Issues: No salmon stocks on the Alaska Peninsula are currently listed as “stock of concern” by the Alaska Board of Fisheries. Recent late-run sockeye salmon returns, which return primarily to Chignik Lake and its tributaries, have recently slightly decreased. If the Federal Subsistence Board approves this proposal but does not require a federal permit, increases in undocumented in-tributary exploitation would not be detectable due to the lack of a federal reporting requirement. Significant increases of unreported harvest in Chignik River watershed may lead to conservation issues that would not be detected in a timely manner and may require severe fishery restrictions when detected.

The July 1 through August 31 subsistence fishery closure was established by the Alaska Board of Fisheries in Chignik River many years ago to prevent inadvertent harvest and harassment of spawning Chinook salmon. Reopening the Chignik River to subsistence fishing with gillnets and hand seines would have immediate impacts on the Chinook salmon population that spawns in approximately 80% of the 1.8 river miles that extends from the outlet of Chignik Lake downstream to the department’s Chignik weir and near the outlet of Chignik Lake. Chinook salmon have not been found to habitually transit beyond Chignik Lake.

The Federal Subsistence Board recently liberalized allowable methods and means for federal subsistence fisheries and eliminated permitting and reporting requirements for federally qualified

¹ **5 AAC 01.470. Lawful gear and gear specifications**

(a) Salmon may be taken by seines and gillnets, or with gear specified on a subsistence fishing permit, except that in Chignik Lake salmon may not be taken with purse seines.

(b) Fish other than salmon may be taken by gear listed in 5 AAC 01.010(a), unless restricted under the terms of a subsistence fishing permit.

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users who utilize rod and reel, bow and arrow, spear, bare-hand capture, and snagging. Elimination of permitting and reporting requirements by federally qualified users causes the department serious concern about localized depletion of sockeye salmon stocks in Chignik River watershed tributaries, especially if a significant increase of harvest results. Since the Federal Subsistence Board does not monitor the federal subsistence fishery in this area, authorizing additional freshwater subsistence fisheries that target unmonitored wild stocks is not consistent with principles of sound management and conservation of fish and wildlife resources.

Three Federal Subsistence Board members discussed their support of proposal FP08-11 at the December 2007 meeting because the expected increase in harvest was estimated to be reasonably small and the proponent's intent was to harvest one or two fish at a time (Federal Subsistence Board Transcripts, December 20, 2007, pages 228 and 229). Further discussion by the Federal Subsistence Board and Regional Advisory Council chairs also focused on liberalizing federal subsistence users' methods and means to allow for harvests of individual salmon for immediate sustenance while traveling light in the course of camping, berry picking, or hunting. Discussions did not consider impacts that adoption of FP08-11 would have on sockeye salmon stocks within Clark River and Home Creek, because both were closed to federal subsistence fishing at the time. The impacts of cumulative unreported harvests from creeks that are near communities and easily accessible were also not considered by the Federal Subsistence Board.

The Federal Subsistence Board approved FP08-11, which liberalized methods and means to allow snagging, bare-hand capture, and similar means for light travelers on the Alaska Peninsula and eliminated reporting requirements, based on information that suggested the level of harvest would be a small number of fish by subsistence users traveling light in the field. During 2008, the department received reports of federal subsistence users harvesting their winter supply of salmon from these tributaries of concern by federal methods and means and without the benefit of permits and harvest reporting. As stated in objections to FP08-11, the department has serious conservation concerns with unreported harvests and the liberalized methods and means. Those concerns increase with consideration of FP09-11 and FP11-10 and the potential of significant federal subsistence harvests in Home Creek and Clark River.

Jurisdiction Issues: While standing on state and private lands (including state-owned submerged lands and shorelands), persons must comply with state laws and 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 in order to reduce risk of violation for federal subsistence fishermen. During the December 2007 Federal Subsistence Board meeting, Alaska wildlife trooper testimony (Federal Subsistence Board Transcripts December 11, 2007, pages 89-91) explained the importance of users understanding and knowing jurisdiction and land status. When an enforcement officer encounters an individual conducting an activity that is prohibited by state regulations while standing on state or private lands, including state-owned submerged lands, the person may be cited.

Other Issues: An identical proposal was submitted to the Alaska Board of Fisheries for consideration during the January 16—18, 2011, meeting in Anchorage.

Recommendation: Defer until the similar proposal is addressed by the Alaska Board of Fisheries.

FP11-11 Executive Summary	
General Description	Proposal FP11-11 requests that the annual harvest limit for king crab in the Kodiak Management Area be changed from six per household to three per household. <i>Submitted by the Kodiak/Aleutians Subsistence Regional Advisory Council</i>
Proposed Regulation	§ __.28(k)(4)(iv) <i>In the subsistence taking of king crab: (A) The annual limit is six three crabs per household; only male king crab with shell width of 7 inches or greater may be taken or possessed;</i>
OSM Conclusion	Support
Kodiak/Aleutians Regional Council Recommendation	Support
Interagency Staff Committee Comments	See comments following the analysis.
ADF&G Comments	Support with modification. <ol style="list-style-type: none"> 1. Close Womens Bay and Gibson Cove to harvest of red king crab based on conservation concerns over handling mortality of juvenile red king crabs that are returned to Womens Bay and Gibson Cove that are under the minimum legal size limit. 2. Support reducing household possession and annual harvest limit of red king crab in the remaining federal subsistence fisheries near Kodiak Island from six to three male red king crabs.
Written Public Comments	None

STAFF ANALYSIS FP11-11

ISSUES

Proposal FP11-11, submitted by the Kodiak/Aleutians Subsistence Regional Advisory Council, requests that the annual harvest limit for king crab in the Kodiak Management Area be changed from six per household to three per household.

DISCUSSION

The most abundant, widely distributed, and commonly harvested king crab species in the Kodiak Area is the red king crab *Paralithodes camtschaticus*. While Kodiak Area red king crab stocks once supported a large and valuable commercial fishery, these stocks dropped dramatically in abundance in the early 1980s and still show no indication of improvement. All Federal public waters in the Kodiak Area have been closed to the taking of red king crab by non-subsistence users since 1995, and the State-managed commercial fishery has been closed since 1983. This regulatory change would decrease the annual household harvest limit for Federally qualified users from six king crabs, which has been in place since 1990, to three king crabs. The annual household harvest limit for the State managed subsistence king crab fishery in the Kodiak Area was changed from six to three king crabs in 1997. Other Federal subsistence regulations for the taking of king crab, including minimum shell size and gear, are the same as those specified under State subsistence regulations.

Existing Federal Regulation

§ __.28(k)(4)(iv) In the subsistence taking of king crab: (A) The annual limit is six crabs per household; only male king crab with shell width of 7 inches or greater may be taken or possessed;

Proposed Federal Regulation

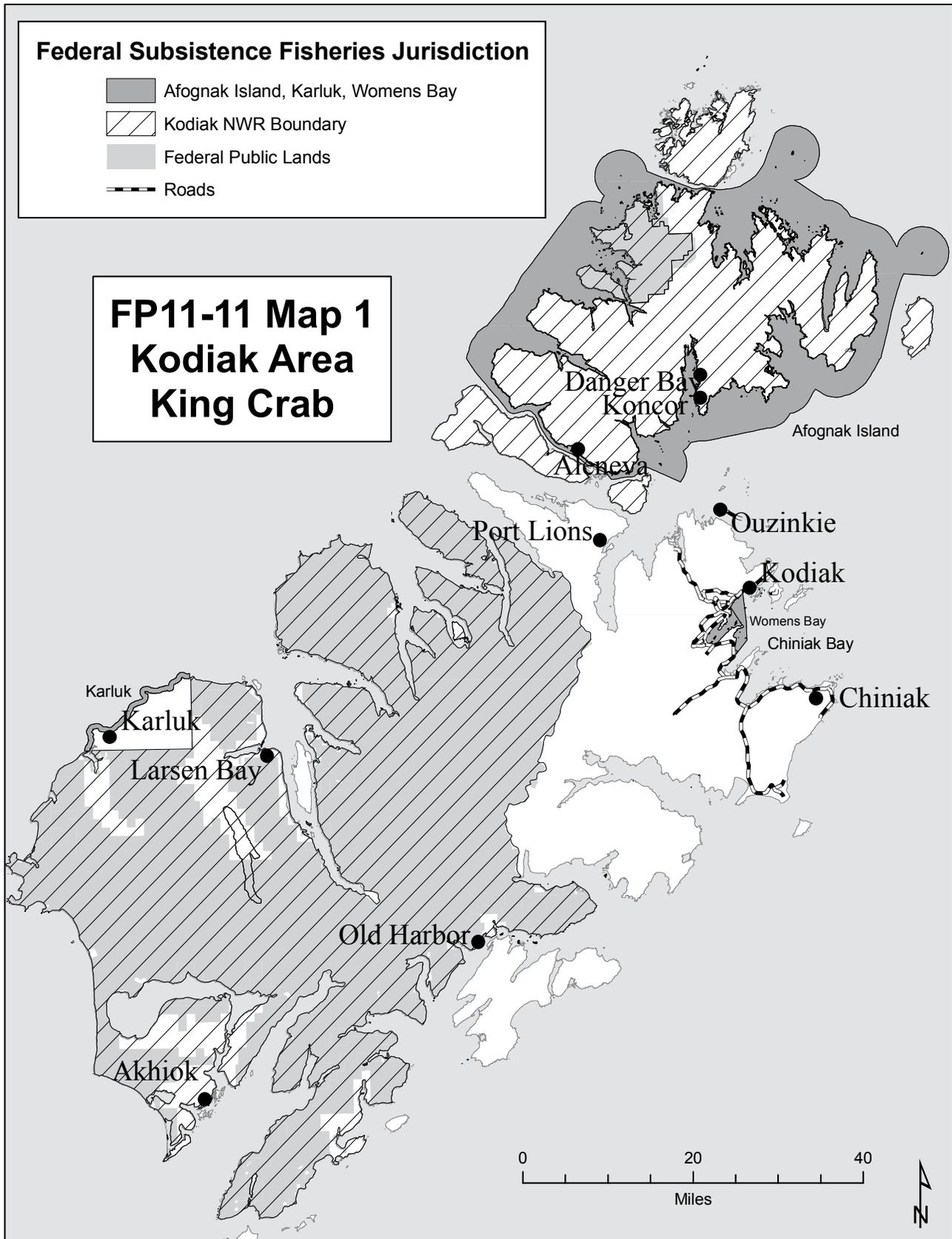
*§ __.28(k)(4)(iv) In the subsistence taking of king crab: (A) The annual limit is ~~six~~ **three** crabs per household; only male king crab with shell width of 7 inches or greater may be taken or possessed;*

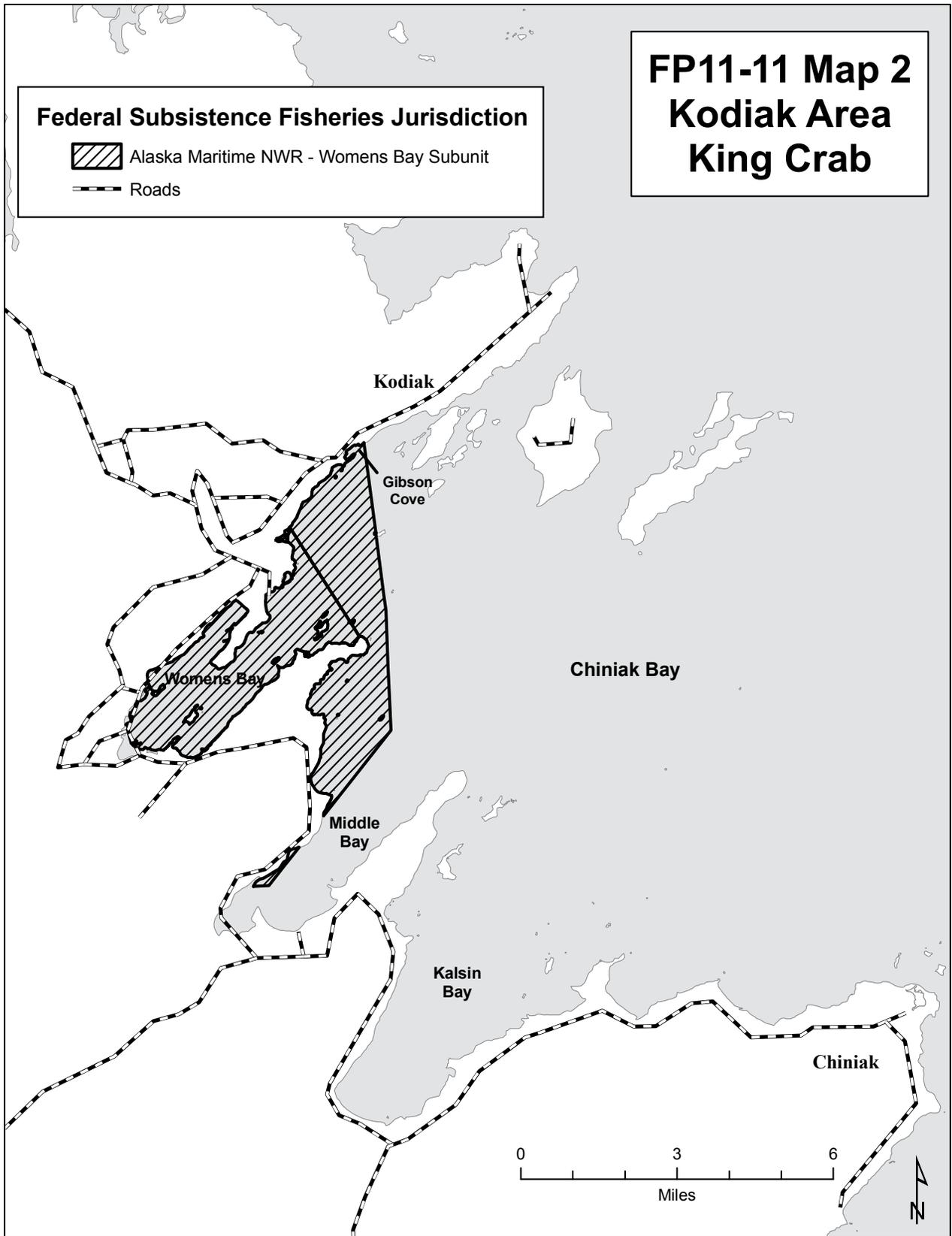
Current State Regulation

5 AAC 02.420 Subsistence King Crab Fishery (1) the annual limit is three king crab for a household; ... (5) only male king crab seven inches or greater in width of shell may be taken or possessed.

Extent of Federal Public Waters

For the purpose of this discussion, the phrase “Federal public waters” is defined as those waters described under 36 CFR 242.3 and 50 CFR 100.3. In the Kodiak Management Area, these Federal subsistence fishing regulations apply to the submerged lands and waters within the Alaska Maritime National Wildlife Refuge that are described as the Karluk, Womens Bay, and Afognak subunits (**Maps 1 and 2**).





Customary and Traditional Use Determinations

Residents of the Kodiak Island Borough, except those residing on the Kodiak Coast Guard Base, have a positive customary and traditional use determination for king crab in the Kodiak Area.

Regulatory History

In 1994, the Federal Subsistence Board closed Federal public waters in the Kodiak Area to the taking of all king crab by non-Federally qualified subsistence users beginning with the 1995/1996 fishing season. The closure was adopted by the Federal Subsistence Board after deliberations on Request for Reconsideration (RFR) 94-03, which was submitted by the Alaska Department of Fish and Game. RFR94-03 sought to restrict the take of king crab to males with a shell size greater than or equal to 7 inches, a size limit that had been in place for the State subsistence fishery since 1990. While a motion to adopt a size limit failed, the Federal Subsistence Board closed Federal public waters to non-qualified users, as was recommended by the Interagency Staff Committee (FSB 1994).

In 2002, the Federal Subsistence Board considered Fisheries Proposal (FP) 03-07, submitted by the Kodiak National Wildlife Refuge, that requested a decrease in the annual harvest and possession limit from six to three male king crabs per household and adoption of a 7-inch shell width minimum size limit (FSB 2002). The State had previously adopted these size (1990) and harvest limits (1997). Following the recommendation of the Kodiak/Aleutians Subsistence Regional Advisory Council concerning FP03-07, the Federal Subsistence Board adopted the minimum shell width requirement, did not adopt the reduced harvest limit, and also adopted a gear reduction limit of one pot of any size. This action aligned Federal regulations for shell size and gear with those of the State, but maintained the greater harvest limit for Federally qualified users as well as the closure to non-Federally qualified users. The State has continued to oppose proposals seeking to increase the harvest limit for State managed subsistence fisheries, citing continued conservation concerns for this resource (ADF&G 2005 and BOF 2005).

The closure of Federal public waters in the Kodiak Area to the taking of king crab by non-Federally qualified subsistence users was reviewed by the Kodiak/Aleutians Subsistence Regional Advisory Council and the Federal Subsistence Board in 2005 (FCR05-02; OSM 2005) and again in 2010 (FCR10-02; OSM 2010). No proposals to remove the closure have been submitted, and the closure currently remains in place. Federal users are required to obtain, complete and return an Alaska Department of Fish and Game subsistence crab fishing permit (**Figure 1**).

Biological Background

While no specific biological management objective has been set for either the Federal or State king crab subsistence fisheries in the Kodiak Area, the State has set a total threshold abundance of 5.12 million fertilized females for reopening the red king crab commercial fishery (Pengilly and Schmidt 1995). Since relatively few red king crabs are captured in the State trawl survey each year, it has not been possible to accurately determine abundance trends because small differences in catches result in large differences in population estimates (Spalinger 2010). However, these surveys do show that red king crab abundance in the Kodiak Area has remained at very low levels with no indication of rebuilding. For example, the 2009 survey estimate of the total number of adult females in the Kodiak Area was 3,997 red king crabs, and was based on a total survey catch of 16 females and 39 males (Spalinger 2010). This was the lowest estimated number of adult females reported from 2000–2009 annual surveys (range: 3,997 to 74,259 adult female red king crabs).

The Kodiak road system provides ready access to marine waters under Federal jurisdiction in Womens Bay. These waters serve as a red king crab nursery area for the larger Chiniak Bay complex, and studies have shown that Womens Bay has much higher numbers of juvenile red king crabs than nearby Anton Larson Bay and the Trident Basin (Cummiskey et al. 2008, Dew 1991, Dew et al. 1992, and FSB 2002). After first settling in Womens Bay as larvae, red king crabs tend to remain there for six or seven years before leaving for the more open waters of Chiniak and Kalsin bays. Most red king crabs leaving Womens Bay have not yet attained a carapace width of 7 inches, which is the minimum legal size limit for males that can be harvested in subsistence fisheries.

Harvest History

An Alaska Department of Fish and Game subsistence permit is required to participate in the Federal subsistence king crab fishery, and reported king crab harvests in the Kodiak Area have been very small since the collapse of the red king crab stock in the 1980s (FSB 2002). Fishery managers assume that all king crabs harvested in the subsistence fishery are red king crab, since other king crab species are not widely distributed or readily available in the Kodiak Area. During the 1990s, annual estimated subsistence harvests of king crab by Kodiak Area communities ranged from 0 (Karluk) to 4,646 (Kodiak City) king crabs (**Table 1**). Harvests from three communities off the road system have continued to decline since the 1990s (Old Harbor, Port Lions and Larson Bay) and only slightly increased in one (Akhiok; **Table 1**). While king crab harvests from specific Federal public waters have not been documented, harvests from the Chiniak Area, which includes Womens Bay, have shown the same decreasing trend (**Table 2**). Chiniak Area annual total harvests were close to or above 1,000 king crab for the period 1990–1995 (range: 931–1,530 king crab), and then dropped to about 100 or less king crab for the period 1996–2009 (range: 42–204 king crab). This decline was mirrored in the harvest per permit, which was above 1.0 king crab for the period 1990–1995 (range: 1.1–4.3 king crab per permit), and then dropped below this level for the period 1996–2009 (range: 0.2–1.0 king crab per permit).

The commercial king crab fishery was closed after the 1982/1883 season, when annual harvests declined from a high of 11,061,709 red king crabs during the 1965/1966 season to a low of 1,011,109 red king crabs during the 1982/1983 season (Sagalkin 2008).

There is also currently no open season for or retention of king crab allowed in the Kodiak Area for either sport or personal use fisheries.

Other Alternative(s) Considered

There may be conservation value in closing king crab subsistence fishing to all users in the Womens Bay Subunit of the Alaska Maritime National Wildlife Refuge in addition to reducing the annual household limit for Federally qualified subsistence users from six to three king crabs in the Karluk and Afognak subunits. The rationale for a Womens Bay Subunit closure would be based on 1) the continued decline of red king crab throughout the Kodiak Area and the lack of any sign of stock rebuilding (Spalinger 2010); 2) the documented use of Womens Bay as a red king crab nursery area for Chiniak Bay (Cummiskey et al. 2008, Dew 1991, Dew et al. 1992, and FSB 2002); 3) the very small average annual harvest reported for Chiniak Bay, which includes Womens Bay, of 73 king crabs (0.5 king crab per permit) since 1997 (**Table 2**); 4) the ready access to Womens Bay from the Kodiak road system of a relatively large number of Federally qualified users (**Map 1 and 2**); and 5) the continued ability of these Federally qualified users to access the remaining portion of Chiniak Bay from the Kodiak road system, where they would have to fish for king crab under State subsistence regulations. However, it is not clear that a complete closure of Womens Bay is necessary since other nursery areas within Chiniak Bay would continue to be open to fishing and the Chiniak Bay harvest, even if it was all taken in Womens Bay, is so very small.

Table 1. Kodiak Management Area estimated community king crab subsistence harvests for the 1990s and 2003 (ADF&G 2010).

Year	Community	King Crab Harvest	
		Number	Pounds
<i>Best representative data from 1990s</i>			
1993	Kodiak City	4,646	10,687
1991	Kodiak Road	2,945	6,773
1991	Kodiak Coast Guard Station	202	464
1997	Old Harbor	174	401
1993	Port Lions	92	213
1992	Akhiok	66	151
1997	Larsen Bay	9	22
1997	Ouzinkie	3	6
1991	Karluk	0	0
<i>Available data from 2003</i>			
2003	Old Harbor	45	104
2003	Port Lions	4	9
2003	Akiok	71	163
2003	Larsen Bay	6	14

Table 2. King crab subsistence permits and harvests reported from permits for the Chiniak Area, which includes Womens Bay, 1990–2009 (Pappas 2010, pers. comm.)

Year	Number of Permits	King Crab Harvest	
		Total	Per Permit
1990	537	1,530	2.8
1991	448	1,028	2.3
1992	392	1,671	4.3
1993	553	1,300	2.4
1994	444	931	2.1
1995	393	1,190	3.0
1996	187	204	1.1
1997	221	94	0.4
1998	230	56	0.2
1999	72	48	0.7
2000	111	63	0.6
2001	187	109	0.6
2002	143	79	0.6
2003	195	62	0.3
2004	224	77	0.3
2005	186	70	0.4
2006	150	77	0.5
2007	103	62	0.6
2008	80	42	0.5
2009	116	116	1.0

Further discussion and consideration of a Womens Bay closure occurred during the September 23, 2010 meeting of the Kodiak-Aleutians Council (KASRAC). 2010). Peter Cummiskey, a crab biologist stationed at the National Marine Fisheries Service's Kodiak Laboratory, answered questions from the Council via telephone. He verified that king crab pod sizes observed in Womens Bay have followed the decline in adult abundance documented from Alaska Department of Fish and Game trawl surveys from the 1990s to the present time. While he felt strongly that Womens Bay was a king crab nursery area, he acknowledged that there are many near-shore areas within Chiniak Bay that have not been studied that could also serve

as nursery areas for the king crab population and so the overall importance of Womens Bay as a king crab nursery area for Chiniak Bay was not known. Mr. Cummiskey also stated that the Kodiak Laboratory supports king crab conservation, but did not have an official position concerning a total closure of Womens Bay to all king crab fishing. He had no information on king crab handling mortality associated with the subsistence fishery, but did express concern over crabs being trapped in pots for extended periods of time, if users did not pull and check their pots regularly. He was also very concerned about lost pots that continue to trap and kill crabs, especially pots lacking escape mechanisms, although such pots are illegal to use under both Federal and State regulations. While there is no dedicated program or effort to remove derelict crab pots from Womens Bay, he and his diving partners have attempted to reduce their effects over the years by cutting webbing out or mangling the doors on crab pots so that crabs can escape. Finally, some Council members stated that while the harvest from Womens Bay was small, it was still very important to some Kodiak residents, particularly elders, because it is one of the few areas they can easily access from the community of Kodiak (Map 2). Since it was not at all clear whether a full closure of Womens Bay would have any effect on rebuilding Kodiak Area king crab populations, these Council members felt that people should not be denied access to an important subsistence resource.

Effect of the Proposal

This proposal would reduce the annual king crab household harvest limit for Federally qualified subsistence users in the Kodiak Area. Since subsistence harvests are already very small, with an annual average of less than one king crab per permit since 1997 (**Table 2**), it is difficult to predict whether this reduction in opportunity would result in a reduction in actual harvest and contribute to rebuilding of the Kodiak Area red king crab resource. Adopting this proposal could make it easier to enforce annual household harvest limits, since these would be the same for both State and Federally managed subsistence king crab fisheries in the Kodiak Area. However, it is not clear that there has been a problem enforcing different harvest limits for these user groups, particularly since average household harvests have been well below even the State's three king crab limit (**Table 2**).

OSM CONCLUSION

Support Proposal FP11-11.

Justification

There is a continuing conservation concern for king crab in the Kodiak Area, which includes Federal public waters in Womens Bay, Gibson Cove, and near shore waters around the Karluk River mouth and Afognak Island. The State has closed Kodiak Area commercial, sport, and personal use fisheries to the taking of king crab, and reduced the annual household harvest limit in the subsistence fishery from six to three crabs in 1997. Alaska Department of Fish and Game trawl surveys indicate that the Kodiak Area red king crab stock, the most abundant and widely distributed king crab species in the Kodiak Area, remains at very low levels of abundance with no indication of improvement over the near term. Marine waters under Federal jurisdiction include Womens Bay, which is a red king crab nursery area for the larger Chiniak Bay, and is easy to access from the Kodiak road system. Reducing the annual harvest limit for Federally qualified users from six to three king crabs per household would further highlight conservation efforts and provide a more realistic indication of what users should expect to harvest.

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REGIONAL ADVISORY COUNCIL RECOMMENDATION

Kodiak/Aleutians Regional Advisory Council

Support Proposal FP11-11. This proposal addresses conservation concerns and would continue to provide fishing opportunity for elder subsistence users from Kodiak city. Only a few crab are taken out of all of Chiniak Bay and there is no information about how many are taken from Women's Bay in particular; however, observations of local fisheries managers are that the population of crab in Womens Bay has remained stable over the years. Womens Bay is one of few crab fishing places on the island that are road accessible and is the most accessible location where elders from Kodiak city can continue to fish.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a complete and accurate evaluation of the proposal and the recommendations of the Regional Advisory Council to be supported by substantial evidence, consistent with recognized principles of conservation, and appropriately allows for the continuation of subsistence uses.

ADF&G Comments on FP11-11
November 30, 2010; Page 1 of 2

Alaska Department of Fish and Game
Comments to Federal Subsistence Board

Fisheries Proposal FP11-11: Reduce federal subsistence annual and possession limits for red king crab near Kodiak Island.

Introduction: The Kodiak-Aleutians Regional Advisory Council proposal was submitted to reduce household possession and annual harvest limit of red king crab in the federal subsistence fisheries near Kodiak Island from six to three male red king crabs. Adoption of this proposal would align the federal and state harvest limits, although most waters where federal subsistence jurisdiction is claimed have been closed to non-federally qualified subsistence users since 1996.

Impact on Subsistence Users: If adopted, federal subsistence user possession and annual harvest limits of red king crab per household would be reduced from six to three. The proposed reduction is not anticipated to have a significant impact on harvest due to the low levels of harvest reported in Chiniak Bay, which includes Womens Bay and Gibson Cove.

Opportunity Provided by State: The state subsistence fishery harvest limit for red king crab near Kodiak is three male crabs per year per household: *5 AAC 02.420 Subsistence King Crab Fishery (1) the annual limit is three king crab for a household;*

Conservation Issues: The red king crab stocks near Kodiak Island have been depressed for three decades. In 1996, the Alaska Board of Fisheries lowered the daily/possession/annual harvest limits from six per person to three crabs per household per year. The Alaska Department of Fish and Game surveys the waters near Kodiak Island on an annual basis, and the 2009 survey indicates the population is at historically low levels.

Commercial fisheries began in the 1930s and peaked in the 1960s when over 94 million pounds of crab were harvested. Harvests declined in the late 1970s. Commercial fishing closed in 1983/84 and has not reopened. Since 1988, the Alaska Department of Fish and Game conducted trawl surveys to assess king and Tanner crab populations around Kodiak Island, along the Alaska Peninsula, and in the eastern Aleutian Islands. The Kodiak Area remains closed because the abundance estimates of female king crabs are well below threshold levels. The Kodiak red king crab population remains at historically low levels. The 2009 Kodiak red king crab population was estimated at 28,257 crabs, down from an estimated 71,877 crabs in 2008.

Adoption of this proposal may benefit the depressed red king crab population near Kodiak. On-going research reveals that Womens Bay and Gibson Cove are important nursery areas within the greater Chiniak Bay for juvenile red king crab. Reducing the annual household bag limit may reduce injuries and mortalities to juvenile red king crabs incurred while being handled, measured, sorted, and returned to the water by federal subsistence users.

Jurisdiction Issues: The Federal Subsistence Board authorized a subsistence red king crab fishery near Kodiak Island in the marine waters of the Pacific Ocean enclosed by the boundaries of Womens Bay, Gibson Cove, and an area defined by a line ½ mile on either side of the mouth of the Karluk River, extending seaward 3,000 feet. Additionally, federal subsistence users can

ADF&G Comments on FP11-11
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fish for red king crab in the marine waters within three miles of Afognak Island, and the waters within 1,500 feet seaward of the Afognak Island shoreline are closed to red king crab harvest by the non-federally qualified users. Detailed maps are needed in order to assure non-federally qualified and federal subsistence users can identify the boundaries and avoid risk of enforcement actions.

Recommendation: Support with modification.

1. Close Womens Bay and Gibson Cove to harvest of red king crab based on conservation concerns over handling mortality of juvenile red king crabs that are returned to Womens Bay and Gibson Cove that are under the minimum legal size limit.
2. Support reducing household possession and annual harvest limit of red king crab in the remaining federal subsistence fisheries near Kodiak Island from six to three male red king crabs.

FP11-13 Executive Summary

<p>General Description</p>	<p>Proposal FP11-13 requests that no harvest limit be associated with subsistence permits issued to Federally qualified subsistence users who fish for salmon in Federal public waters of the Kodiak Management Area that cannot be accessed from the Kodiak road system, except the Mainland District. It also requests that recording of harvests on all permits be done prior to leaving the fishing site rather than immediately upon landing fish. <i>Submitted by the Kodiak/Aleutians Subsistence Regional Advisory Council</i></p>
<p>Proposed Regulation</p>	<p>§ __.27(i)(9) (iv) You must have a A subsistence fishing permit is required for taking salmon, trout, and char, and herring for subsistence purposes. You must have a subsistence fishing permit for taking herring and bottomfish for subsistence purposes during the State commercial herring sac roe season from April 15 through June 30.</p> <p>(v) With a subsistence salmon fishing permit you may take 25 salmon plus an additional 25 salmon for each member of your household whose names are listed on the permit. You may obtain an additional permit if you can show that more fish are needed The annual limit for a subsistence salmon fishing permit holder is as follows:</p> <p style="padding-left: 40px;">(A) In the fresh waters of Kodiak Island, east of the line from Crag Point south to the westernmost point of Saltery Cove, including the waters of Woody and Long Islands, and the salt waters bordering this area within one mile of Kodiak Island, excluding the waters bordering Spruce Island, 25 salmon for the permit holder plus an additional 25 salmon for each member of the same household whose names are listed on the permit: an additional permit may be obtained if it can be shown that more fish are needed;</p> <p style="padding-left: 40px;">(B) In the remainder of the Kodiak area not described in (A) of this subsection, there is no annual limit.</p> <p>(vi) You must Subsistence fishermen shall keep a record on your subsistence permit of the number, or if for herring, the number of pounds, of subsistence fish taken by that subsistence fisherman each year. The number or pounds of subsistence fish taken shall be recorded on the reverse side of the permit. You The catch must be complete the recorded prior to leaving the fishing site immediately upon landing subsistence-caught fish, and the permit must be returned to the local representative of the department it by February 1 of the year following the year the permit was issued.</p>

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FP11-13 Executive Summary *(continued)*

OSM Conclusion

Support Proposal FP11-13 with modification to 1) retain existing wording for § __.27(i)(9)(iv), since this would be consistent with the proponent's intent to address changes in annual harvest limits and reporting requirements for salmon but not for herring; 2) clarify, as recommended by the Kodiak Aleutians Council, that these regulations pertain to the Federal waters of Kodiak Island; 3) change the proposed wording for § __.27(i)(9)(v)(A) from "an additional permit may be obtained if it can be shown that more fish are needed" to "an additional permit may be obtained upon request"; 4) retain most of the existing wording for § __.27(i)(9)(vi) without proposed modifications, but retain proposed change to when harvests need to be recorded on permits, and 5) omit proposed wording for § __.27(i)(9)(vi) concerning where information needs to be recorded on permits and to whom recorded permits must be returned, and delete existing wording concerning the date permit returns are due.

The modified proposed regulation should read:

§ __.27(i)(9)(iv) You must have a subsistence fishing permit for taking salmon, trout, and char, for subsistence purposes. You must have a subsistence fishing permit for taking herring and bottomfish for subsistence purposes during the State commercial herring sac roe season from April 15 through June 30.

*(v) With a subsistence salmon fishing permit you may take 25 salmon plus an additional 25 salmon for each member of your household whose names are listed on the permit. You may obtain an additional permit if you can show that more fish are needed. **The annual limit for a subsistence salmon fishing permit holder is as follows:***

(A) In the Federal waters of Kodiak Island, east of the line from Crag Point south to the westernmost point of Saltery Cove, including the waters of Woody and Long Islands, and the salt waters bordering this area within one mile of Kodiak Island, excluding the waters bordering Spruce Island, 25 salmon for the permit holder plus an additional 25 salmon for each member of the same household whose names are listed on the permit: an additional permit may be obtained upon request;

(B) In the remainder of the Kodiak Area not described in (A) of this subsection, there is no annual harvest limit for a subsistence salmon fishing permit holder.

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FP11-13 Executive Summary (continued)

	<p><i>vi) You must record on your subsistence permit the number of subsistence fish taken. You must complete the record all harvested fish prior to leaving the fishing site, and must return it the permit by the date marked on February 1 of the year following the year the permit was issued.</i></p>
<p>Kodiak/Aleutians Regional Council Recommendation</p>	<p>Support Proposal FP11-13 with modification. The Council modified the proposed regulatory language to remove references to herring, which allows section 27(i)(9)(iv) to revert to existing regulatory language, and to use the word “Federal” in paragraph (A) instead of “fresh” as a descriptor for relevant waters. These modifications will clarify the regulatory language for the benefit of subsistence users. It is understood that the intent of the proposal was to address salmon annual harvest limits and reporting, but not to deal with herring.</p> <p>The modified regulation should read:</p> <p><i>§ __.27(i)(9) (iv) You must have a subsistence fishing permit for taking salmon, trout, and char for subsistence purposes. You must have a subsistence fishing permit for taking herring and bottomfish for subsistence purposes during the State commercial herring sac roe season from April 15 through June 30.</i></p> <p><i>(v) With a subsistence salmon fishing permit you may take 25 salmon plus an additional 25 salmon for each member of your household whose names are listed on the permit. You may obtain an additional permit if you can show that more fish are neededThe annual limit for a subsistence salmon fishing permit holder is as follows:</i></p> <p><i>(A) In the Federal waters of Kodiak Island, east of the line from Crag Point south to the westernmost point of SALTERY Cove, including the waters of Woody and Long Islands, and the salt waters bordering this area within one mile of Kodiak Island, excluding the waters bordering Spruce Island, 25 salmon for the permit holder plus an additional 25 salmon for each member of the same household whose names are listed on the permit: an additional permit may be obtained if it can be shown that more fish are needed;</i></p> <p><i>(B) In the remainder of the Kodiak area not described in (A) of this subsection, there is no annual harvest limit for a subsistence salmon fishing permit holder.</i></p>

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FP11-13 Executive Summary (continued)	
	<p><i>(vi) You must Subsistence fishermen shall keep a record on your subsistence permit of the number of subsistence fish taken by that subsistence fisherman each year. The number of subsistence fish taken shall be recorded on the reverse side of the permit. You The catch must be complete the recorded prior to leaving the fishing site immediately upon landing subsistence-caught fish, and the permit must be returned to the local representative of the department it by February 1 of the year following the year the permit was issued.</i></p>
Interagency Staff Committee Comments	See comments following the analysis.
ADF&G Comments	<ol style="list-style-type: none"> 1. Support the proposed limits of fish that can be harvested on and off the Kodiak road system. 2. Support the proposed requirement to record herring harvested in Federal subsistence fisheries on a permit. 3. Oppose reporting requirements that allow subsistence fishermen to be in possession of harvest but not record it until leave the fishing site. 4. Oppose the elimination of permitting and reporting for the Federal subsistence herring fishery (if applicable).
Written Public Comments	None

STAFF ANALYSIS FP11-13

ISSUES

Proposal FP11-13, submitted by the Kodiak/Aleutians Subsistence Regional Advisory Council, requests that no harvest limit be associated with subsistence permits issued to Federally qualified subsistence users who fish for salmon in Federal public waters of the Kodiak Management Area that cannot be accessed from the Kodiak road system, except the Mainland District. It also requests that recording of harvests on all permits be done prior to leaving the fishing site rather than immediately upon landing fish.

DISCUSSION

Federal subsistence salmon harvest limits and reporting requirements are more restrictive than subsistence regulations recently adopted by the State for people fishing in Federal public waters that cannot be accessed from the Kodiak road system. This proposal seeks to align Federal with newly adopted State regulations that allow subsistence users fishing in waters not accessible from the Kodiak road system to harvest and report all salmon they take in a season on a single fishing permit. Federally qualified and State subsistence users fishing in waters accessible from the Kodiak road system would still be limited to a harvest of 25 salmon for each household member listed on the permit, but they could obtain another permit to harvest additional salmon. Maintaining a permit salmon harvest limit for waters accessible from the Kodiak road system allows fishery managers to better gauge harvest potential in relation salmon run abundance for these intensively managed salmon runs and does not appear to be limiting subsistence fishing opportunities or affecting the accuracy of harvest reporting. Additionally, the proposal would allow Federally qualified users in the Kodiak Management Area to record their harvests on permits at any time before leaving the fishing site rather than immediately upon landing fish.

Existing Federal Regulation

§ __.27(i)(9) (iv) You must have a subsistence fishing permit for taking salmon, trout, and char for subsistence purposes. You must have a subsistence fishing permit for taking herring and bottomfish for subsistence purposes during the State commercial herring sac roe season from April 15 through June 30.

(v) With a subsistence salmon fishing permit you may take 25 salmon plus an additional 25 salmon for each member of your household whose names are listed on the permit. You may obtain an additional permit if you can show that more fish are needed.

(vi) You must record on your subsistence permit the number of subsistence fish taken. You must complete the record immediately upon landing subsistence-caught fish, and must return it by February 1 of the year following the year the permit was issued.

Proposed Federal Regulation

*§ __.27(i)(9) (iv) ~~You must have a~~ subsistence fishing permit **is required** for taking salmon, trout, **and char, and herring** for subsistence purposes. You must have a subsistence fishing permit for taking herring and bottomfish for subsistence purposes during the State commercial herring sac roe season from April 15 through June 30.*

(v) With a subsistence salmon fishing permit you may take 25 salmon plus an additional 25 salmon for each member of your household whose names are listed on the permit. You may obtain an additional permit if you can show that more fish are needed. The annual limit for a subsistence salmon fishing permit holder is as follows:

(A) In the fresh waters of Kodiak Island, east of the line from Crag Point south to the westernmost point of Saltery Cove, including the waters of Woody and Long Islands, and the salt waters bordering this area within one mile of Kodiak Island, excluding the waters bordering Spruce Island, 25 salmon for the permit holder plus an additional 25 salmon for each member of the same household whose names are listed on the permit; an additional permit may be obtained if it can be shown that more fish are needed;

(B) In the remainder of the Kodiak area not described in (A) of this subsection, there is no annual limit.

(vi) You must Subsistence fishermen shall keep a record on your subsistence permit of the number, or if for herring, the number of pounds, of subsistence fish taken by that subsistence fisherman each year. The number or pounds of subsistence fish taken shall be recorded on the reverse side of the permit. You The catch must be complete the recorded prior to leaving the fishing site immediately upon landing subsistence-caught fish, and the permit must be returned to the local representative of the department by February 1 of the year following the year the permit was issued.

Current State Regulation

5 AAC 02.530 Subsistence fishing permits

(a) A subsistence fishing permit is required for taking salmon, trout, char, and herring for subsistence purposes.

(b) The annual limit for a subsistence salmon fishing permit holder is as follows:

(1) in the fresh waters of Kodiak Island, east of a line from Crag Point south to the westernmost point of Saltery Cove, including the waters of Woody and Long Islands, and the salt waters bordering this area within one mile of Kodiak Island, excluding the waters bordering Spruce Island, 25 salmon for the permit holder plus an additional 25 salmon for each member of the same household whose names are listed on the permit; an additional permit may be obtained if it can be shown that more fish are needed;

(2) in the remainder of the Kodiak Area not described in (1) of this subsection, there is no annual limit.

(c) A subsistence fishermen shall keep a record of the number, or if for herring, the number of pounds, of subsistence fish taken by that subsistence fisherman each year. The number or pounds of subsistence fish taken shall be recorded on the reverse side of the permit. The record must be completed immediately upon landing subsistence-caught fish, and must be returned to the local representative of the department by February 1 of the year following the year the permit was issued.

Extent of Federal Public Waters

For the purpose of this discussion, the phrase “Federal public waters” is defined as those waters described under 36 CFR 242.3 and 50 CFR 100.3. In the Kodiak Management Area, these Federal subsistence fishing regulations apply on fresh waters within or adjacent to Kodiak National Wildlife Refuge and the submerged lands and waters within the Alaska Maritime National Wildlife Refuge that are described as the Karluk, Womens Bay, and Afognak subunits (**Map 1**).

Customary and Traditional Use Determinations

Residents of the Kodiak Island Borough, except those residing on the Kodiak Coast Guard Base, have a positive customary and traditional use determination for salmon in the Kodiak Area.

Regulatory History

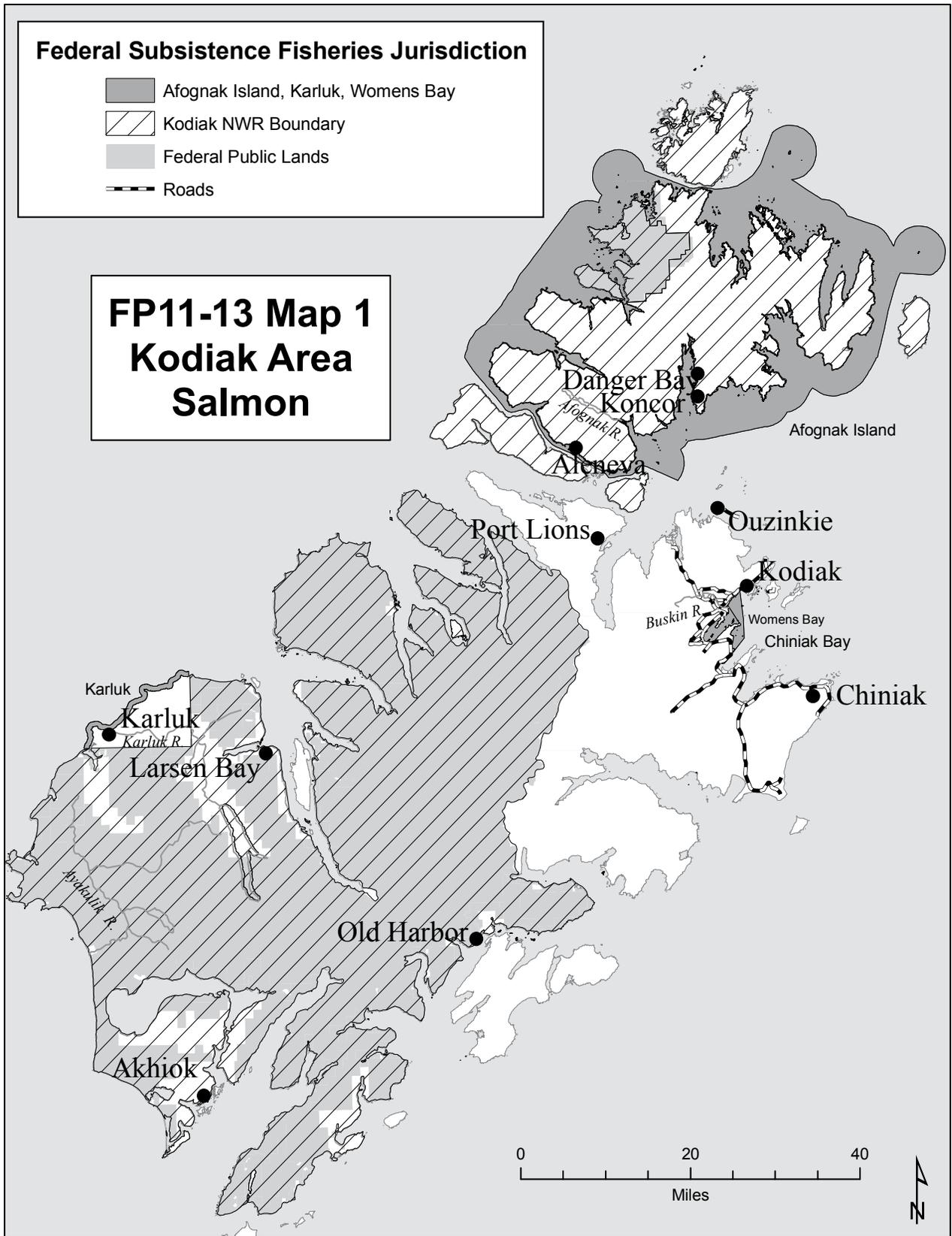
Federal regulations for subsistence fisheries were first established in 1999 and were based on existing State regulations. Until 2008, the only significant difference between Federal and State subsistence salmon fishing regulations for the Kodiak Area concerned fishing times, since Federally qualified users were allowed to fish 24 hours per day while State users were allowed to fish only from 6:00 a.m. until 9:00 p.m. During its January 14–18, 2008 meeting, the Alaska Board of Fisheries (BOF 2008) adopted a regulatory proposal submitted by the Alaska Department of Fish and Game that eliminated salmon harvest limit requirements on subsistence permits for people fishing in waters of the Kodiak Management Area that were not accessible from the Kodiak road system. Although another permit could be obtained to take additional salmon after the harvest limit on the original permit was reached, it has been difficult for people fishing and living off the road system to get additional permits. The Alaska Department of Fish and Game expected that eliminating the harvest limit from permits issued to people that fish for salmon off the road system would result in more accurate subsistence harvest reporting. All Federally qualified users are required to obtain an ADF&G subsistence permit to fish for salmon in the Kodiak Area.

Biological Background

While salmon stocks in the Kodiak Management Area are generally healthy, there have been some recent run declines that have resulted in commercial, sport, and subsistence fishery restrictions. Most notably, salmon run declines have been documented for sockeye salmon in the Afognak and Buskin river drainages and Chinook salmon in the Karluk and Ayakulik river drainages. For the Afognak River drainage, spawning escapements since 2001 have been either just below or just above the lower bound of the current goal of 20,000 to 50,000 sockeye salmon, ranging from 15,181 in 2004 to 31,358 in 2009 (Baer 2010). For the Buskin River drainage, spawning escapements were within or above the current goal of 8,000 to 13,000 sockeye salmon during 2000–2007, but dropped below the range in both 2008 (5,900) and 2009 (7,757) (Schmidt and Evans 2010). For the Karluk River drainage, spawning escapements have been below the goal of 3,600 to 7,600 Chinook salmon since 2006. For the Ayakulik River drainage, spawning escapements have been below the goal of 4,800 to 9,600 Chinook salmon for three of the past four years.

Harvest History

Most subsistence salmon fishing in the Kodiak Management Area occurs on the north end of Kodiak Island, the Buskin and Pasagshak rivers, and the southeast side of Afognak Island in the vicinity of the Afognak (also referred to as Litnik) River (Dinnocenzo et al. 2010). Federally qualified subsistence users fishing in Federal public waters harvest most of their salmon within the marine waters of the Alaska



Maritime Wildlife Refuge near the mouth of the Buskin River on Kodiak Island and Afognak River on Afognak Island. Residents of the six off-road Kodiak Island communities of Akhiok, Karluk, Larsen Bay, Old Harbor, Ouzinkie, and Port Lions harvest most salmon in locations off the Kodiak road system (ADF&G 2008). The mean annual Kodiak Management Area subsistence harvest for the 10-year period 1999–2008 based on permit data was 36,795 salmon, and annual harvests ranged from 27,947 salmon in 2008 to 42,622 salmon in 2002 (**Table 1**). Most of the subsistence harvest was comprised of sockeye and coho salmon, and mean annual subsistence harvests for 1999–2008 for these salmon species were 28,678 sockeye and 5,904 coho salmon.

The mean 1999–2005 subsistence harvest reported for all six off-road Kodiak Island communities based on permit data was 8,275 salmon and ranged from 6,299 salmon in 2000 to 10,172 salmon in 2005 (**Table 2**). This represented about 22% of the mean 1999–2005 subsistence harvest reported for the entire Kodiak Area (37,845 salmon). The mean 1999–2005 subsistence harvest per returned permit for all six off-road Kodiak Island communities was 56 salmon and ranged from 46 salmon in 2004 to 69 salmon in 2005 (**Table 3**). This was almost three times greater than the mean 1999–2005 subsistence harvest per permit for the remainder of Kodiak Island (19 salmon per permit). When comparative information was available, salmon harvests, participation, and average salmon harvest per fishing household were all considerably lower when estimated from returned permits than from household surveys (ADF&G 2008 and Williams et al. 2010). For example, there were two years for which salmon harvest information from five of the six off-road communities were available for comparison, 2003 and 2004 (**Table 4**). The harvest reported on returned permits in 2003 (8,626 salmon) was about 39% less than that estimated from household surveys (14,241 salmon), while the harvest reported from returned permits in 2004 (7,839 salmon) was about 64% less than that estimated from household surveys (21,509 salmon). Similarly, the mean household harvest for all six off-road communities estimated from surveys (128 salmon) was almost two times greater than that estimated from returned permits (67 salmon).

Subsistence fishing for sockeye and Chinook salmon returning to some Kodiak Management Area drainages has been restricted by time and area or closed for the season due to poor runs and failure to meet escapement goals (Dinnocenzo et al. 2010). The two largest subsistence salmon fisheries, which target sockeye salmon returning to the Buskin and Afognak river drainages, have been restricted or closed during some years. The Afognak River sockeye salmon subsistence fishery was closed most of each season during 2002–2004, remained open all season in 2005 with only a small reported harvest, was restricted in 2006 and 2007, and then remained open all season in both 2008 and 2009. To date, the 2010 Afognak River sockeye salmon run appears to be large, and the area open to subsistence fishing has been expanded (ADF&G and USFWS 2010a). The Buskin River sockeye salmon subsistence fishery was restricted in 2009 by closing a large portion of the Buskin River Section, including Womens Bay, from June 15 until July 16 (ADF&G and USFWS 2009a), and was closed in 2010, from June 15 until June 30, to ensure that the lower end of the escapement goal range would be reached (ADF&G and USFWS 2010b and c). The Karluk River Chinook salmon subsistence fishery, including the lagoon, was closed in 2009, from June 15 until December 31 (ADF&G and USFWS 2009b), and 2010, from April 30 until December 31 for State subsistence users and from May 15 until July 13 for Federal public waters (ADF&G and USFWS 2010d). The Ayakulik River Chinook salmon subsistence fishery was closed in 2009, from July 4 until December 31, due to poor escapement (ADF&G and USFWS 2009c).

Most salmon harvested in the Kodiak Management Area are taken in commercial fisheries. The mean 1999–2008 commercial harvest was 23,637,817 salmon, and the total harvest in 2009 was 30,627,685 salmon (Dinnocenzo et al. 2010). A very small commercial harvest of Buskin River sockeye salmon sometimes occurs in Chiniak Bay, and the commercial fishery targeting sockeye salmon returning to the Afognak River drainage was closed from 2001–2009, due to poor runs, except for a five day opening in

Table 1. Subsistence salmon harvests for Kodiak Management Area based on ADF&G permit data, 1999–2008 (Dinnocenzo et al. 2010).

Year	Permits		Number of Salmon Harvested					Total
	Issued	Returned	Sockeye	Coho	Pink	Chinook	Chum	
1999	1,845	1,437	26,534	4,974	1,229	397	388	33,522
2000	1,711	1,679	31,667	6,383	977	351	375	39,753
2001	2,378	2,009	33,878	5,920	1,158	275	427	41,656
2002	2,277	2,068	33,844	6,175	1,665	588	350	42,622
2003	2,272	2,052	32,193	6,098	1,509	510	388	40,698
2004	2,241	2,063	30,503	5,857	1,403	379	261	38,403
2005	2,290	1,958	27,664	7,703	2,350	434	592	38,743
2006	2,095	1,911	22,985	6,640	1,827	280	441	32,173
2007	2,096	1,929	22,656	4,715	1,585	207	266	32,429
2008	2,037	1,745	21,852	4,570	1,180	159	186	27,947

2005. Commercial fishing for sockeye salmon returning to the Afognak River drainage has been allowed in 2010 due to a large run (ADF&G 2010a, and ADF&G and USFWS 2010b).

Sport fishing effort in the Kodiak Management Areas is much greater in freshwater drainages and marine waters accessible from the road system than in more remote locations, and the two most heavily utilized sport fishing locations on the road system, Buskin River drainage and Chiniak Bay, account for about 33% of all sport fishing effort each year (Schwarz et al. 2007). The mean 1997–2006 sport fishery salmon harvest was 34,230 coho, 11,510 sockeye, 8,450 pink, and 8,390 Chinook salmon. In 2010, the Karluk River Chinook salmon fishery was closed on March 15 (ADF&G 2010b); the Ayakulik Chinook salmon fishery was restricted to catch-and-release on March 15 (ADF&G 2010c), closed on June 26 (ADF&G 2010d), and reopened on July 7 when lower end of the escapement goal was reached (ADF&G 2010e); the Buskin River sockeye salmon fishery was closed on June 15 (ADF&G 2010f).

Effect of the Proposal

This proposal would allow Federally qualified users fishing in Federal public waters not accessible from the Kodiak road system to harvest and report all salmon taken by their household each year on one subsistence fishing permit. While current Federal subsistence regulations do not set an upper limit on annual household salmon harvests, they do limit the number of salmon a household may take with a fishing permit to 25 salmon per head of household and 25 salmon per each additional household member. Once this number is reached, the permit holder is required to return the permit and obtain a new one before additional salmon can be harvested. The State has already adopted regulations that allow State residents who subsistence fish for salmon in waters not accessible from the Kodiak road system to use a single permit to harvest and report all salmon taken each year. The Alaska Department of Fish and Game expects that this change will result in more accurate salmon harvest reporting. Most people fishing in these remote waters also live in communities that are not accessible from the Kodiak road system and do not have easy access to State offices or vendors that issue subsistence permits. Studies done by the Alaska Department of Fish and Game have shown that harvest estimates for these off-road communities based on returned permits have generally been much less than those based on household surveys (ADF&G 2008 and Williams et al. 2010). While adopting the proposal should not affect the actual number of salmon being harvested, it could improve the accuracy of salmon harvest estimates based on permit data, would not jeopardize the health and sustainability of salmon populations, and would reduce confusion and simplify enforcement by having the same permitting requirements for both Federal and State subsistence regulations.

Table 2. Subsistence salmon harvests by community based on permit returns for Kodiak Management Area, 1999–2005 (ADF&G 2008).

Year	Number of Salmon Harvested									
	Akhiok	Karluk	Larsen Bay	Old Harbor	Ouzinkie	Port Lions	Off-Road Community Total	Remainder Kodiak Island ^a	Other Alaska Communities ^b	Grand Total
1999	300	77	556	1,194	2,275	2,070	6,472	26,028	1,080	33,580
2000	105		459	1,139	2,110	2,486	6,299	23,648	1,681	31,628
2001	51	565	841	2,022	2,269	3,286	9,034	30,407	2,170	41,611
2002	260	317	628	2,506	2,467	3,208	9,386	30,206	2,050	41,642
2003	408	88	917	2,710	2,346	2,245	8,714	29,396	2,458	40,568
2004	113	0	1,021	2,204	2,265	2,242	7,845	28,983	1,243	38,071
2005	107	0	1,453	3,303	3,416	1,893	10,172	29,099	1,544	37,815
Mean	192	175	839	2,154	2,450	2,490	8,275	28,252	1,747	37,845

^a May include a small number of permits from remote locations, but most are from Kodiak City, Kodiak Coast Guard Base, and Kodiak on-road communities.

^b Alaska residents not residing in Kodiak Island Borough and for which community of residence was not known.

Table 3. Average subsistence salmon harvest per returned permit by community for Kodiak Management Area, 1999–2005 (ADF&G 2008).

Year	Average Number of Salmon Harvested per Permit									
	Akhiok	Karluk	Larsen Bay	Old Harbor	Ouzinkie	Port Lions	All six off-Road Communities	Remainder Kodiak Island ^a	Other Alaska Communities ^b	Grand Total
1999	60	77	56	66	71	45	58	22	9	24
2000	53		46	54	81	61	63	21	10	23
2001	9	63	32	41	50	61	48	18	7	19
2002	24	63	26	63	62	68	56	17	6	18
2003	58	18	44	66	59	44	53	17	7	18
2004	14	0	36	57	53	46	46	17	4	17
2005	21	0	61	87	95	44	69	18	5	20
Mean	34	37	43	62	67	53	56	19	7	20

^a May include a small number of permits from remote locations, but most are from Kodiak City, Kodiak Coast Guard Base, and Kodiak on-road communities.

^b Alaska residents not residing in Kodiak Island Borough and for which community of residence was not known.

Table 4. Comparisons of subsistence salmon harvests based on permit returns (P) and household surveys (S) for Kodiak Management Area off-road communities, 1989-1993, 1998, and 2003-2005 (ADF&G 2008).

Year	Number of Salmon Harvested																	
	Akhiook		Karluk		Larsen Bay		Old Harbor		Ouzinkie		Port Lions		Total					
	P	S	P	S	P	S	P	S	P	S	P	S	P	S				
1989	120	1,342		2,549	350	1,765	591	5,210	555	296	969	1,870	2,585	13,032				
1990			997	4,723	1,598	2,382			2,002	2,093			4,597	9,198				
1991			1,227	2,907	883	2,597	2,966	6,138	2,261	2,408			7,337	14,050				
1992					577	3,018			2,518	3,924			3,095	6,942				
1993	389	2,253			661	5,380			2,038	3,640	4,278	7,414	7,366	18,687				
1998					637	2,641	661	3,669	2,051	4,789			3,349	11,099				
2003	408	1,604			917	1,556	2,710	3,637	2,346	4,479	2,245	2,965	8,626	14,241				
2004	107	1,498			1,021	4,384	2,204	7,286	2,265	4,616	2,242	3,725	7,839	21,509				
2005					1,453	2,478	3,303	5,500	3,416	4,815	1,893	4,153	10,065	16,946				
2005					1,453	2,478	3,303	5,500	3,416	4,815	1,893	4,153	10,065	16,946				
Mean	49	129	222	238	56	186	71	128	64	99	54	94	67	128				
	<u>Harvest per Household</u>																	

This proposal would also allow Federally qualified users in the Kodiak Management Area to record their harvests on fishing permits before leaving the fishing site rather than immediately upon landing fish, would require them to record harvest information on the reverse side of the fishing permit, and would require them to return completed permits to an Alaska Department of Fish and Game representative. Allowing users to record harvests prior to leaving the fishing site rather than immediately upon landing fish should be less burdensome to users. However, including regulatory requirements concerning where to record information on permits and where to return completed permits is not necessary since these types of instructions are already printed on the permit (**Figure 1**).

OSM CONCLUSION

Support Proposal FP11-13 with modification to 1) retain existing wording for § __.27(i)(9)(iv), since this would be consistent with the proponent’s intent to address changes in annual harvest limits and reporting requirements for salmon but not for herring; 2) clarify, as recommended by the Kodiak Aleutians Council, that these regulations pertain to the Federal waters of Kodiak Island; 3) change the proposed wording for § __.27(i)(9)(v)(A) from “an additional permit may be obtained if it can be shown that more fish are needed” to “an additional permit may be obtained upon request”; 4) retain most of the existing wording for § __.27(i)(9)(vi) without proposed modifications, but retain proposed change to when harvests need to be recorded on permits, and 5) omit proposed wording for § __.27(i)(9)(vi) concerning where information needs to be recorded on permits and to whom recorded permits must be returned, and delete existing wording concerning the date permit returns are due.

The modified proposed regulation should read:

§ __.27(i)(9)(iv) You must have a subsistence fishing permit for taking salmon, trout, and char, for subsistence purposes. You must have a subsistence fishing permit for taking herring and bottomfish for subsistence purposes during the State commercial herring sac roe season from April 15 through June 30.

*(v) ~~With a subsistence salmon fishing permit you may take 25 salmon plus an additional 25 salmon for each member of your household whose names are listed on the permit. You may obtain an additional permit if you can show that more fish are needed~~**The annual limit for a subsistence salmon fishing permit holder is as follows:***

(A) In the Federal waters of Kodiak Island, east of the line from Crag Point south to the westernmost point of Saltery Cove, including the waters of Woody and Long Islands, and the salt waters bordering this area within one mile of Kodiak Island, excluding the waters bordering Spruce Island, 25 salmon for the permit holder plus an additional 25 salmon for each member of the same household whose names are listed on the permit: an additional permit may be obtained upon request;

(B) In the remainder of the Kodiak Area not described in (A) of this subsection, there is no annual harvest limit for a subsistence salmon fishing permit holder.

*(vi) You must record on your subsistence permit the number of subsistence fish taken. You must complete the record **all harvested fish prior to leaving the fishing site**, and must return it **the permit by the date marked on February 1 of the year following the year the permit was issued.***

Justification

Adopting the proposal with the modifications noted here would achieve the outcome sought by the proponent by 1) removing household salmon harvest limit restrictions from fishing permits issued to Federally qualified subsistence users that harvest salmon from Federal public waters not accessible from the Kodiak road system, and 2) allowing Federally qualified subsistence users in the Kodiak Management Area to record their harvests on fishing permits before leaving the fishing site rather than upon landing fish. The modified proposal does not include any portion of the proposed regulatory language that could be addressed as specifications on fishing permits or on instructions provided with fishing permits.

All Federally qualified subsistence users in the Kodiak Management Area are currently required to obtain additional permits whenever the harvest limit specified on the permit is reached. Federally qualified subsistence users fishing in Federal Public waters accessible from the Kodiak road system can accomplish this relatively easily since old permits can be returned and new ones can be obtained at the Alaska Department of Fish and Game office in the City of Kodiak. This process is more difficult for Federally qualified subsistence users fishing in Federal public waters that are not accessible from the Kodiak road system, particularly since most of these people also live in communities that are not accessible from the Kodiak road system. People fishing in these remote areas do not have easy access to the City of Kodiak, and there are usually no agency representatives or vendors in these remote communities to issue permits. Adoption of the proposal with modifications noted here should not affect the number of salmon harvested by Federally qualified subsistence users in the Kodiak Area, and may improve the accuracy of harvest reporting by people harvesting salmon in remote locations not accessible from the Kodiak road system. Removing a specified harvest limit from permits issued to Federally qualified subsistence users fishing for salmon in remote areas should not jeopardize the health and sustainability of the salmon populations being exploited since managers have the authority to restrict subsistence harvests during the fishing season to protect these salmon populations. Since the State has already made a similar change to permitting and reporting requirements for State subsistence users, adopting similar requirements for Federally qualified users would be less confusing to users as well as enforcement agents. The current Alaska Department of Fish and Game permit already specifies the harvest limits adopted by the State in 2008 (**Figure 1**), and these are now different from those in Federal regulations for people fishing for salmon in Federal public waters not accessible from the Kodiak road system.

Federally qualified subsistence users living in the Kodiak Management Area are currently required to record their harvests on fishing permits immediately upon landing fish. Adoption of the modified proposal would instead require these Federally qualified subsistence users to record their harvests on fishing permits before leaving the fishing site. This would be less burdensome to these users and should not affect the accuracy of harvest reporting or hinder enforcement.

Federally qualified subsistence users living in the Kodiak Management Area are currently required to return their fishing permits by February 1, and adoption of the original proposal would also require them to return completed permits to an Alaska Department of Fish and Game representative as well as to record harvest information on the reverse side of the fishing permit. Adoption of the modified proposal would not specify a receiving entity for submission of completed permits or where to record information on permits, and it would also remove the February 1 return date specified in current regulations. It is not necessary to include regulatory language specifying where to record information on permits, the agency to which permits are to be returned, and the date by which permits must be returned. These types of requirements are already specified on fishing permits (**Figure 1**). There do not appear to be any benefits in placing them into regulation.

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REGIONAL ADVISORY COUNCIL RECOMMENDATION

Support Proposal FP11-13 with modification. The Council modified the proposed regulatory language to remove references to herring, which allows section 27(i)(9)(iv) to revert to existing regulatory language, and to use the word “Federal” in paragraph (A) instead of “fresh” as a descriptor for relevant waters. These modifications will clarify the regulatory language for the benefit of subsistence users. It is understood that the intent of the proposal was to address salmon annual harvest limits and reporting, but not to deal with herring.

The modified regulation should read:

§ __.27(i)(9) (iv) You must have a subsistence fishing permit for taking salmon, trout, and char for subsistence purposes. You must have a subsistence fishing permit for taking herring and bottomfish for subsistence purposes during the State commercial herring sac roe season from April 15 through June 30.

*(v) ~~With a subsistence salmon fishing permit you may take 25 salmon plus an additional 25 salmon for each member of your household whose names are listed on the permit. You may obtain an additional permit if you can show that more fish are needed~~**The annual limit for a subsistence salmon fishing permit holder is as follows:***

(A) In the Federal waters of Kodiak Island, east of the line from Crag Point south to the westernmost point of Saltery Cove, including the waters of Woody and Long Islands, and the salt waters bordering this area within one mile of Kodiak Island, excluding the waters bordering Spruce Island, 25 salmon for the permit holder plus an additional 25 salmon for each member of the same household whose names are listed on the permit: an additional permit may be obtained if it can be shown that more fish are needed;

(B) In the remainder of the Kodiak area not described in (A) of this subsection, there is no annual harvest limit for a subsistence salmon fishing permit holder.** ~~(vi) You must~~ **Subsistence fishermen shall keep a record on your subsistence permit of the number of subsistence fish taken by that subsistence fisherman each year. The number of subsistence fish taken shall be recorded on the reverse side of the permit. ~~You~~ The catch must be complete the recorded prior to leaving the fishing site immediately upon landing subsistence-caught fish, and the permit must be returned it to the local representative of the department by February 1 of the year following the year the permit was issued.

*~~(vi) You must~~ **Subsistence fishermen shall keep a record on your subsistence permit of the number of subsistence fish taken by that subsistence fisherman each year. The number of subsistence fish taken shall be recorded on the reverse side of the permit. ~~You~~ The catch must be complete the recorded prior to leaving the fishing site immediately upon landing subsistence-caught fish, and the permit must be returned to the local representative of the department it by February 1 of the year following the year the permit was issued.***

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a complete and accurate evaluation of the proposal and the recommendation of the Kodiak/Aleutians Regional Advisory Council to be supported by

substantial evidence and consistent with recognized principles of conservation. The proposal is intended only to address salmon harvest limits and permit requirements. The Council did not specifically address proposed stipulations concerning to whom and by what date permits are to be returned. The staff analysis does address this, and provides an administratively preferred approach.

ADF&G Comments on FP11-13
November 30, 2010; Page 1 of 2

Alaska Department of Fish and Game
Comments to Federal Subsistence Board

Fisheries Proposal FP11-13: Remove harvest limit for non-road system federal subsistence salmon fisheries on Kodiak Island, require a permit and recording of Pacific herring harvested under federal subsistence regulations, and require harvest recording prior to leaving the site.

Introduction: The Kodiak-Aleutians Regional Advisory Council submitted this proposal to remove the annual limit for salmon harvested in federal subsistence fisheries on Kodiak Island from waters that are not adjacent to the Kodiak Island road system. A total annual household limit for salmon harvested in any Kodiak federal subsistence salmon fisheries exists in federal regulations and not in state subsistence regulations. This proposal also requires herring harvest be recorded on the subsistence fishing permit consistent with state regulations. It proposes to change reporting requirements to allow fishermen to record harvest prior to leaving the site, whereas the state requirement is to record harvest “immediately.” Except for the reporting requirement, the federal regulations would be consistent with existing state regulations.¹

Impact on Subsistence Users: If adopted, federal subsistence users who choose to fish in waters of Kodiak not adjacent to the road system will no longer have an annual harvest limit for salmon, consistent with state regulation. Federally qualified subsistence fishers fishing in waters where federal subsistence jurisdiction is claimed will be required to record subsistence-harvested herring. The requirement to record harvest “prior to leaving the site” is inconsistent with state regulations and may put fishers at risk of citation, depending on location of harvest. If the harvest recording requirements contained in the modified proposal supported by the Kodiak-Aleutians Regional Advisory Council is adopted, the US Fish and Wildlife Service will need to provide federal subsistence fishermen with subsistence permits. The state issued subsistence permits require recording subsistence harvested fish immediately upon landing.

Opportunity Provided by State: State subsistence regulations for Kodiak salmon fisheries have different annual household limits depending upon location of harvest. Subsistence fishermen who harvest fish from road system streams are limited to 25 salmon for those named on the permit, and an additional permit is available based on needs of the permit holder. There is

¹ 5AAC 01.530 Subsistence Fishing Permits

- (a) A subsistence fishing permit is required for taking salmon, trout, char, and herring for subsistence purposes.
- (b) The annual limit for a subsistence salmon fishing permit holder is as follows:
 - (1) in the fresh waters of Kodiak Island, east of a line from Crag Point south to the westernmost point of Saltery Cove, including the waters of Woody and Long Islands, and the salt waters bordering this area within one mile of Kodiak Island, excluding the waters bordering Spruce Island, 25 salmon for the permit holder plus an additional 25 salmon for each member of the same household whose names are listed on the permit; an additional permit may be obtained if it can be shown that more fish are needed;
 - (2) in the remainder of the Kodiak Area not described in (1) of this subsection, there is no annual limit.
- (c) A subsistence fishermen shall keep a record of the number, or if for herring, the number of pounds, of subsistence fish taken by that subsistence fisherman each year. The number or pounds of subsistence fish taken shall be recorded on the reverse side of the permit. The record must be completed immediately upon landing subsistence-caught fish, and must be returned to the local representative of the department by February 1 of the year following the year the permit was issued.
- (d) A subsistence herring fishing permit holder may take no more than 500 pounds of herring in a calendar year.

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no annual harvest limit for subsistence fishermen that harvest in waters that are not adjacent to the road system, but fishermen are required to record harvest and submit the permit to agency staff by February 1 of the following year. Subsistence fishermen may harvest up to 500 pounds of herring in a calendar year under the same state subsistence permit.

Conservation Issues: Kodiak currently has no designated salmon stocks of concern. However, the Karluk River Chinook salmon stock has not met its minimum escapement goal (3,600) and has had commercial, sport, and subsistence fishery restrictions for the past three seasons. The Karluk River early-run sockeye salmon stock has not met its minimum escapement goal (110,000) and had commercial, sport, and subsistence restrictions for the past two seasons. The Ayakulik River Chinook salmon stock has not met its minimum escapement goal (4,800) and had commercial, sport, and subsistence restrictions for three of the past four seasons. Subsistence harvest from both the Karluk and Ayakulik rivers is minimal or has been restricted.

Jurisdiction Issues: The federal subsistence salmon fisheries on or near Kodiak Island can take place in the fresh and marine waters of the Pacific Ocean enclosed by boundaries of Womens Bay, Gibson Cove, and an area defined by a line ½ mile on either side of the mouth of the Karluk River extending seaward 3,000 feet. Additionally, federal subsistence users can fish for salmon in marine waters of Afognak Island within 1,500 feet seaward of shoreline.

Other Issues: The Kodiak Aleutians Regional Advisory Council supported a modified proposal included the removal references to herring under § __.27(i)(9)(iv)-(vi). The department has concerns about removal of references to herring in this section of regulations as the resulting regulations might inadvertently eliminate permitting and reporting requirements for the federal subsistence herring fishery near Kodiak. The department requests clarification from the federal subsistence process, as the council meeting transcripts clearly request the removal of herring references but do not illustrate the intent of the council for doing so.

Recommendations:

1. Support the proposed limits of fish that can be harvested on and off the Kodiak road system.
2. Support the proposed requirement to record herring harvested in federal subsistence fisheries on a permit.
3. Oppose reporting requirements that allow subsistence fishermen to be in possession of harvest but not record it until leave the fishing site.
4. Oppose the elimination of permitting and reporting for the federal subsistence herring fishery (if applicable).

FP11-16 /17 Executive Summary	
General Description	<p>Proposal FP11-16 requests that the season closing date for the Federal subsistence sockeye salmon fishery in the Klawock River be extended from July 31 to August 15 and that the Monday through Friday fishing schedule be removed. <i>Submitted by Michael Douville</i></p> <p>Proposal FP11-17 requests that the season closing date for the Federal subsistence sockeye salmon fishery in the Klawock River be extended from July 31 to August 7 but retains the Monday through Friday fishing schedule. <i>Submitted by Southeast Alaska Regional Advisory Council</i></p>
Proposed Regulation	<p>FP11-16 § __.27(i)(13)(xiv) From July 7 through July 31 August 15, you may take sockeye salmon in the waters of the Klawock River and Klawock Lake only from 8:00 a.m. Monday until 5:00 p.m. Friday.</p> <p>FP11-17 § __.27(i)(13)(xiv) From July 7 through July 31 August 7, you may take sockeye salmon in the waters of the Klawock River and Klawock Lake only from 8:00 a.m. Monday until 5:00 p.m. Friday.</p>
OSM Conclusion	<p>Support Proposal FP11-16 with modification to remove the defined season and fishing schedule for subsistence sockeye fishing in the Klawock Lake/River drainage from regulation.</p> <p>The modified regulation should read:</p> <p>§ __.27(i)(13)(xiv) From July 7 through July 31, you may take sockeye salmon in the waters of the Klawock River and Klawock Lake only from 8:00 a.m. Monday until 5:00 p.m. Friday.</p> <p>Take no action on Proposal FP11-17.</p>
Southeast Regional Council Recommendation	<p>Support Proposal FP11-16 with modification to remove the defined season and fish schedule for subsistence sockeye salmon fishing in the Klawock River drainage from regulation. <i>See the full recommendation following the analysis.</i></p> <p>Took no action on Proposal FP11-17 due to previous action on FP11-16.</p>
Interagency Staff Committee Comments	See comments following the analysis.
ADF&G Comments	<p>Oppose Proposal FP11-16.</p> <p>Support Proposal FP11-17</p>
Written Public Comments	None

STAFF ANALYSIS FP11-16/17

ISSUES

Proposal FP11-16, submitted by Michael Douville, requests that the season closing date for the Federal subsistence sockeye salmon (*Onchorynchus nerka*) fishery in the Klawock River be extended from July 31 to August 15 and that the Monday through Friday fishing schedule be removed. Proposal FP11-17, submitted by Southeast Alaska Regional Advisory Council, requests that the season closing date for the Federal subsistence sockeye salmon fishery in the Klawock River be extended from July 31 to August 7 but retains the Monday through Friday fishing schedule.

DISCUSSION

The proponent of FP11-16 requests the Federal season be extended to August 15, plus allow additional fishing opportunity on the weekends within the season by removing the Monday through Friday fishing schedule. The proponent indicated that the Monday–Friday fishing schedule was implemented in 1986 by State Board of Fisheries action, to address local resident’s concerns that the stock was being overharvested by non-local residents (non-Federally qualified users — i.e., Ketchikan residents) travelling over on the ferry to Prince of Wales Island (when travel costs were cheaper) in order to subsistence fish sockeye in the Klawock Harbor during the weekends. The proponent believes removing the fishing schedule from Federal regulation would allow Federal qualified subsistence users, unable to fish during the work week with beach seines in marine water, to fish other gear allowed under Federal regulations within waters under Federal jurisdiction. The proponent also believes the harvest by these individuals would be minimal compared to the harvests occurring in State waters (Douville 2010).

The proponent of FP11-17 requests that the Federal season be extended by one week to August 7 to align State and Federal harvest seasons. Aligning this regulation would prevent the need for Special Action by the Federal Subsistence Board, as was the case in both 2009 and 2010.

Existing Federal Regulation

§ __.27(i)(13)(xiv) From July 7 through July 31, you may take sockeye salmon in the waters of the Klawock River and Klawock Lake only from 8:00 a.m. Monday until 5:00 p.m. Friday.

Also relevant to this proposal analysis is the following Federal regulation:

§ __.27(i)(13)(viii) If you take salmon, trout, or char incidentally with gear operated under the terms of a subsistence permit for other salmon, they may be kept for subsistence purposes. You must report any salmon, trout, or char taken in this manner on your subsistence fishing permit.

Proposed Federal Regulation

FP11-16

*§ __.27(i)(13)(xiv) From July 7 through ~~July 31~~ **August 15**, you may take sockeye salmon in the waters of the Klawock River and Klawock Lake ~~only from 8:00 a.m. Monday until 5:00 p.m. Friday.~~*

FP11-17

*§ ____ .27(i)(13)(xiv) From July 7 through ~~July 31~~ **August 7**, you may take sockeye salmon in the waters of the Klawock River and Klawock Lake only from 8:00 a.m. Monday until 5:00 p.m. Friday.*

Existing State Regulations

5AAC 01.710(e) From July 7 through August 7, sockeye salmon may be taken in the waters of Klawock Inlet enclosed by a line from Klawock Light to the Klawock Oil Dock, the Klawock River, and Klawock Lake only from 8:00 a.m. Monday until 5:00 p.m. Friday.

5AAC 01.750 In the waters of Klawock Inlet enclosed by a line from Klawock Light to the Klawock Oil Dock, no person may subsistence salmon fish from a vessel that is powered by a motor of greater than 35 horsepower.

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. They include waters within the exterior boundary of the Tongass National Forest in the Southeastern Alaska Area excluding marine waters.

Customary and Traditional Use Determinations

The Klawock Lake drainage (**Map 1**) drains into District 3B. Residents living south of Sumner Strait and west of Clarence Strait and Kashevaroff Passage (primarily residents of Prince of Wales Island) have a positive customary and traditional use determination for salmon in District 3.

Regulatory History

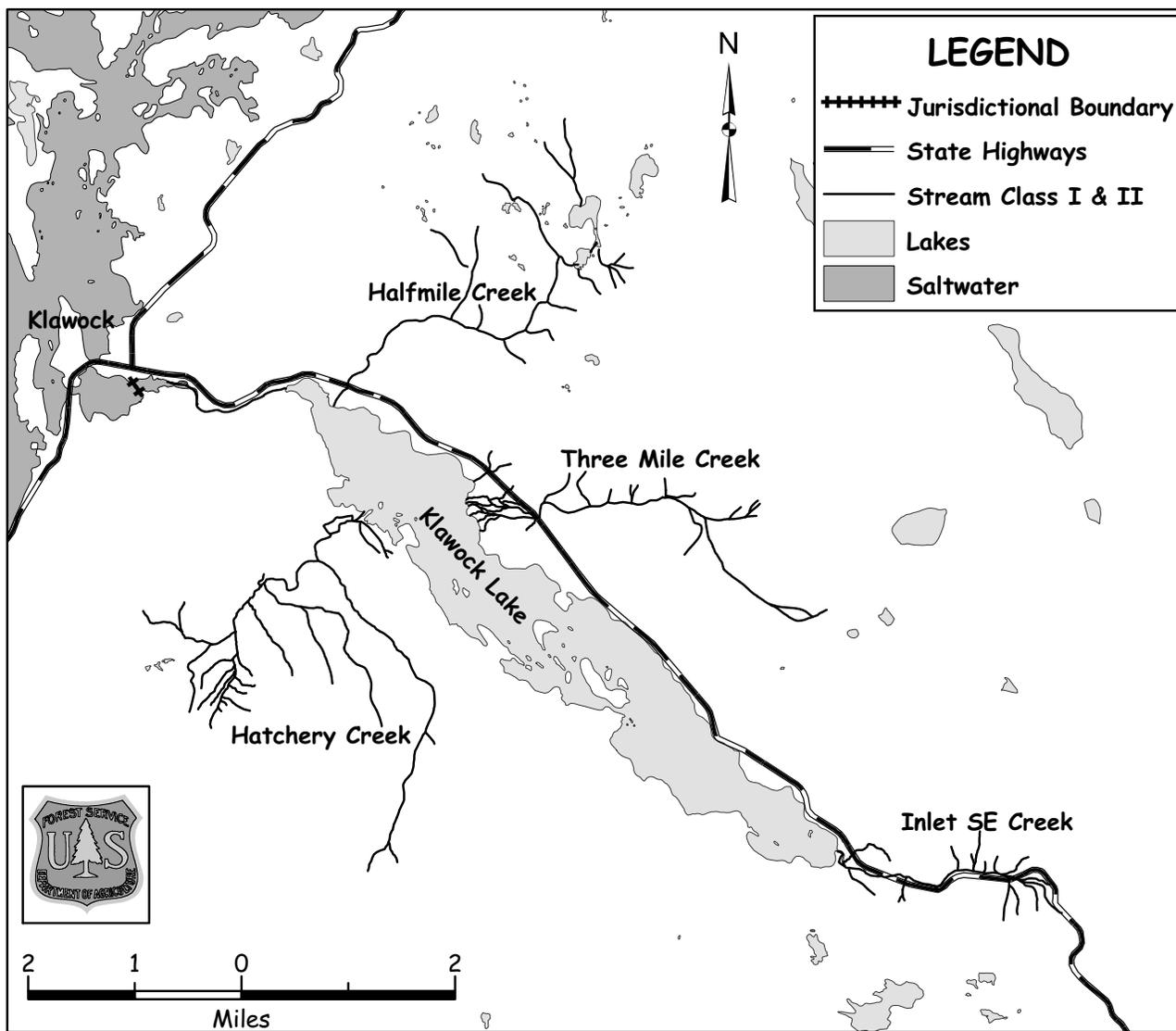
State Regulatory History

ADF&G, Division of Commercial Fisheries, Ketchikan Area Office issues subsistence salmon permits for Klawock Lake salmon. Individual and household possession limits have varied since permits were first issued in 1969. Current permit conditions allow for individual and household limits of 20 sockeye salmon daily with no annual limit. Legal subsistence fishing gear in this area includes hand purse seines, beach seines, and dip nets.

In 1986, the State managed Klawock subsistence fishery was set in State regulation with a season and fishing schedule of July 7 through July 31 from 8:00 a.m. Monday to 5:00 p.m. Friday (5 AAC 01.710). This regulation was implemented in 1986 due to concerns that too many sockeye salmon were being taken on the weekend by people from urban areas. Three additional actions in 1986, related to Klawock sockeye, also occurred. Sport fishing for sockeye salmon was closed throughout the Klawock River/Lake drainage, a portion of Klawock Harbor was closed to the snagging of salmon, and the restriction on the use of outboard motors greater than 35 horsepower was implemented.

In February 2009, the Board of Fisheries adopted Proposal 265 extending the closing date of the State-managed subsistence sockeye fishery from July 31 to August 7. This State fishery extends from the lake down through the river into tidal water. This proposal, submitted by the Klawock Cooperative Association, originally requested that the starting date of the State managed subsistence sockeye fishery

Map 1 Klawock Lake Watershed



S.Burch, 11/24/2010

be moved to July 15, and the closing date of the fishery be changed to August 15. The Alaska Department of Fish and Game (ADF&G) opposed Proposal 265 as written, however, ADF&G did support extending the harvest opportunity for the subsistence sockeye season through August 7.

Federal Regulatory History

In 1999, when Federal subsistence fishing management began, existing State subsistence fishing regulations were adopted for Southeast Alaska. The Klawock is the only drainage in Southeast Alaska with a specific season and fishing schedule under Federal regulations. Although the regulation defines a season and a schedule of directed subsistence fishing for sockeye, there are no Federal seasons for the remaining species of salmon within the Klawock River drainage. Federal regulations also allow for the

retention of incidentally harvested salmon, trout, or char, with the requirement that any salmon, trout, or char taken in this manner be recorded on the subsistence fishing permit.

In 2001, proposal FP01-24 was submitted by the Alaska Native Brotherhood and Alaska Native Sisterhood Camp 9, in Klawock, which requested a change to the fishing schedule for sockeye salmon. The Southeast Alaska Regional Advisory Council (Council) originally tabled proposal FP01-24 until they could hear testimony from local subsistence users. After hearing testimony from a local user the proposal remained tabled (SERAC 2000). During the December 2000 Federal Subsistence Board (Board) meeting, the proposal was deferred by the Board (FSB 2000), however, the proposal was revisited in December 2001 when the Board rejected the proposal (FSB 2001).

In 2007, proposal FP07-20 was submitted by the Craig Community Association requesting a change in the current fishing schedule for sockeye salmon. The Council opposed this proposal, because the majority of the subsistence fishing effort was occurring in waters under State jurisdiction. The Council felt that the proponent needed to further pursue action through the Alaska Board of Fisheries process (SERAC 2006). At the January 2007 meeting, the Board took no action on this proposal (FSB 2007).

During April 2009, the local Federal in-season manager submitted Special Action Request FSA09-03 to extend the Federal sockeye season on the Klawock River to August 7 to match the change implemented by the Alaska Board of Fisheries. The request was approved by the Federal Subsistence Board. Because of the current biennial fisheries regulatory cycle, the Federal manager, again, had to submit the same special action request, FSA10-01, to align the State and Federal sockeye seasons for the Klawock River for 2010 fishing season. In early July 2010, the Federal Subsistence Board approved this request.

Biological Background

The Klawock drainage is located on the western side of Prince of Wales Island. Klawock Lake is one of the few major sockeye salmon producers on Prince of Wales Island. The Klawock sockeye salmon stock has been an important subsistence resource for the people of Klawock and other nearby communities for over 100 years (Lewis and Zadina 2002; Cartwright and Lewis 2004). The Klawock River is approximately a mile and a half long and drains out of Klawock Lake. The lake is five miles long and has four major streams draining into it: Half-mile Creek and Three-mile Creek to the north, Hatchery Creek to the south, and an unnamed creek, often referred to as “Inlet” Creek to the east. All four of these streams are important for spawning sockeye salmon. It is unknown if there are beach spawning sockeye in the lake.

The Klawock River sockeye salmon escapement has been above average in recent years (Davidson et al. 2009). The Prince of Wales Hatchery Association maintains an aluminum bipod weir on the Klawock River. Prior to 2001, the weir was utilized typically in late July to capture coho. Since 2001, the weir has been in by early July. Historic weir counts (prior to 2001) of Klawock sockeye have ranged from 872 to 65,314 sockeye with recent escapements ranging from 11,000 and 21,000 sockeye. From 2001–2009, a two-sample mark-recapture study was conducted to test the integrity of the weir and to provide an independent estimate of sockeye escapement (Lewis and Cartwright 2002). Historic weir counts and mark-recapture estimates can be found in **Table 1**.

Table 1. Historical weir counts of Klawock River sockeye. Numbers from 1968 to 2009 represent a minimum escapement estimate due to incomplete fish counts in many years (Walker 2009, pers. comm., Pappas 2010, pers. comm.).

Year	Sockeye Weir Count	Mark/Recapture Estimate
1930	7,044	
1931	34,184	
1932	57,294	
1934	16,374	
1935	20,028	
1936	65,314	
1937	33,544	
1938	15,368	
1968	13,242	
1969	1,557	
1970	7,213	
1971	11,580	
1977	4,771	
1982	4,872	
1983	872	
1985	1,042	
1986	19,636	
1987	7,844	
1988	6,453	
1999	5,310	
2000	9,428	
2001	7,236	14,000
2002	13,920	14,000
2003	6,276	21,000
2004	11,653	
2005	12,509	
2006	14,757	No estimate
2007	n/a	17,500
2008	15,600	No estimate
2009	21,165	19,701

Harvest History

State Subsistence Harvest

Subsistence harvests have been reported on permits issued by ADF&G since 1969. Although the entire Klawock Lake drainage is open for subsistence fishing, the majority of the sockeye harvested are taken in marine waters during the month of July. Directed harvest of sockeye within the river and lake is very low, as local users tend to feel that once in the river they are escapement, and the fish are of lesser quality than those in the bay. Lastly, the sediment bottom and heavy amounts of large woody debris make it nearly impossible to seine within the few large, deep holes on the river.

Since 2005, the run timing of Klawock River sockeye has seemed to be later, with larger numbers of sockeye returning near the last week of the regulatory season dates. During years of late returns, ADF&G has been asked to extend the subsistence fishery. The fishery has been extended in the past when it was determined that although late, indications are that the return will be at least of average size (Davidson et al. 2009). In February 2009, the State Board of Fisheries extended the closing date in regulation to August 7. Directed fishing effort for sockeye, during August, is not normally as high as that during July, as pink salmon are heavily abundant during this time frame.

The reported harvest of sockeye and the total number of permits issued have fluctuated annually since 1969. Reported subsistence harvests of Klawock sockeye have ranged from 238 to 6,661 sockeye with harvest between 1,700 and 3,000 fish more common (**Table 2**), occurring in marine waters outside of Federal jurisdiction. Based upon on-site harvest surveys from 2001 to 2009, the reported harvest on returned permits was, on average, only 60% of the actual harvest (Cartwright and Lewis 2004; Walker 2009).

Federal Subsistence Harvest

Typically, Federal subsistence fishing regulations for Southeast Alaska do not have defined seasons for harvesting sockeye, coho, pink or chum salmon. The Klawock River/Lake drainage is the only exception, and currently has a season of July 7 to July 31 for the directed harvest of sockeye. In both 2009 and 2010, the local in-season manager has submitted Special Action requests to extend the Federal season to August 7. Federal regulation allows for the retention of incidentally taken salmon, trout, and char and requires that any incidental harvest be recorded on the permit.

Until 2006, the only sockeye harvest reported under Federal subsistence fishing permits from the Klawock Lake/River drainage was seven taken incidentally during the Federal coho salmon fishery in 2002. Since 2006, some directed harvest of sockeye has been reported on Federal permits. Harvests reported from 2006–09 have ranged from 9 to 321 sockeye, with dip net, seine and handline gear being used (USDA Forest Service 2010).

Effects of the Proposal

Adoption of either proposal will provide additional fishing time to the Klawock River Federal subsistence sockeye fishery during peak run timing. FP11-16 will create differing State and Federal regulations for subsistence sockeye fishing, while FP11-17 will re-align State and Federal regulations for subsistence sockeye fishing within this drainage. Extending the season as requested by both proposals would result in additional sockeye being harvested. This additional harvest should not cause any conservation concerns for this salmon stock since the Federal harvest would be minimal compared to the subsistence harvest occurring in marine waters under State regulations. Removal of the Monday–Friday fishing schedule may increase fishing pressure on the weekend days, but would only be limited to Federally qualified users.

OSM CONCLUSION

Support Proposal FP11-16 with modification to remove the defined season and fishing schedule for subsistence sockeye fishing in the Klawock Lake/River drainage from regulation.

The modified regulation should read:

§ ____ .27(i)(13)(xiv) From July 7 through July 31, you may take sockeye salmon in the waters of the Klawock River and Klawock Lake only from 8:00 a.m. Monday until 5:00 p.m. Friday.

Table 2. Subsistence permits, reported harvest, and harvest estimates by year from 1969 to 2009 (USDA Forest Service 2010; Walker 2009, pers. comm.; Pappas 2010, pers. comm.).

Year	State Permits	Sockeye Reported on State Permits	Harvest Estimate ¹	Federal Harvest
1969	35	1,455		
1970	32	798		
1971	38	314		
1972	79	1,978		
1973	64	755		
1974	60	1,362		
1975	59	1,377		
1976	71	1,108		
1977	63	1,286		
1978	87	1,017		
1979	111	2,980		
1980	159	3,522		
1981	152	4,183		
1982	225	6,661		
1983	130	1,736		
1984	235	2,366		
1985	138	2,336		
1986	156	2,762		
1987	117	2,118		
1988	96	1,851		
1989	122	3,088		
1990	100	2,361		
1991	77	1,989		
1992	133	4,322		
1993	162	5,763		
1994	133	4,848		
1995	118	3,489		
1996	159	5,553		
1997	126	4,746		
1998	125	4,670		
1999	123	3,509		
2000	112	3,000		
2001	130	4,433	6,400	
2002	116	3,778	6,000	7
2003	91	3,195	6,000	
2004	80	2,697	4,500	
2005	34	238	175	
2006	65	1,859	3,100	15
2007	57	2,042	2,600	45
2008	70	3,000	6,700	9
2009	109	3,777	5,520	321

¹ This estimate was generated from on-site creel surveys as a part of the FIS funded Klawock sockeye assessment project.

Take no action on Proposal FP11-17.

Justification

Removal of the Klawock fishing season and schedule for sockeye will bring consistency in the Federal management of subsistence sockeye fisheries within the Southeast Alaska management area.

Removal of the season from Federal regulation will remove the need for the Federal in-season manager to submit formal Special Action Requests to the Federal Subsistence Board.

Removal of the fishing schedule, will allow only Federally qualified users some extra time to harvest sockeye. With the majority of the subsistence sockeye harvest occurring in State managed marine waters, the harvest in Federal waters will be minimal in comparison. Sockeye escapements since 2001 have been considered above average. The Klawock sockeye return can be easily monitored with the fish hatchery's weir, and if sockeye escapements appear to be below average during the season, Federal managers can easily take special action within Federal Jurisdiction.

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REGIONAL ADVISORY COUNCIL RECOMMENDATION

Southeast Alaska Subsistence Regional Advisory Council

Support Proposal FP11-16 **with modification** to remove the defined season and fish schedule for subsistence sockeye salmon fishing in the Klawock River drainage from regulation. The Council determined that this proposal, as modified, would provide additional fishing opportunity for subsistence users and simplify subsistence harvest regulations. The original regulation establishing the season and weekly fishing schedule was developed during a period of time when there was considerable non-local weekend travel to the island. The regulation was developed by the State and incorporated into the Federal program when the Federal government assumed authority for subsistence management of fish. The intent of the regulation was to give local residents an advantage over non-locals. There is not the need to restrict non-local participation in Federal subsistence fisheries. There is not a conservation concern in the Klawock River that requires retaining the current regulation. The Klawock River is the only Federal subsistence sockeye salmon fishery with a defined fishing season and weekly fishing schedule in Southeast Alaska. Deleting the sockeye salmon season and weekly fishing schedule would align the Klawock fishing regulations with other Federal sockeye salmon management systems in the Region. The current rules are largely ineffective in restricting sockeye salmon harvest as current regulations for the Southeast Alaska Area allow for sockeye salmon to be retained outside the designated season and weekly fishing period as incidental harvest while fishing for other species.

The modified regulation should read:

§ ____ .27(i)(13)(xiv) From July 7 through July 31, you may take sockeye salmon in the waters of the Klawock River and Klawock Lake only from 8:00 a.m. Monday until 5:00 p.m. Friday.

Took No Action on Proposal FP11-17 due to previous action on FP11-16. The Council determined that previous action on FP11-16 provided a superior solution to the issue.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a complete and accurate evaluation of the proposal and the Southeast Regional Advisory Council's discussion and recommendation on the analysis to be complete and clear. The Interagency Staff Committee also would like to point out that as noted in the analysis, the Klawock sockeye return can be easily monitored with the fish hatchery's weir, and if sockeye escapements appear to be below average during the season, or if harvest patterns change such that conservation concerns arise, the Federal inseason manager could issue a special action within Federal jurisdiction to address conservation concerns.

ADF&G Comments on FP11-16 and FP11-17
November 30; Page 1 of 3

Alaska Department of Fish and Game
Comments to Federal Subsistence Board

Fisheries Proposal FP11-16 and FP11-17: Eliminate daily hour restrictions for the Klawock river and lake federal subsistence sockeye salmon fishery and extend the closure date of the Klawock River sockeye salmon fishery to August 15.

Introduction: FP11-16, submitted by Michael Douville, would remove the daily hour restrictions and season closure date for the federal subsistence sockeye salmon fishery in Klawock river and lake, rescinding hour restrictions implemented in 1986 at the request of local Klawock area residents. If adopted, the proposal would allow all federally-qualified subsistence users to fish 24 hours per day, seven days per week through August 15, in Klawock river and lake. Current federal subsistence fishery hours are from 8:00 am Monday until 5:00 pm Friday during the July 7 through July 31 season.

FP11-17, submitted by the Southeast Regional Advisory Council, proposes to change the federal subsistence fishery season closing date for sockeye salmon in the Klawock river and lake fishery from July 31 to August 7 in order to match the state subsistence fishing season regulations adopted by the Alaska Board of Fisheries during the February 17 through 26, 2010, meeting. The department supported both FSA09-03 and FSA10-01, which were identical requests also approved by the Federal Subsistence Board.

Impact on Subsistence Users: If FP11-16 is adopted, federal subsistence users will be allowed to participate in the federal subsistence fishery for sockeye salmon during evenings and weekends and during an extended federal subsistence fishing season. The restriction to the hours of the fishery was originally put in place to provide subsistence fishing opportunities for local residents during the week. If adopted as proposed, all residents of Prince of Wales Island will be able to fish for sockeye salmon in those waters of the Klawock River where federal jurisdiction is claimed. This may increase competition for local residents who harvest sockeye salmon for subsistence in the Klawock River. If FP11-16 is adopted, the federal and state subsistence users would have a different fishing season closure dates. Adjusting the closure date of the federal subsistence sockeye salmon fishery to a date different than the state subsistence fishery will create inconsistency between state and federal regulations and increase risk of enforcement actions on subsistence users fishing under different regulations.

If FP11-17 is adopted, federal subsistence users will have the same fishing season as state subsistence users participating in the state subsistence fishery, which extends the opportunity to fish for one additional week past the federal season, to August 7. Adjusting the closure date of the sockeye salmon fishery will provide consistency between state and federal regulations and reduce risk of enforcement actions on subsistence users fishing under different regulations.

Opportunity Provided by State: Salmon may be harvested under state subsistence regulations in the Klawock River from 8:00 am Monday until 5:00 pm Friday, from July 7 through August 7. The time limitations were adopted in 1986 by the Alaska Board of Fisheries in response to a proposal submitted by local residents of Klawock, who expressed concern that sockeye salmon were being taken on weekends by people from urban areas. The sockeye salmon harvest limit in

ADF&G Comments on FP11-16 and FP11-17
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the state—managed subsistence fishery is 20 sockeye salmon per day, per household, there is no annual limit. Personal Use and Subsistence permit conditions prohibit the retention of incidentally caught sockeye salmon when the fishery is closed. Legal subsistence fishing gear in this area includes hand purse seines, beach seines, and dip nets. State regulations for this fishery include other time, area, and gear provisions as follows:

5AAC 01.710(e) From July 7 through August 7, sockeye salmon may be taken in the waters of Klawock Inlet enclosed by a line from Klawock Light to the Klawock Oil Dock, the Klawock River, and Klawock Lake only from 8:00 a.m. Monday until 5:00 p.m. Friday.

5AAC 01.750 In the waters of Klawock Inlet enclosed by a line from Klawock Light to the Klawock Oil Dock, no person may subsistence salmon fish from a vessel that is powered by a motor of greater than 35 horsepower.

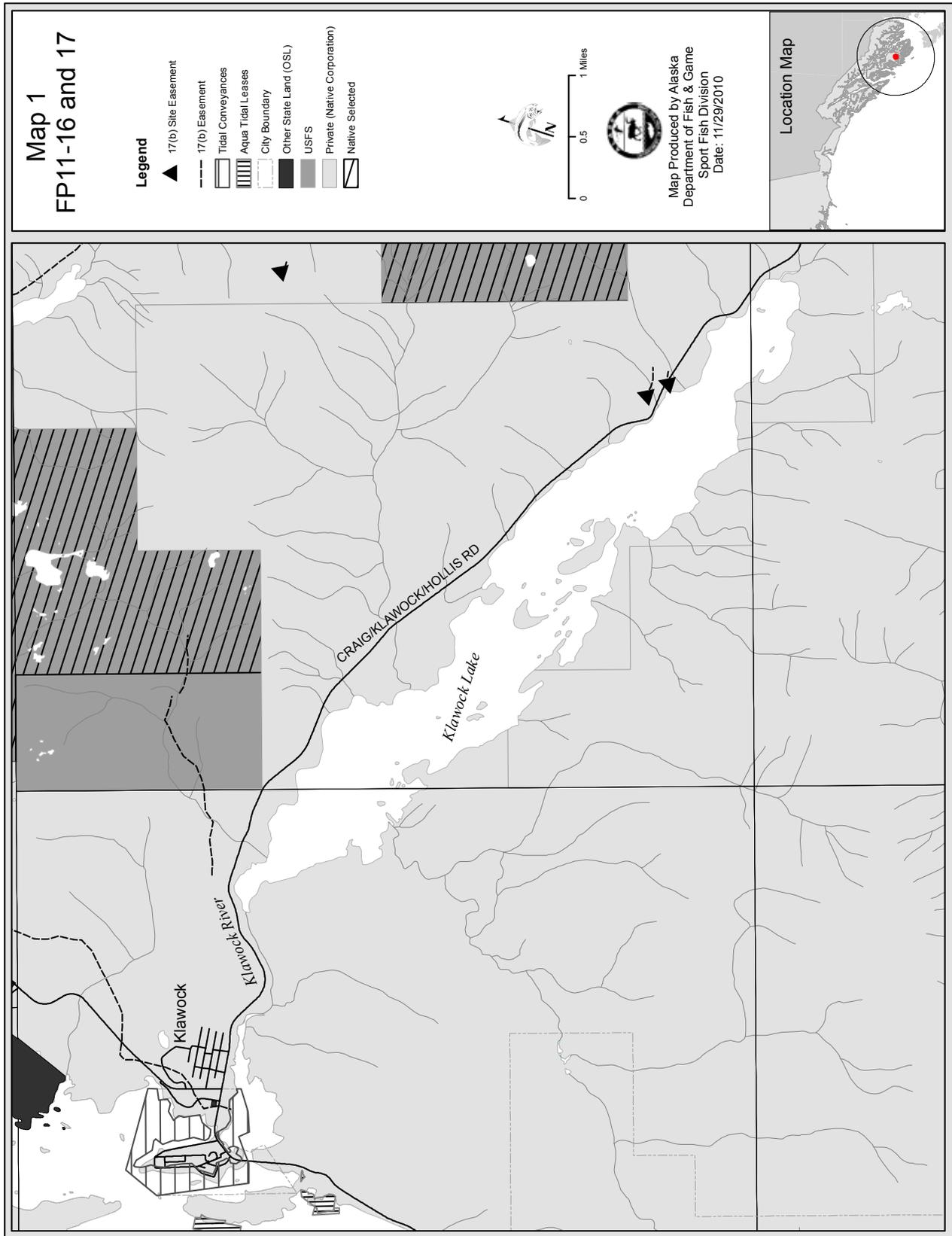
Conservation Issues: No salmon stocks in this area have been determined by the Alaska Board of Fisheries to be a stock of conservation or management concern, and adoption of these proposals will not likely cause a conservation or management concern. Adoption of these proposals, however, is expected to increase federal subsistence harvest of sockeye salmon to an unknown degree. Currently, approximately 95% of the subsistence harvest effort takes place in the state subsistence fishery in state marine waters.

Jurisdiction Issues: 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. The uplands and all shorelines for the Klawock river and lake are private lands. No federal public lands exist within the fishable Klawock River watershed (see attached map). The department requests that federal subsistence administrators provide detailed maps that depict land ownership and specific boundaries of areas where federal regulations are claimed to apply. The maps provided with FP07-20, FSA 09-03, and FSA 10-01 federal analyses are not detailed enough for use by fishermen in the field.

Other Issues: Most sockeye salmon are enumerated through a weir into the Klawock system, but the escapement data are not utilized as a primary tool for the inseason management of the state personal use and subsistence fisheries. The time between sockeye salmon passing through the personal use and subsistence fisheries and passing the weir can be lengthy and variable depending up on environment conditions. Additionally, the weir does not consistently operate during the entire sockeye salmon run on some years. The department utilizes sockeye salmon passage data post season.

Recommendations: Oppose FP11-16, elimination of the hour restriction for the subsistence sockeye salmon fishery in Klawock river and lake and oppose extension of the season fishery closure date to August 15. The department recommends submitting this proposal to the Alaska Board of Fisheries public process to ensure this issue is evaluated by the majority of users from the affected Prince of Wales Island communities.

Oppose the Office of Subsistence Management proposed modified language to eliminate season dates of the Klawock sockeye salmon fishery.



ADF&G Comments on FP11-16 and FP11-17
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Support FP11-17, extending the subsistence sockeye salmon season to August 7.

FP11-18 Executive Summary	
General Description	Proposal FP11-18 requests all waters draining into Sections 1C and 1D be closed to the harvest of eulachon. <i>Submitted by the Southeast Alaska Subsistence Regional Advisory Council</i>
Proposed Regulation	<p>§ __.27(i)(13)(ii) <i>You must possess a subsistence fishing permit to take salmon, trout, grayling, or char. You must possess a subsistence fishing permit to take eulachon from any freshwater stream flowing into fishing Sections 1C or 1D</i></p> <p>§ __.27(i)(13)(xxii) <i>All drainages of fishing Sections 1C and 1D are closed to the harvest of eulachon.</i></p>
OSM Conclusion	<p>Support Proposal FP11-18 with modification to clarify the applicable area, and to make explicit that the closure applies to all users.</p> <p>The modified proposed regulation should read:</p> <p>§ __.27(i)(13)(ii) <i>You must possess a subsistence fishing permit to take salmon, trout, grayling, or char. You must possess a subsistence fishing permit to take eulachon from any freshwater stream flowing into fishing Sections 1C or 1D</i></p> <p>§ __.27(i)(13)(xxii) <i>All freshwater streams flowing into Sections 1C and 1D are closed to the harvest of eulachon by all users.</i></p>
Southeast Regional Council Recommendation	<p>Support Proposal FP11-18 with modification to clarify the applicable area, and to make explicit that the closure applies to all users.</p> <p>The modified proposed regulation should read:</p> <p>§ __.27(i)(13)(ii) <i>You must possess a subsistence fishing permit to take salmon, trout, grayling, or char. You must possess a subsistence fishing permit to take eulachon from any freshwater stream flowing into fishing Sections 1C or 1D</i></p> <p>§ __.27(i)(13)(xxii) <i>All freshwater streams flowing into Sections 1C and 1D are closed to the harvest of eulachon by all users.</i></p>
Interagency Staff Committee Comments	See comments following the analysis.

continued on next page

FP11-18 Executive Summary (continued)

ADF&G Comments	<p>Support with modification to be “no Federal season” for the harvest of eulachon in Sections 1-C and 1-D. This modification would remove the procedural burden of opening a closed fishery when eulachon numbers rebound in these sections. Because the waters in which eulachon move include intermixture of state waters with waters where Federal regulations are claimed to apply, it would be less onerous for Federal subsistence users if the modification read: § __.27(i)(13)(xxii) All drainages of fishing Sections 1-C and 1-D – No Federal season for eulachon. Thus, if eulachon numbers rebound sufficiently that the state is able to open a subsistence fishery, opportunity to all subsistence users could occur without a delay due to the process necessary to reopen areas closed to Federally-qualified and non-Federally qualified users. If the waters are closed where Federal jurisdiction is claimed and the state opens a fishery, all fishermen would need to assure they are fishing in state waters (i.e. below mean high tide).</p>
Written Public Comments	None

**STAFF ANALYSIS
FP11-18**

ISSUES

Proposal FP11-18, submitted by the Southeast Alaska Subsistence Regional Advisory Council (Council) requests all waters draining into Sections 1C and 1D be closed to the harvest of eulachon.

DISCUSSION

The eulachon (*Thaleichthys pacificus*) population in waters draining into Sections 1C and 1D (the Unuk River area) is at a critically low level and there is not a harvestable surplus. It is likely there will not be a harvestable surplus in the foreseeable future. The area has been closed to all fishing for eulachon during the past five years, essentially one eulachon life-cycle, without any signs of stock recovery. With a stock size at this level, there are few options available for conservation other than closing the fishery. This regulation will provide clear direction to the public that the area will be closed to fishing for eulachon for all users.

Existing Federal Regulation

Southeastern Alaska Area—General provisions

§ __.27(i)(13)(ii) You must possess a subsistence fishing permit to take salmon, trout, grayling, or char. You must possess a subsistence fishing permit to take eulachon from any freshwater stream flowing into fishing Sections 1C or 1D.

Proposed Federal Regulation

§ __.27(i)(13)(ii) You must possess a subsistence fishing permit to take salmon, trout, grayling, or char. You must possess a subsistence fishing permit to take eulachon from any freshwater stream flowing into fishing Sections 1C or 1D

§ __.27(i)(13)(xxii) All drainages of fishing Sections 1C and 1D are closed to the harvest of eulachon.

Existing State Regulations

Southeastern Alaska Area—General provisions

5AAC 01.716(a) The Alaska Board of Fisheries finds that the following fish stocks are customarily and traditionally taken or used for subsistence:

(22) Eulachon in Sections 1-C and 1-D and in the waters of Districts 7 and 8.

5AAC 01.730(a) Eulachon in the Unuk River; and salmon, trout, char, and herring spawn on kelp may only be taken under the authority of a subsistence fishing permit.

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. They include waters within the exterior boundary of the Tongass National Forest in the Southeastern Alaska Area excluding marine waters.

Customary and Traditional Use Determinations

Rural residents of both the Southeastern Alaska and Yakutat Areas have a positive customary and traditional use determination for Dolly Varden, trout, smelt, and eulachon in waters draining into Sections 1C and 1D (**Map 1**).

State Regulatory History

The commercial eulachon fishery in the Unuk River has been closed since 2001. The Alaska Board of Fisheries made a positive customary and traditional use determination for eulachon in the Unuk River area in 2003. The State subsistence fishery required permits beginning in 2004 and has been closed since 2005 (Walker 2010, pers. comm.).

Federal Regulatory History

The Board adopted a regulation to require Federal subsistence fishing permits for eulachon in Sections 1C and 1D effective in 2002 (FSB 2001; SEASRAC 2001). During the 2002 fisheries regulatory cycle, Proposals FP02-42 and FP02-43 were submitted by two residents of Ketchikan, requesting harvest limits for subsistence eulachon fishing. Although the proponents and the ADF&G were concerned about not having harvest limits, both the Council and Board rejected the proposals (FSB 2001; SEASRAC 2001). Due to stock failure, the area has been closed annually by special action since 2006.

Biological Background

The eulachon, also known as “ooligan” or “candlefish” is a small, silvery fish of the smelt family that ranges from Bodega Head, California north along the coast of North America to Bristol Bay, Alaska, and westward in the Bering Sea to the Pribilof Islands. Eulachon are anadromous. They spawn and hatch in fresh water streams. The larvae drift immediately down-stream into marine waters to grow to maturity. After three to six years at sea, they return as adults to spawn. As the spawning season approaches, eulachon gather in large schools off the mouths of their spawning streams. Eulachon do not strictly “home” to a particular stream like salmon, but appear to use streams in the general area where they were spawned that have the best habitat conditions. The abundance in a particular stream can vary greatly from year to year depending on stream water conditions and overall ocean survival. In Southeast Alaska, the main spawning migration can occur as early as late March and April; while in central and western Alaska, it generally takes place in May. Certain drainages like the Chilkat, Asek, and Copper Rivers, have occasional winter runs in January and February if temperature conditions are right. Some streams can have two separate but overlapping migrations. Eulachon spawning rivers are typically slow moving waterways since eulachon are weak swimmers that cannot travel through long stretches of high water velocity. Spawning sites are in the lower elevations of the river or stream, but in some rivers with long flat deltas spawning sites may be many miles upstream. Eggs are “broadcast” over sandy gravel bottoms, and once fertilized; a sticky substance allows them to attach to sand particles. The eggs hatch in 21 to 40 days, depending on the water temperature. Newly hatched young are carried to the sea with the river currents where they feed mainly on copepod larvae and other plankton. After spawning, the majority of eulachon die (Hart 1973; Morrow 1980; ADF&G 2008).

Eulachon population levels in the Unuk River system have been monitored by the USFS since 2001. In 2008, a three-year eulachon stock assessment project (OSM08-607) was funded by the Fisheries Resource Monitoring Program for the Unuk River. The results of these monitoring and assessment studies indicate that almost no eulachon have returned to spawn in the Unuk River since 2004.

Harvest History

The eulachon has long had an important role in the economy of the Pacific Northwest, British Columbia, and Alaska Native populations. Until the early 1900s, large numbers of Natives gathered on rivers with major migrations of eulachon to dry them and extract oil from their flesh with simple presses. The eulachon was important as a food staple and as barter with inland tribes, thus the famous “kleena” or grease trails of Southeast Alaska and British Columbia. In modern times in Alaska, the eulachon is important as a personal use and subsistence species. Eulachon are taken with dip nets, gillnets, and seines. They are frozen, dried, and smoked mostly for human consumption. Eulachon have been harvested commercially and sold for human consumption, and as food fishes for captive sea mammals (ADF&G 2008).

Sections 1-C and 1-D include the Burroughs Bay area (Unuk and Klahini Rivers) and Chickamin River, located approximately 110 km northeast of Ketchikan, Alaska. There has been a long history of local use of eulachon from the Unuk River which was poorly documented prior to 1969. From 1969–2000, Unuk River eulachon were sold under State managed commercial fishery provisions which allowed dockside sales of eulachon. Between 1969 and 2000, commercial harvests ranged from zero to a high of 34,900 pounds. There was no commercial harvest of eulachon in 2000 and the commercial fishery was closed in 2001. Prior to 2003, personal use eulachon harvest did not require a permit and harvest levels were not recorded. From 2003 to 2004, a small amount of subsistence fishing occurred under State issued permits. Since 2005, there has been no State subsistence or personal use harvest as the fishery was closed pre-season (**Table 1**) (Walker 2010, pers. comm.).

Eulachon were first harvested under Federal subsistence regulations in 2001 because the State commercial fishery was closed and Federal customary trade regulations allowed the continued sale of eulachon. Eulachon harvested in the Federal fishery were typically harvested by the same individuals that participated in the State commercial fishery. Since 2001, harvests have ranged from a high of 18,000 pounds in 2001 to a low of zero pounds in 2005. The Federal fishery has been closed pre-season by the Federal in-season manager annually since 2006 (**Table 1**) (USDA Forest Service 2010).

Effects of the Proposal

This proposal will prohibit the harvest of eulachon from any waters draining into fishing Sections 1C and 1D by all users, although the applicable area could be clarified with a slightly different description, and the scope of the closure could be made explicit by adding the phrase “by all users.” Should eulachon returns improve enough to allow for a subsistence fishing opportunity, a proposal to open a subsistence fishery could be submitted to the Federal Subsistence Board. In accordance with the Board policy on closures, the closure will be reviewed by the Board no more than three years from establishment of the closure and at least every three years thereafter. Because of their nature to spawn in the lower portions of streams, eulachon may be available for harvest in waters under Federal jurisdiction and in waters under State jurisdiction. Due to this shared jurisdiction, any management actions must be coordinated with the State managers to be completely effective.

Closing the area to all users could facilitate the development of future regulations necessary to reopen the area while providing for a Federal subsistence priority, if stocks recover. However, unilateral action by

Table 1 – Harvests of eulachon by fishery type, 1969-2010 (Walker 2001; Pappas 2010; US Forest Service 2010).

Year	Comm. Harvest (lbs)	No. of permits	State PU/subsist Harvest (lbs)	No. of permits	Federal Harvest (lbs)	No. of permits	Total Harvest (lbs)
1969	15,800	2	unknown	unknown	n/a	n/a	15,800
1970	0	0	unknown	unknown	n/a	n/a	0
1971	0	0	unknown	unknown	n/a	n/a	0
1972	0	0	unknown	unknown	n/a	n/a	0
1973	14,207	3	unknown	unknown	n/a	n/a	14,207
1974	2,100	1	unknown	unknown	n/a	n/a	2,100
1975	3,120	1	unknown	unknown	n/a	n/a	3,120
1976	720	1	unknown	unknown	n/a	n/a	720
1977	0	0	unknown	unknown	n/a	n/a	0
1978	0	0	unknown	unknown	n/a	n/a	0
1979	0	0	unknown	unknown	n/a	n/a	0
1980	3,200	1	unknown	unknown	n/a	n/a	3,200
1981	8,000	2	unknown	unknown	n/a	n/a	8,000
1982	14,400	2	unknown	unknown	n/a	n/a	14,400
1983	16,746	3	unknown	unknown	n/a	n/a	16,746
1984	34,900	3	unknown	unknown	n/a	n/a	34,900
1985	15,000	2	unknown	unknown	n/a	n/a	15,000
1986	0	0	unknown	unknown	n/a	n/a	0
1987	0	0	unknown	unknown	n/a	n/a	0
1988	0	0	unknown	unknown	n/a	n/a	0
1989	0	0	unknown	unknown	n/a	n/a	0
1990	31,000	3	unknown	unknown	n/a	n/a	31,000
1991	20,800	3	unknown	unknown	n/a	n/a	20,800
1992	0	0	unknown	unknown	n/a	n/a	0
1993	27,000	3	unknown	unknown	n/a	n/a	27,000
1994	28,000	3	unknown	unknown	n/a	n/a	28,000
1995	19,700	4	unknown	unknown	n/a	n/a	19,700
1996	8,000	2	unknown	unknown	n/a	n/a	8,000
1997	15,000	4	unknown	unknown	n/a	n/a	15,000
1998	0	0	unknown	unknown	n/a	n/a	0
1999	10,200	5	unknown	unknown	n/a	n/a	10,200
2000	0	12	unknown	unknown	n/a	n/a	0
2001	0	closed	700	4	18,000	2	18,700
2002	0	closed	350	unknown	4,302	4	4,652
2003	0	closed	4,300	unknown	14,420	5	14,720
2004	0	closed	100	7	1,800	3	1,900
2005	0	closed	0	closed	0	3	0
2006	0	closed	0	closed	0	closed	0
2007	0	closed	0	closed	0	closed	0
2008	0	closed	0	closed	0	closed	0
2009	0	closed	0	closed	0	closed	0
2010	0	closed	0	closed	0	closed	0

the Federal program will not affect State actions in adjacent marine and intertidal waters not in Federal jurisdiction.

OSM CONCLUSION

Support Proposal FP11-18 **with modification** to clarify the applicable area, and to make explicit that the closure applies to all users.

The modified proposed regulation should read:

§ __.27(i)(13)(ii) You must possess a subsistence fishing permit to take salmon, trout, grayling, or char. You must possess a subsistence fishing permit to take eulachon from any freshwater stream flowing into fishing Sections 1C or 1D

§ __.27(i)(13)(xxii) All freshwater streams flowing into Sections 1C and 1D are closed to the harvest of eulachon by all users.

Justification

Eulachon returns to the rivers flowing into Sections 1C and 1D, particularly the Unuk River, have been at critically low levels and will be without a harvestable surplus in the foreseeable future. Closing this area will provide clear direction that there will be no eulachon fishery allowed within Federal jurisdiction, and will eliminate the need for annual in-season special actions. Modification to clarify the applicable area and make explicit that the closure applies to all users is consistent with the intent of the proposal.

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REGIONAL ADVISORY COUNCIL RECOMMENDATION

Southeast Alaska Subsistence Regional Advisory Council

Support Proposal FP11-18 **with modification** to clarify the applicable area, and to make explicit that the closure applies to all users.

The modified regulation should read:

§ __.27(i)(13)(ii) You must possess a subsistence fishing permit to take salmon, trout, grayling, or char. You must possess a subsistence fishing permit to take eulachon from any freshwater stream flowing into fishing Sections 1C or 1D

§ __.27(i)(13)(xxii) All freshwater streams flowing into Sections 1C and 1D are closed to the harvest of eulachon by all users.

The Council determined there were no other management actions appropriate for this area after the collapse of the stock. There will likely be no harvestable surplus in the foreseeable future for any user. The Council considered it very unfortunate this action was necessary and felt this was an example where the need for conservation was not recognized early enough for alternative solutions to be implemented.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a complete and accurate evaluation of the proposal and the recommendation of the Southeast Regional Advisory Council to be supported by substantial evidence and consistent with recognized principles of conservation. The Interagency Staff Committee appreciates the Council's concern over this stock, and shares its dismay at the closure.

ADF&G Comments on FP11-18
November 30, 2010; Page 1 of 2

Alaska Department of Fish and Game
Comments to Federal Subsistence Board

Fisheries Proposal FP11-18: Close fisheries Sections 1-C and 1-D in Southeast Alaska to the federal subsistence harvest of eulachon in Southeast Alaska.

Introduction: The Southeast Regional Advisory Council proposes to close federal subsistence fisheries for eulachon in all drainages of Sections 1-C and 1-D in Southeast Alaska to provide clear direction that the eulachon fisheries are closed due to recent stock trends in the area.

Impact on Subsistence Users: If adopted, federal and state subsistence users could not harvest eulachon in the drainages of Sections 1-C and 1-D until stocks rebuild and the fishery is reopened. In recent years, the federal and state fisheries for eulachon have been restricted or closed to all users by special actions due to low returns.

Opportunity Provided by State: The state eulachon fisheries in Sections 1-C and 1-D have been closed by emergency order since 2006 due to conservation concerns.

Conservation Issues: Many eulachon spawning runs throughout the Pacific Coast, including Southeast Alaska, have had marked declines in recent years. Since 2004, there have been minimal returns in the Burroughs Bay and Behm Canal area. The eulachon stocks within Sections 1-C and 1-D are at critically low levels. The personal use, commercial, and subsistence fisheries have been closed for several years in anticipation of rebuilding. Stock status information for each of the above areas is limited, and a conservative approach is necessary for sustaining the health of these stocks.

Jurisdiction Issues: 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. The department requests federal subsistence administrators provide detailed maps that depict land ownership and specific boundaries of areas where federal regulations are claimed to apply.

Other Issues: Eulachon frequently mill in estuarial areas of a system, moving in and out of the water body with the tide. A fishery closure to all users in waters claimed under federal subsistence jurisdiction exposes participants in an open state fishery to enforcement actions by federal officers. Determining exact locations of the mean high tide boundary of the Tongass National Forest would be challenging while fishing from a boat.

Recommendation: Support with modification to be “no federal season” for the harvest of eulachon in Sections 1-C and 1-D. This modification would remove the procedural burden of opening a closed fishery when eulachon numbers rebound in these sections. Because the waters in which eulachon move include intermixture of state waters with waters where federal regulations are claimed to apply, it would be less onerous for federal subsistence users if the modification read: § __.27(i)(13)(xxii) *All drainages of fishing Sections 1-C and 1-D – No federal season for eulachon.* Thus, if eulachon numbers rebound sufficiently that the state is able to open a subsistence fishery, opportunity to all subsistence users could occur without a

ADF&G Comments on FP11-18
November 30, 2010; Page 2 of 2

delay due to the process necessary to reopen areas closed to federally-qualified and non-federally qualified users. If the waters are closed where federal jurisdiction is claimed and the state opens a fishery, all fishermen would need to assure they are fishing in state waters (i.e. below mean high tide).

FP09-05 (Deferred) Executive Summary	
General Description	Proposal FP09-05 seeks to close the Federal public waters in the Makhnati Island area near Sitka to the harvest of herring and herring spawn except for subsistence harvests by Federally qualified subsistence users. This proposal was deferred for a period not to exceed two years by the Federal Subsistence Board in January 2009. <i>Submitted by the Sitka Tribe of Alaska</i>
Proposed Regulation	§ __.27(i)(13)(xxii) <i>The Federal public waters in the Makhnati Island area, as defined in 36 CFR 242.3(b)(5) and 50 CFR §100.3(b)(5) are closed to the harvest of herring and herring spawn except for subsistence harvests by Federally qualified subsistence users.</i>
OSM Conclusion	Oppose
Southeast Regional Council Recommendation	Defer Proposal FP09-05 to a time determined by the Board.
Interagency Staff Committee Comments	See comments following the analysis.
ADF&G Comments	Oppose
Written Public Comments	2 Oppose (<i>comments received in 2008</i>)

STAFF ANALYSIS FP09-05 DEFERRED

ISSUES

Proposal FP09-05 was submitted by the Sitka Tribe of Alaska (STA) and seeks to close the Federal public waters in the Makhnati Island area near Sitka (**Maps 1 and 2**) to the harvest of herring and herring spawn except for subsistence harvests by Federally qualified subsistence users. This proposal was deferred for a period not to exceed two years by the Federal Subsistence Board (Board) in January 2009.

DISCUSSION

The proponent believes a closure of these waters is necessary to ensure the continuation of subsistence uses by Federally qualified subsistence users and to provide a meaningful preference for qualified subsistence users of herring. The proponent states that under the current State management plan which has been in effect since 2002, the commercial herring fishery is to be dispersed if the local fisheries manager believes it is necessary to ensure that subsistence users have a reasonable opportunity to harvest the amount of herring spawn necessary for subsistence uses. The proponent states that despite this regulation, subsistence users were unable to harvest the amount of herring spawn necessary for subsistence uses in 2005 and 2007. In these same years, the commercial fishery met its quota.

The proponent believes that the commercial fishing effort in and near subsistence herring spawn harvest sites and its adverse effect on subsistence harvests cannot be overstated. The proponent believes that herring have not been consistently spawning in traditional subsistence areas. The proponent states that traditional ecological knowledge and local observation support that the commercial harvest of herring displaces subsistence users from traditional harvesting sites, disrupts herring spawning such that good quality deposition of herring eggs does not take place at traditional sites, causes herring to spawn away from subsistence sites, and may seriously reduce the biomass of spawning herring upon which subsistence users depend.

The proponent also believes that a closure is necessary to ensure subsistence uses can continue in the Federal public waters because in-season management to protect subsistence uses is virtually impossible because the commercial fishery precedes the subsistence fishery so that by the time subsistence users realize they are unable to harvest herring eggs, the commercial fishery is already completed.

Existing Federal Regulation:

Under existing Federal regulations, all rural residents of Alaska are eligible to harvest herring and herring spawn from Federal public waters in southeast Alaska. There is no season or harvest limit in regulation.

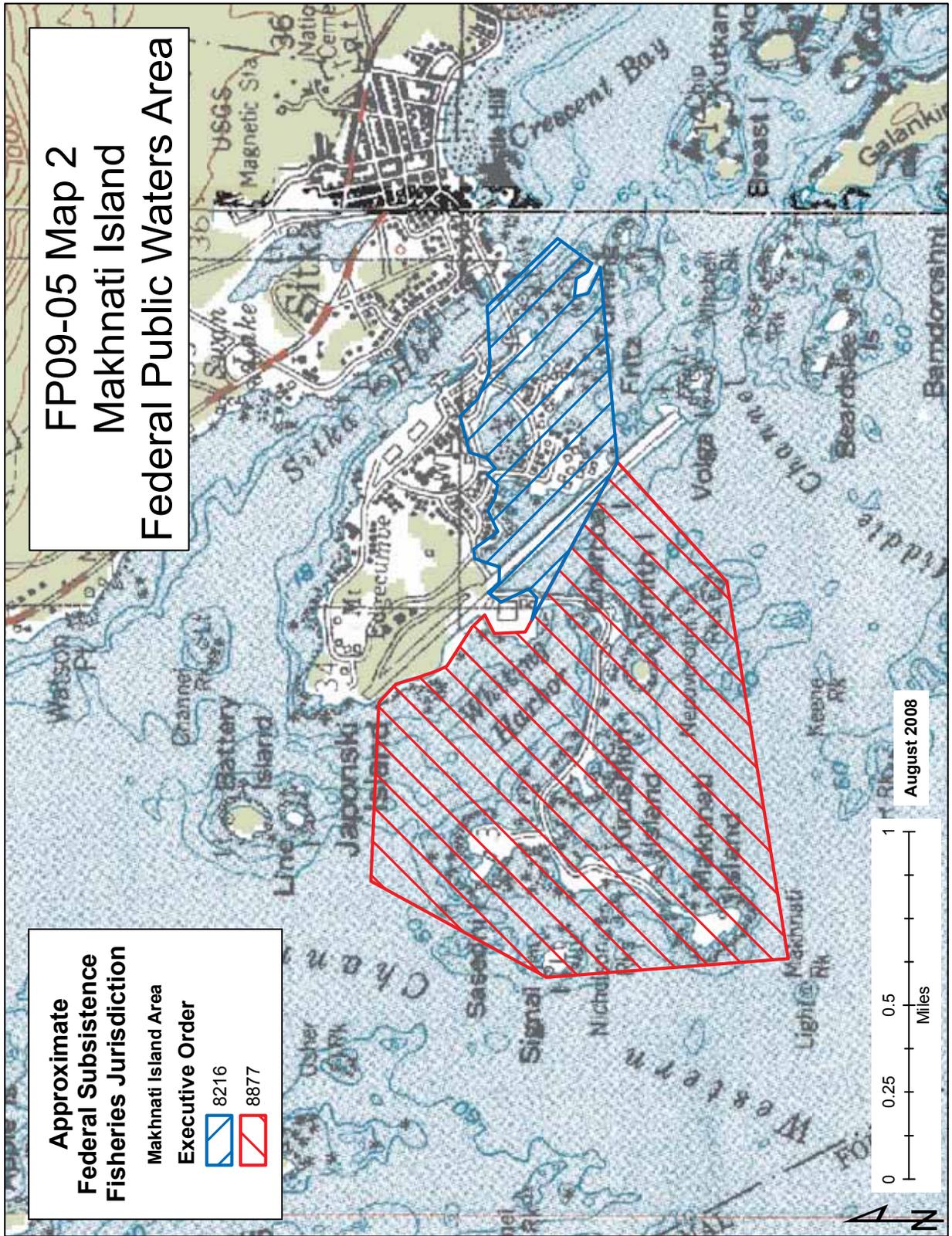
Proposed Federal Regulation

§ __.27(i)(13)(xxii) The Federal public waters in the Makhnati Island area, as defined in 36 CFR 242.3(b)(5) and 50 CFR §100.3(b)(5) are closed to the harvest of herring and herring spawn except for subsistence harvests by Federally qualified subsistence users.

Proposal FP09-05

Map 1: Sitka Sound and Vicinity





Extent of Federal Public Waters

The Federal subsistence program has jurisdiction of the waters near Makhnati Island as described in 36 CFR 242.3(b)(5) and 50 CFR 100.3(b)(5). The Makhnati area was described in two Executive Orders, EO 8877 (August 29, 1941), approximately 610 acres, and EO 8216 (July 25, 1939), approximately 190 acres, for a total of approximately 800 acres (**Map 2**). The Makhnati Island area is described in the Federal Register (74 FR 34696) as follows:

Southeastern Alaska—Makhnati Island Area: Land and waters beginning at the southern point of Fruit Island, 57°21'35" north latitude, 135°21'07" west longitude as shown on United States Coast and Geodetic Survey Chart No. 8244, May 21, 1941; from the point of beginning, by metes and bounds; S. 58° W., 2500 feet, to the southern point of Nepovorotni Rocks; S. 83° W., 5600 feet, on a line passing through the southern point of a small island lying about 150 feet south of Makhnati Island; N. 6° W., 4200 feet, on a line passing through the western point of a small island lying about 150 feet west of Makhnati Island, to the northwestern point of Signal Island; N. 24° E., 3000 feet, to a point, 57°03'15" north latitude, 135°23'07" west longitude; East, 2900 feet, to a point in course No. 46 in meanders of U.S. Survey No. 1496, on west side of Japonski Island; Southeasterly, with the meanders of Japonski Island, U.S. Survey No. 1496 to angle point No. 35, on the Southwestern point of Japonski Island; S. 60° E., 3300 feet, along the boundary line of Naval reservation described in Executive order No. 8216, July 25, 1939, to the point beginning, and that part of Sitka Bay lying south of Japonski Island and west of the main channel, but not including Aleutski Island as revoked in Public Land Order 925, October 27, 1953, described by meets and bounds as follows: Beginning at the southeast point of Japonski Island at angle point No. 7 of the meanders of U.S. Survey No. 1496; thence east approximately 12.00 chains to the center of the main channel; thence S. 45° E. along the main channel approximately 20.00 chains; thence S. 45° W. approximately 9.00 chains to the southeastern point of Aleutski Island; thence S. 79° W. approximately 40.00 chains to the southern point of Fruit Island; thence N. 60° W. approximately 50.00 chains to the southwestern point of Japonski Island at angle point No. 35 of the U.S. Survey No 1496; thence easterly with the meanders of Japonski Island to the point of beginning including Charcoal, Harbor, Alice, Love, Fruit Islands and a number of smaller un-named islands.

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.

Customary and Traditional Use Determinations

Sec. 100.24 Customary and traditional use determinations.

(a) The Federal Subsistence Board has determined that rural Alaska residents of the listed communities, areas, and individuals have customary and traditional use of the specified species on Federal public land in the specified areas. Persons granted individual customary and traditional use determinations will be notified in writing by the Board. The Fish & Wildlife Service and the local NPS Superintendent will maintain the list of individuals having customary and traditional use on National Parks and Monuments. A copy of the list is available upon request. When there is a determination for specific communities or areas of residence in a Unit, all other communities not listed for that species in that Unit have no Federal subsistence priority for that species in that Unit. If no determination has been made for a species in a Unit, all rural Alaska residents are eligible to harvest fish or wildlife under this part.

The Board has not made a customary and traditional use determination for herring in this area; therefore, all rural residents of Alaska may harvest herring and herring spawn under Federal subsistence regulations in this area. It should be noted that the Customary and Traditional uses of marine fish species, including herring, in the Makhnati Federal public waters is addressed in Proposal FP11-19.

Regulatory History

Federal Regulatory History

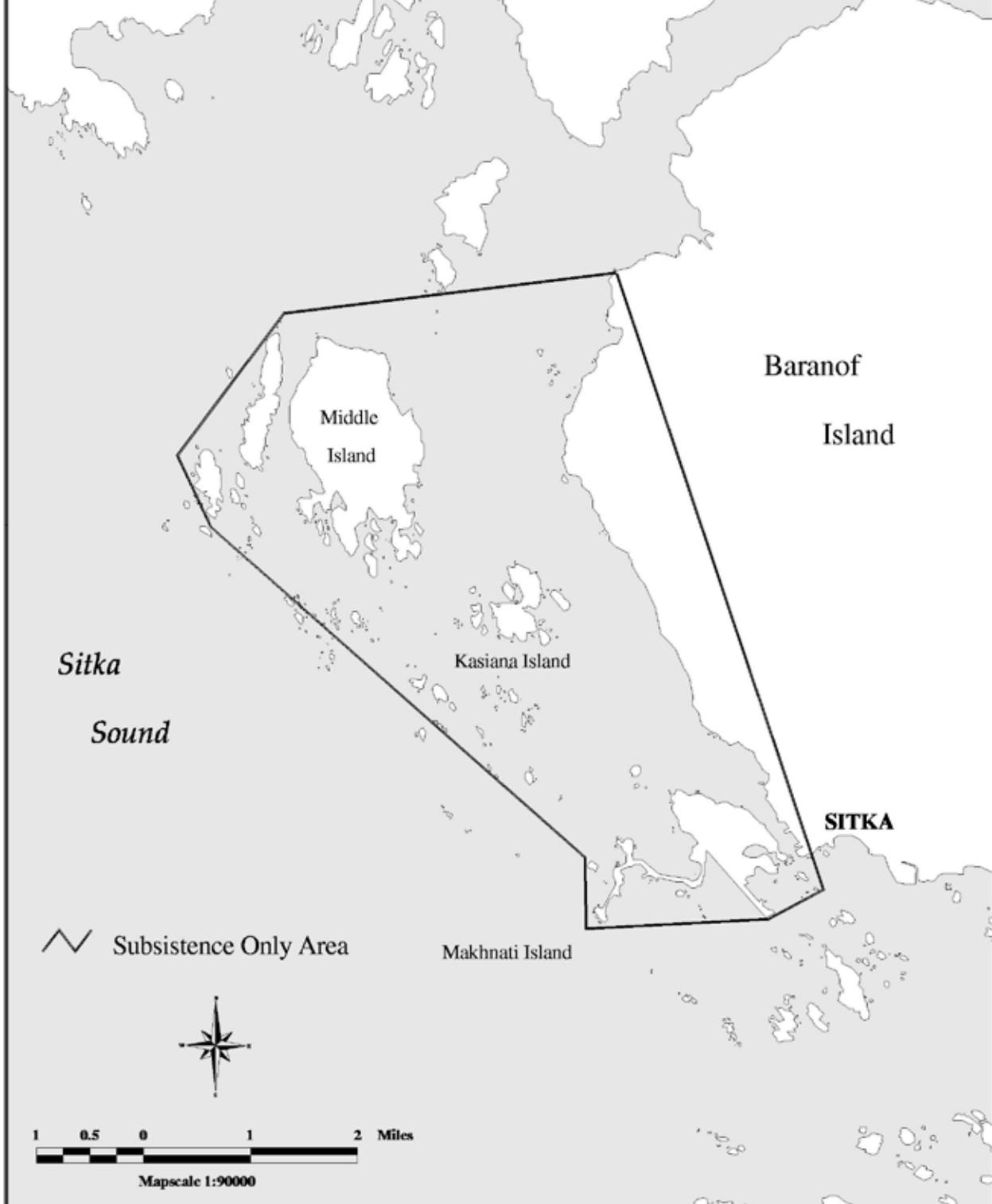
In January 2007, the Board considered two proposals regarding the subsistence herring egg harvest in the Makhnati Federal public waters near Sitka (FSB 2007a). FP07-18 was submitted by the Southeast Alaska Subsistence Regional Advisory Council (Council) and FP07-19 was submitted by the STA. Both proposals sought to close the Makhnati Federal public waters to commercial herring fishing during the months of March and April. The proponents believed that the closure would be a constructive step toward ensuring that adequate harvests of herring and herring spawn for subsistence would be obtained. The Board deferred action on proposal FP07-18 and took no action on FP07-19 (FSB 2007a). The Board asked the Council to form a subcommittee to recommend criteria which would govern decisions to open or close the commercial herring fishery in the Makhnati Federal public waters and possible alternate solutions. The subcommittee did not reach consensus on all recommendations. However its report was presented to the Council in September 2007. The Council accepted the report and distributed it to the public. At its September meeting, the Council developed closure language for the Makhnati Island area based on the subcommittee report. The Council recommended the closure of Federal public waters near Makhnati Island to non-Federally qualified subsistence users when the forecast herring biomass is less than 35,000 tons for the Sitka Sound area or when Amounts Necessary for Subsistence (ANS) are not met for two consecutive years (SESRAC 2007). In comparison, the State of Alaska's herring management plan uses a threshold level of 20,000 tons, below which no commercial sac roe harvest would occur. The Board considered the Council's recommendation during a December 2007 public meeting as part of proposal FP08-18. Following considerable oral testimony from Tribal representatives, professional managers and staff, the Board rejected the Council's recommendation. The Board's rationale for rejection was that there was not substantial evidence of a conservation concern or a need for a closure to insure the continuance of subsistence uses (FSB 2007b).

On March 25, 2008 a special action request was received by the Board from the STA requesting that the Federal public waters in the Makhnati Island area, as defined in 36 CFR 242.3(b)(5) and 50 CFR §100.3(b)(5) be closed to the harvest of herring and herring spawn except for subsistence harvests by Federally qualified subsistence users from March 24, 2008 through April 30, 2008. The Board responded by letter dated April 3, 2008. The Board informed the STA that the commercial fishery was completed prior to the Board action and consequently the matter was moot.

Also on March 25, 2008 a letter was received by the Secretaries of Agriculture and the Interior from STA requesting that they exert extra-territorial jurisdiction authority to close the commercial herring fishery in the area shown in **Map 3**. In a letter to the STA, the Secretaries denied STA's request, and stated that the Secretaries "only exercise their authority to impose Federal jurisdiction outside of Federal public land under extraordinary circumstances. The threshold for such a decision is extremely high, and is not met in this case. With such a healthy herring biomass, there is clearly no conservation concern with regard to the herring stocks and the associated fishery in Sitka Sound. Given the spawning characteristics of herring, closing State marine waters as is being requested would not significantly increase the likelihood of Federally qualified users harvesting their desired amounts in the Makhnati Island Federal public waters."

In January of 2009, the Board deferred proposal FP09-05 until the next fisheries cycle.

Map 3: Area requested of ADF&G by the Sitka Tribe of Alaska to be open only to subsistence uses of herring.



Reasons for Board Deferral

In January of 2009, the Board deferred this proposal until the next fisheries cycle to allow pending research to be completed and peer reviewed and also to wait until the Alaska Board of Fisheries considered a variety of proposals that could change the regulations for the Sitka Sound herring fisheries.

The Board deferred action on this proposal to consider the results of a study conducted by Heather Meuret-Woody of the STA and Nate Bickford of the University of Great Falls (Meuret-Woody and Bickford 2009). The study was published in 2009. The study attempted to use trace chemical signatures of adult herring otoliths to identify discrete spawning areas within Sitka Sound. The Board was particularly interested in whether herring spawning in Federal waters are a distinct population or stock. The sampling strategy was very limited, but the study seemed to detect a difference between adult herring in Salisbury Sound and Sitka Sound. The study was not able to distinguish any stock differences amongst spawning herring within Sitka Sound which includes the Federal waters.

The Board was also interested in the results of a study conducted by the Sitka Tribe of Alaska (FRMP 08-651 Makhnati Island Subsistence Herring Fishing Assessment) to determine the amount of subsistence use of herring roe in the Federal Waters near Makhnati Island.

State Regulatory History

In response to a poor subsistence herring egg harvest in 2001, the STA submitted a proposal to the Alaska Board of Fisheries in 2002. The proposal requested that the herring sac roe fishery be dispersed to avoid concentrating the commercial harvest in traditional subsistence egg harvesting areas. The Alaska Board of Fisheries amended the proposal by removing a suggested requirement for a subsistence permit for all subsistence harvest in favor of face to face surveys to estimate subsistence herring egg harvest. The Alaska Board of Fisheries also established the ANS for herring roe in Sitka Sound, Section 13-A and 13-B north of the latitude of Aspid Cape at 105,000 to 158,000 pounds (5AAC 01.716(7) (b)) (Turek 2003). Regulations limit customary trade in herring roe on kelp (5AAC 01.717 and 5 AAC 01.730 (g)). Other than spawn on kelp, there are no harvest limits for herring or herring spawn. When issuing a herring spawn on kelp subsistence fishing permit, the annual possession limit for herring spawn on kelp is 32 pounds for an individual or 158 pounds for a household of two or more persons. There are no regulations regarding subsistence reporting requirements, or specific allocations for subsistence (Turek 2006).

In November of 2002 a Memorandum of Agreement (MOA) was signed by the Chairman of the Alaska Board of Fisheries, the Commissioner of the Alaska Department of Fish and Game (ADF&G) and the STA Chairman. The State and the STA agreed to collaborate, communicate, and collect and share data (STA 2006). The MOA contains provisions for in-season collaboration which includes daily contact between the STA and ADF&G and stipulates that the STA will be consulted whether a proposed commercial opening might affect subsistence opportunity. If the STA concludes there is potential for the subsistence fishery to be adversely effected by a proposed opening, the STA will provide this conclusion and reasoning to ADF&G verbally and in writing. A formal objection to a proposed opening does not necessarily result in a commercial closure, as ADF&G maintains discretion whether or not to open the commercial fishery. In June of 2009 the ADF&G sent a letter to STA withdrawing from the MOA because of the perception that the STA had access to information and input into decision making that was not readily available to the general public and other user groups.

The ADF&G is required to “distribute the commercial harvest by fishing time and area if the department [ADF&G] determines that is necessary to ensure that subsistence users have a reasonable opportunity to harvest the amount of herring spawn necessary for subsistence uses” (5AAC27.195(a)(2)). Additionally,

commercial herring vessels, permit holders, and crew members may not take or possess herring for subsistence 72 hours prior to or following a commercial herring fishing period.

In February of 2009 the Alaska Board of Fisheries created new regulations for the Sitka Sound herring fisheries which were in effect beginning with the 2010 season. The new regulations are as follows:

- Section 13-A south of the latitude of Point Kakul (57°21.75' N. lat) in Salisbury Sound will formally be included in the Sitka Sound sac roe seine area [5AAC 27.110(b)(1)(d)].
- The threshold mature biomass below which no fishery would occur in Sitka Sound was increased from 20,000 tons to 25,000 tons. The harvest rate when the biomass is above 25,000 tons does not change from the harvest rate previously established in regulation except that the minimum harvest rate, when the forecast biomass is at 25,000 tons, will be 12% [5AAC 27.160(g)].
- The range of the amount of herring roe reasonably necessary for subsistence in Section 13-A and Section 13-B north of Aspid Cape was increased from 105,000–158,000 pounds to 136,000–227,000 pounds [5AAC 01.716(b)].

Biological Background

Excerpted from the ADF&G Wildlife Notebook Series (ADF&G 2000):

Pacific herring generally spawn during the spring. In Alaska, spawning is first observed in the southeastern archipelago during mid-March. Spawning is confined to shallow, vegetated areas in the intertidal and subtidal zones.

The eggs are adhesive, and survival is better for those eggs which stick to intertidal vegetation than for those which fall to the bottom. Milt released by the males drifts among the eggs and fertilizes them. The eggs hatch in about two weeks, depending on the temperature of the water.

Herring spawn every year after reaching sexual maturity at 3 or 4 years of age. The number of eggs varies with the age of the fish and averages 20,000 annually. Average life span for these fish is about 8 years in Southeast Alaska.

Mortality of the eggs is high. Young larvae drift and swim with the ocean currents and are preyed upon extensively by other vertebrate and invertebrate predators. Following metamorphosis of the larvae to the juvenile form, they rear in sheltered bays and inlets and appear to remain segregated from adult populations until they are mature.

Herring are located in distinctly different environments during different periods of the year. After spawning, most adults leave inshore waters and move offshore to feed primarily on zooplankton such as copepods and other crustaceans. They are seasonal feeders and accumulate fat reserves for periods of relative inactivity. Herring schools often follow a diel vertical migration pattern, spending daylight hours near the bottom and moving upward during the evening to feed.

The biomass of herring returning to spawn in Sitka Sound has been trending higher over the last 30 years of commercial fishing (**Figure 1**). The 2010 forecast estimate of herring biomass in the Sitka Area was higher than any previously recorded biomass estimate at 91,467 tons. However, the total return estimate will not be available until the fall of 2010.

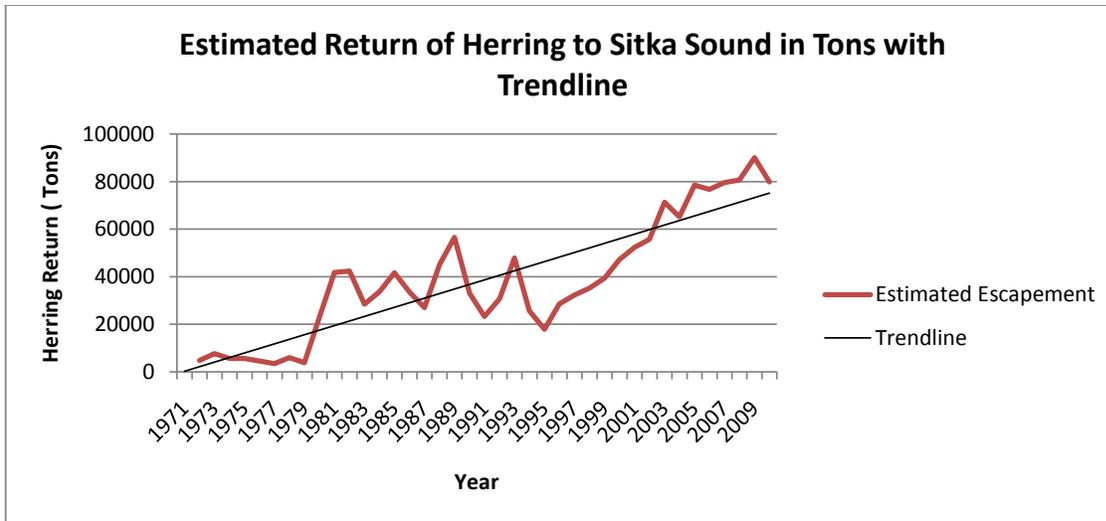


Figure 1. Estimated return of herring to Sitka Sound from 1971 through 2009 showing upward trend (Gordon 2010).

Harvest History

Subsistence Harvest Methods

The subsistence herring egg harvest is a complex and time intensive process. According to Schroeder and Kookesh (1990), this customary and traditional harvest is conducted using a variety of egg deposition strata including hemlock branches and trees, kelp, seaweed and occasionally man-made materials. In the spring (late March–April), seal, sea lion, and sea gull feeding activity are indicators for subsistence harvesters that the herring have arrived in Sitka Sound. There are many “superhouseholds” who harvest herring eggs for multiple households in addition to their own. Herring eggs are a highly valued item in subsistence trade and sharing networks. Detailed examination of the subsistence herring egg harvest is described by Schroeder and Kookesh (1990).

Subsistence Harvest

The ADF&G Division of Subsistence conducted research on the subsistence harvest of herring eggs in Sitka Sound as part of household harvest surveys conducted in Sitka in 1997. These studies included herring egg harvest estimates (ADF&G 2003). At the January 2002 meeting, the Alaska Board of Fisheries requested that ADF&G Division of Subsistence work with the STA and conduct harvest surveys for the Sitka Sound herring egg fishery. In 2002 and 2003, the ADF&G provided field survey and interview project support, and data analysis. The STA, working with ADF&G staff conducted interviews in person with harvesters and provided harvest data to ADF&G for analysis in 2002 and 2003. Research conducted by ADF&G and the STA in 2002 and 2003 produced harvest estimates of the total pounds of herring eggs-on-hemlock-branches and the total pounds of herring eggs harvested on *Macrocystis*, hair seaweed and other substrate. The STA also collected harvest data from 2004 through 2008 (STA 2006 and Turek 2008). In 2008 a project (FRMP 08-651 Makhnati Island Subsistence Herring Fishing Assessment) was funded through the Fisheries Resource Monitoring Program to determine the contribution of Federal public waters to the total harvest of herring spawn in Sitka Sound.

Subsistence users are allowed to harvest herring and herring eggs anywhere in and around Sitka Sound. The location and intensity of herring spawn in Sitka Sound varies from year to year. From 1978 to 2010, the amount of spawn deposition has varied from 13 to 104 nautical miles of beach per year and has not occurred in the same areas every year. Spawn deposition is more consistent in some areas, but spawning is not assured in any area every year. Spawn and subsistence harvest occurs in most years within Federal public waters. However, where people harvest herring eggs is ultimately determined by where the herring spawn. In 2010 the observed spawn deposition was quite extensive in the traditional subsistence harvest areas (**Figure 2**).

For the available years of data (1997, 2002–2009), the average annual total harvest of eggs in Sitka Sound on all substrates was 179,457 pounds (**Table 1**). When compared to the amounts necessary for subsistence established by the Alaska Board of Fisheries, subsistence needs were not met in 2005, 2007 and 2008. In 2009 needs were met and preliminary reports indicate that needs were met in 2010 (**Table 1**).

Commercial Harvest

The following is excerpted from Woodby et al. 2005:

Sac roe fisheries harvest herring just before spawning using either purse seine or gillnet. The roe is salted and packaged as a product that sometimes sells for over \$100/lb (\$220/kg) in Japan. In recent years the Alaska sac roe harvest has averaged about 50,000 tons (45,500 mt), almost all of which ends up in the Japanese marketplace.

The 2008 Southeast Alaska Sac Roe Herring Fishery is managed by ADF&G under a management plan (Gordon et al. 2010). **Table 2** displays the fisheries statistics for the Sitka Sound commercial sac roe herring fishery from 1971 through 2009 (Gordon 2010).

The area where the commercial sac roe herring fishery occurs varies widely from year to year. From 1992 to 2008, the Federal public waters near Makhnati Island have made up part of the areas open to commercial sac roe herring fishing 6 out of 17 years (1993, 1999, 2001, 2003, 2005 and 2006). In 1993, the entire area was part of a larger area open to commercial fishing. In 1999, 2001 and 2005, only the Whiting Harbor side (north side) was included and in 2003 and 2006, only the Nepovorotni side (south side) was included. Since the area of Federal public waters has been a part of larger areas open to commercial fishing, there is no way to apportion harvest from only Federal public waters. No commercial harvest occurred in Federal public waters in 2007 or 2008 and the vast majority of commercial harvest occurred well away from traditional subsistence harvest areas yet subsistence adequate harvests were not obtained (in 2007 and likely in 2008). For example, **Figure 3** displays the relationship of the 2008 commercial harvest compared to the area that STA requested that ADF&G avoid commercial harvest.

Effects of the Proposal

This proposal would close the Federal public waters in the Makhnati Island area near Sitka to all uses of herring and herring spawn except for subsistence harvest by Federally qualified users. All rural residents of Alaska would be eligible to harvest herring and herring spawn for subsistence purposes, but there would be no sport or commercial harvest in Federal public waters.

A Federal closure of a fishery may only be exercised when it is necessary to conserve fish stocks or to continue subsistence uses. The Board determined in December of 2007 that there was no conservation concern with herring in this area at recent biomass levels and that closing Federal public waters to non-Federally qualified users may not be effective in benefiting subsistence users (FSB 2007b).

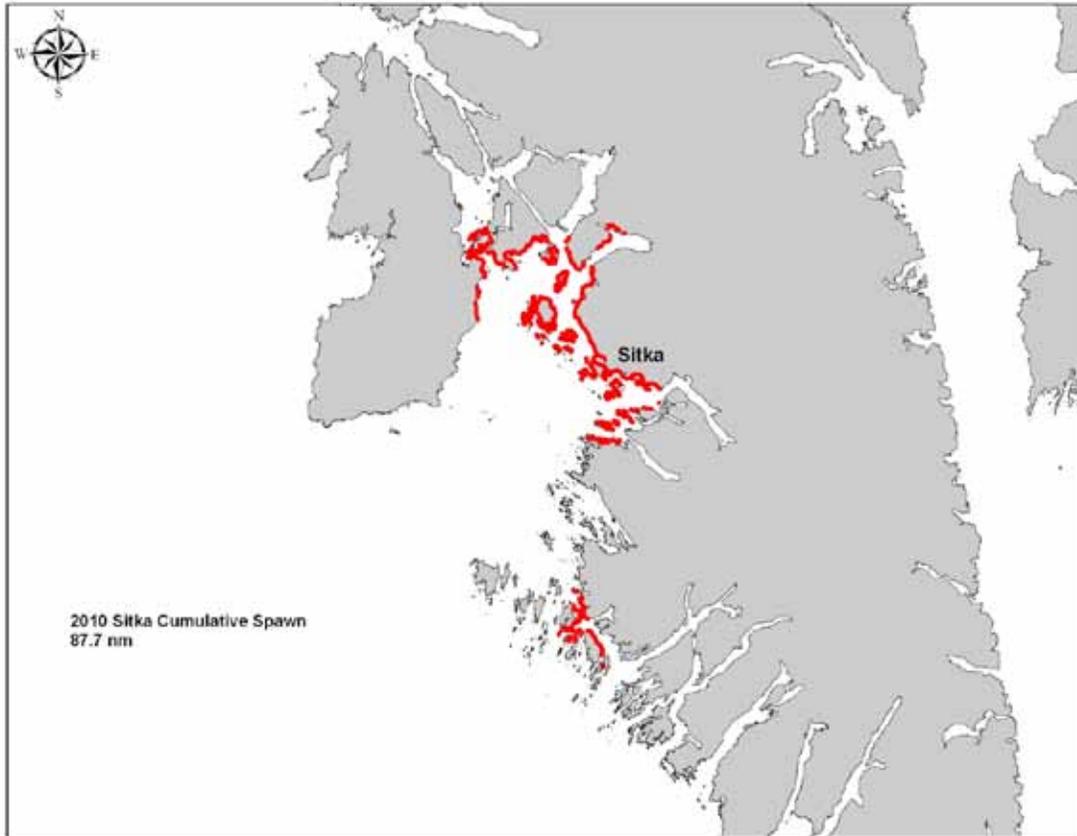


Figure 2. Cumulative spawn observed in 2010 (Coonradt 2010).

Table 1. Subsistence Harvest of Herring Roe on All Substrates, Sitka Sound (STA 2006 and Gordon 2010).

Year	Total Roe Harvest (lbs.)
1997	127,174
2002	151,717
2003	278,799
2004	381,226
2005	83,985
2006	219,356
2007	87,211
2008	71,936
2009	213,712
2010	Pending
Average	179,457

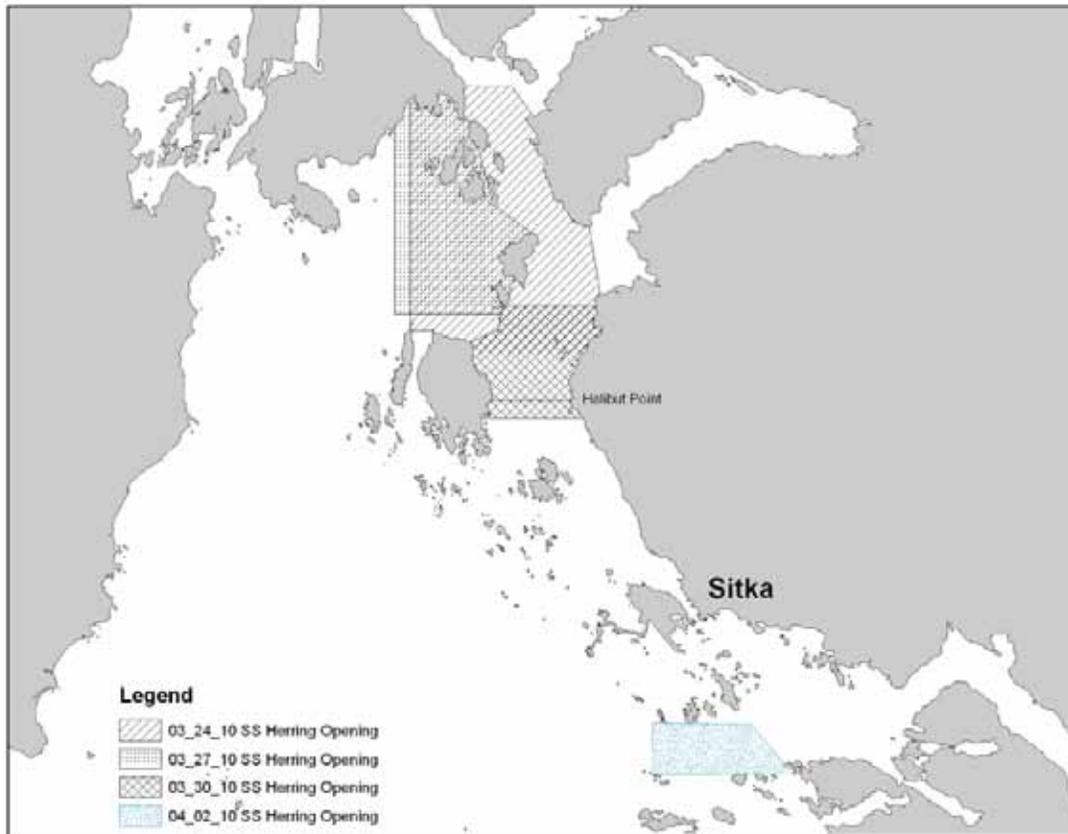


Figure 3. Location of the four commercial sac roe herring openings in 2010 (Coonradt 2010).

Federal fisheries managers have been delegated the authority to close or re-open Federal public waters to non-subsistence fishing. This delegation may be exercised only when it is necessary to conserve fish stocks or to continue subsistence uses. In-season action would be nearly impossible to justify by a Federal manager in this case. Although the ADF&G forecasts the herring biomass before the season starts, the actual return and spawning success of herring is not known until after the commercial and subsistence fisheries are completed. Since the commercial fishery takes place well before the subsistence fishery, managers would not know that the subsistence fishery was poor until long after the commercial fishery ended.

Adequate subsistence harvests were obtained in 2009 and likely in 2010. In years when subsistence harvests were less than adequate, it is unlikely that a closure to other users in Federal public waters would have made a difference. For example, in the Federal public waters in 2008, no commercial harvest occurred and the spawn deposition was extremely minimal; therefore, a closure would not have been effective. Spawn location is a prime factor affecting harvesters' success. Additionally, inclement weather, spawn timing, loss of sets, and the amount of participation by high harvesters are other likely contributors to subsistence harvesters not meeting their desired harvest level. The size of the stock, the conservative commercial harvest levels, and the effective dispersion of the commercial fishery necessitates identifying other factors responsible for subsistence harvesters not meeting their desired harvest level. Closing Federal marine waters, as is being requested, would do little to help Federally qualified users meet their desired harvest levels for herring.

Table 2. Sac Roe Herring Harvest and Herring Spawn Information, Sitka Sound (Gordon 2010).

Year	Forecast Biomass	Quota (tons)	Sac Roe			*Estimated Escapement	Fishing Dates	Date of First Spawn	Nautical Miles Spawn
			Harvest (tons)	Roe Percent					
1971	-	750	278	8.3	4,798	-	6-Apr	9.0	
1972	-	850	603	-	7,620	-	28-Apr	14.0	
1973	-	600	537	8.5	5,645	-	11-Apr	10.0	
1974	-	600	712	12	5,645	-	13-Apr	10.0	
1975	6,400	550	1,484	11	4,516	-	18-Apr	8.0	
1976	7,300	780	795	10.2	3,477	4/16	15-Apr	13.0	
1977	5,650	0	0	-	5,904	-	8-Apr	11.0	
1978	4,500	250	238	11	3,850	4/5	8-Apr	13.0	
1979	20,300	2,000	2,559	9.3	23,144	4/12	13-Apr	41.0	
1980	39,500	4,000	4,445	10.8	41,750	4/4, 4/5	3-Apr	63.0	
1981	27,000	3,000	3,506	11.0	42,306	3/24, 3/26	22-Mar	60.0	
1982	30,000	3,000	4,363	11.7	28,478	3/30	24-Mar	40.8	
1983	32,850	5,500	5,416	11.1	33,673	3/26, 3/29	21-Mar	68.0	
1984	30,550	5,000	5,830	11.1	41,628	3/26 - 3/28	21-Mar	65.0	
1985	38,500	7,700	7,475	11.3	33,417	3/29, 4/1, 4/5	29-Mar	60.5	
1986	30,950	5,029	5,443	11.9	27,025	4/2, 4/8	27-Mar	51.6	
1987	24,750	3,600	4,216	9.9	45,133	3/31	21-Mar	86.0	
1988	46,050	9,200	9,390	9.5	56,544	4/4 - 4/14	23-Mar	104.0	
1989	58,500	11,700	11,831	9.4	33,052	3/31 - 4/8	19-Mar	65.5	
1990	27,200	4,150	3,804	10.6	23,311	4/5 - 4/6	31-Mar	39.1	
1991	22,750	3,200	1,838	8.9	30,693	4/10 - 4/13	1-Apr	44.5	
1992	23,450	3,356	5,368	9.4	47,833	4/6	28-Mar	72.5	
1993	48,500	9,700	10,186	10.7	25,702	3/27 - 4/3	24-Mar	55.3	
1994	28,450	4,432	4,758	11.0	17,824	3/29, 3/31	28-Mar	58.1	
1995	19,700	2,609	2,908	11.8	28,546	3/25, 3/27	21-Mar	37.3	
1996	42,265	8,144	8,144	9.6	32,251	3/23, 3/31-4/8	22-Mar	45.6	
1997	54,500	10,900	11,147	11.5	35,175	3/18-21, 23	19-Mar	41.0	
1998	39,200	6,900	6,638	10.2	39,398	3/16,3/18,3/19	19-Mar	64.5	
1999	43,600	8,476	9,217	10.7	47,226	3/22, 3/24, 3/26-27	22-Mar	59.5	
2000	33,365	5,120	4,630	9.9	52,360	3/19, 3/22	19-Mar	54.5	
2001	52,985	10,597	11,974	11.3	55,732	3/22, 3/26, 3/27	23-Mar	61.0	
2002	55,209	11,042	9,788	10.9	71,358	3/27-4/15	24-Mar	42.6	
2003	39,378	6,969	7,051	10.7	65,142	3/22,3/23,3/26	23-Mar	47.1	
2004	53,088	10,618	10,490	10.8	78,546	3/21,3/25,3/27	27-Mar	79.8	
2005	55,962	11,192	11,366	11.5	76,718	3/23,3/25,3/27-29	24-Mar	39.5	
2006	52,059	10,412	9,967	10.5	79,580	3/24,3/26,3/27,3/29	23-Mar	57.4	
2007	59,519	11,904	11,571	11.4	80,683	3/26,3/30,4/1,4/3	28-Mar	50.2	
2008	87,715	14,723	14,386	11.5	90,102	3/25,3/26,3/31	27-Mar	55.3	
2009	72,521	14,504	14,776	11.8	79,862	3/22,3/24,3/28,3/31,4/2	2-Apr	65.6	
2010	91,467	18,293	17,874	12.5		3/24,3/27,3/30,4/2	30-Mar	87.7	
Average 1971-2010	39,047	6,284	6,425	10.6	38,606			48.8	

*Pre-1980 Estimated Escapement based on either hydroacoustic surveys or applying a conversion of approximately 450-500 tons/nm of spawn.

*1980 to present estimated escapement from current year ASA model

The Alaska Board of Fisheries took action to increase the minimum biomass threshold for conducting a commercial sac roe fishery from 20,000 to 25,000 tons. This action adds a measure of conservation if the biomass decreases. It has no effect currently since biomass levels are more than three times that amount. Formally adding Salisbury Sound to the commercial fishery area has little or no effect on subsistence users since no subsistence harvest of herring eggs occurs there. Additionally, the Salisbury Sound area has been part of the commercial Sac Roe fishery before this action so little change will result in how the fishery is prosecuted. The Alaska Board of Fisheries did raise the ANS range for the subsistence harvest of herring roe in recognition of historical use.

OSM CONCLUSION

Oppose Proposal FP09-05.

Justification

This proposal is effectively the same as the proposal considered by the Board in December of 2007. At that time the Board determined there was no conservation concern in this area for herring at recent biomass levels and that closing Federal public waters to non-Federally qualified users may not be effective in benefiting subsistence users. The biomass in Sitka Sound has been trending higher since 1971 with the highest estimated biomass forecast in 2010. There have been no restrictions on subsistence uses. No commercial harvest occurred in Federal public waters in 2007 through 2010 and the vast majority of commercial harvest was taken well away from Federal public waters and traditional subsistence harvest areas. Adequate subsistence harvests were obtained in 2009 and likely in 2010. In years when subsistence harvests were not adequate it is unlikely that a closure to other users in Federal public waters would have made a difference. Adoption of this proposal would result in an unnecessary closure to non-Federally qualified users.

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REGIONAL ADVISORY COUNCIL RECOMMENDATION

Southeast Alaska Subsistence Regional Advisory Council

Defer Proposal FP09-05 to a time determined by the Board. The Sitka Tribe of Alaska, the original proponent, submitted a letter to the Council requesting that the proposal be deferred once again. This postponement would allow more time for peer review of a STA authored research paper on herring management and population assessment of Sitka Sound herring. Additionally, STA has started a Herring Research Priority Planning Group which may provide additional recommendations regarding the proposal. The Council also wanted to provide the new Board chair additional time to become engaged in this issue. The Council determined that action on this proposal may be premature at this time because implementation of recommendations contained within the Secretarial review may provide different or additional rules or policies appropriate to evaluate the proposal.

INTERAGENCY STAFF COMMITTEE COMMENT

While most of the Interagency Staff Committee found the staff analysis to be a complete and accurate evaluation of the proposal, which adequately addresses the prohibition against unnecessary closures (ANILCA Section 815(3)), other members continue to feel that the ecological and social importance of the Makhnati Island Federal waters — to both Sitka Sound herring populations and subsistence harvesters — was not fully considered. The Interagency Staff Committee notes that the proponent has indicated that new information/data may be forthcoming which could provide additional useful information for future consideration of this issue. The Interagency Staff Committee suggests that there are two alternative actions that the Federal Board could take given current state of knowledge: it could oppose the proposal and accept a new one from the proponent at a future time; or it could defer the proposal to on or before the next Fisheries cycle, which would be consistent with the recommendation of the Southeast Regional Advisory Council.

Alaska Department of Fish and Game
Comments to the Federal Subsistence Board

FP09-05 deferred: Close Makhnati Island Area to herring harvest by non-federally qualified users.

Introduction: Proposal FP09-05¹ requests closure of marine waters of Makhnati Island and Whiting Harbor, which are subject to federal claims of jurisdiction, to harvest of herring by non-federally qualified users. The closure would only allow subsistence herring fishing by federally-qualified users and would bar state subsistence, sport, and commercial fisheries for herring or herring spawn in the area. The proposed closure area is not where the primary subsistence herring fishing has occurred, and commercial harvest rarely occurs in the area. In addition, no new information has been provided that would support the proposed closure.²

Impact on Subsistence Users: Adoption of this proposal would be potentially detrimental to subsistence fisheries, depending upon where and when herring spawn each year. The commercial fishery is managed to minimize harvests near heavily used subsistence areas. Actions by the Alaska Department of Fish and Game (Department) commercial fishery managers must be taken in a timely manner to be effective. The proposed closure would limit options for where a commercial fishery could occur, potentially resulting in adding a commercial fishery in other areas important to subsistence users. The proposed closure would also prohibit subsistence and sport harvest in this area by non-federally qualified individuals. A closure in this small area (560 acres) would have little or no impact on the total subsistence, sport, or commercial harvests.

Opportunity Provided by State: For the majority of subsistence herring egg harvest, the Department does not restrict fishing periods, seasons, or amounts of herring harvested for subsistence purposes in this area. Harvest of spawn on hemlock boughs or spawn on hair kelp is unrestricted, and no state permit is required. Post-season evaluation of subsistence harvest is accomplished by a harvest monitoring program conducted by Sitka Tribe of Alaska in cooperation with the Department's Division of Subsistence. The Alaska Board of Fisheries found that 105,000 to 158,000 pounds of herring spawn is the amount reasonably necessary for subsistence uses in Section 13-A and Section 13-B north of Aspid Cape. The Department requires a permit that may limit harvest of spawn on Macrocystis kelp and requires harvest reporting following the season. (See 5 AAC 01.730(g)) Harvest of spawn on Macrocystis kelp accounts for an average of only two percent of the subsistence harvest on all substrate types, so state requirements for spawn on kelp harvest is not a significant limitation.

The limited non-commercial exchange for cash of subsistence-harvested herring roe on kelp, harvested in Districts 1-16 under terms of a permit, is allowed as customary trade. The annual possession limit for spawn-on-kelp is 32 pounds for an individual and 158 pounds for a household of two or more people. The Department has authority to issue additional permits for herring spawn-on-kelp above the annual possession limit if harvestable surpluses are available. Commercial

¹ Proposal FP09-05 was deferred by the Federal Subsistence Board at its January 2009 meeting. FP09-05 was originally Proposal FP07-18, which was deferred by the Federal Subsistence Board at its January 2007 meeting, renumbered, and resubmitted for consideration at the Federal Board's December 2007 meeting, where it was rejected, 1-5.

² Information presented to the Southeast Regional Advisory Council meeting on September 24, 2008, did not provide evidence that closing Makhnati Island area to non-federally qualified users would meet the requirements of the Federal Subsistence Board's closure policy (i.e., necessary for conservation or provide subsistence uses).

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herring vessels, permit holders, and crew members may not take or possess herring 72 hours prior to or following a commercial herring fishing period.

Conservation Issues: There are no conservation or management concerns for the Sitka Sound herring stock that potentially spawn in waters of the Makhnati area. From 1979 through present, the Sitka Sound herring resource has been above the current 20,000 ton threshold every year, with only one exception, and the run has averaged 75,342 tons per season in the five-year period (2003–2007). Herring are managed under a conservative management strategy that sets threshold biomass levels below which commercial harvest is not allowed and limits harvest rates to 10-20 percent of total mature spawning biomass. This is a time-proven strategy that provides for conservation of the resource. The area proposed for closure is so small that it is unlikely to provide conservation benefits above the threshold level and harvest rate, especially given the highly variable nature of herring spawning behavior.

Jurisdiction Issues: The Federal Subsistence Board does not have authority to close this area solely to commercial herring fishing as suggested by some closure proponents. Instead, the Federal Board would have to close the area to herring harvest by all non-federally qualified users, which would include all subsistence, personal use, sport, commercial, or other harvests occurring under state regulations. Such a closure is not necessary to provide for continued federal subsistence and would violate section 815 of ANILCA. Such a closure may also be detrimental to subsistence uses by unnecessarily limiting options for management of commercial fisheries and, thereby, potentially increasing impacts to areas that are more important as subsistence use areas.

Other Issues: Herring biomass in Sitka Sound has shown a long-term increase and is considered healthy. The 55.3 total nautical miles of spawn in Sitka Sound in 2008 was consistent with the 2003-2007 recent five-year average of 54.8 nautical miles and above the long-term (1964-2007) average of 42.4 nautical miles. The estimated average spawning biomass from 1964-2007 is estimated at 30,617 tons, and the five-year average spawning biomass (2003–2007) is estimated at 75,342 tons. The spawning biomass after the 2008 fishery, as estimated by spawn deposition surveys, was 90,100 tons which was a record high level. In contrast to the 2007 spawning event, in 2008 a significant portion of the biomass spawned on Kruzof Island shoreline on the west side of Sitka Sound. The Kruzof Island shoreline is not considered a viable opportunity for setting subsistence branches due to the distance from town, exposure to ocean surge, and generally unfavorable shoreline structure for setting branches. Significant spawning also occurred along islands near the road system, including heavily used subsistence areas of Kasiana and Middle Islands. Unlike the 2007 season, very limited spawning occurred within the federally claimed waters of Makhnati Island in 2008. During the 2008 season, bad weather generally did not impact subsistence users from accessing fishing sites, and commercial harvests during the 2008 season occurred well away from the Makhnati area. The 2008 commercial sac roe GHL of 14,723 tons was harvested on three separate days. Two openings occurred March 25, harvesting 1,147 tons in an area over 4 nautical miles distant from the Makhnati area. On March 26, two one-half hour openings occurred harvesting 9,380 tons. The fishery boundaries for the March 26, 2008, openings were just over 3 nautical miles from the Makhnati area, though the actual harvesting occurred over

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7 nautical miles west on Kruzof Island shoreline. The third opening occurred March 31 harvesting 3,973 tons with the nearest open waters being 5.5 miles distance from the Makhnati area.³

The 2009 herring biomass in Sitka Sound forecast was 72,521 tons. The commercial fishery Guideline Harvest Level was 14,504 tons resulting in a commercial harvest of 14,776 tons taken during 5 openings. The spawning biomass after the 2009 fishery, as estimated by spawn deposition surveys, was 96,170 tons which again was a record high level. Spawn was recorded from April 2 through April 22. Total recorded spawn was 65.5 nautical miles with peak spawning of 38.7 nautical miles of active spawn on April 10, 2009. An estimated 1.7 nautical miles of spawn occurred within the Makhnati area. No commercial fisheries occurred within the Makhnati area.

The 2010 herring biomass forecast was 91,467 tons. The commercial Guideline Harvest Level was 18,293 tons resulting in a commercial harvest was 17,874 tons taken during 4 openings. The spawning biomass after the 2010 fishery, as estimated by spawn deposition surveys, is not available at this time. Spawn was recorded from April 2 through April 13. Total recorded spawn was 87.7 nautical miles with peak spawning of 49 nautical miles of active spawn on April 10. An estimated 3.0 nautical miles of spawn occurred within the Makhnati area. No commercial fisheries occurred within the Makhnati area. Permits for subsistence spawn on kelp do not provide information on location of harvest and there are no permits for subsistence branch harvests, thus information for subsistence harvests within the Makhnati area is not available.

Recommendation: Oppose.

³ Further information about recent commercial fisheries management of Sitka Sound herring stocks was included in the Department comments for Proposal FP08-18, at pages 272-274 of the December 12, 2007, Federal Board meeting materials and the Federal Board December 12, 2007, meeting transcripts (pages 92-200).

WRITTEN PUBLIC COMMENTS

Comments received in 2008

Oppose. Sitka Herring Association represents the interests of commercial herring sac roe fishery permit holders and opposes the seemingly endless efforts by the Sitka Tribe of Alaska to eliminate the State managed commercial fishery for herring in Federally owned waters surrounding Makhnati Island. Since no new information has been presented by the Sitka Tribe of Alaska in proposal FP09-05 and that it is effectively the same as previous proposals FP07-18 and FP08-18, review of this proposal for the third consecutive year is unnecessary and overly burdensome to the affected parties. Consequently, Sitka Herring Association requests that the Federal Subsistence Board to deny further hearings on this subject.

This spring, Sitka Herring Association and a number of processing companies joined together to provide and pay for a transport vessel which was used to support subsistence efforts. In addition, one local processor independently provided a vessel and support for subsistence gatherers to harvest herring eggs on branches in excess of their own needs for those interested in obtaining the product. Both projects were designed to provide subsistence foods to those who—for one reason or another—were unable to obtain their own.

In spite of over 50 linear miles of herring spawn throughout Sitka Sound this season (2008), there have been reports of inadequate harvest for subsistence gatherers. Much of the spawn deposition appeared to occur outside of easily accessible areas with very little around Makhnati Island. While the utility of the Makhnati Island area for subsistence use is questionable under the best of circumstances, given this year's spawn distribution, withdrawal and closure of the Makhnati Island group would have had no affect on the outcome of subsistence gathering efforts.

Together, permit holders and processors are working to resolve legitimate issues as they arise with subsistence users. With Sitka Sound herring roe issues on the Alaska Board of Fisheries' agenda in January 2009, it would be helpful for the Federal Subsistence Board to refuse consideration of FP09-05 so that more thorough airing of subsistence issues relating to the entirety of the Sitka Sound area can be dealt with through the State regulatory process.

Submitted by Scott Mcallister, President, Sitka Herring Association

Oppose. United Fishermen of Alaska (UFA), a trade association of 37 Alaska commercial fishing organizations as well as individual members representing commercial fishermen throughout the state and its offshore waters, has monitored actions taken by the Federal Subsistence Board since 1999 when Federal management of subsistence fisheries through ANILCA was effected. Commercial fishing is above all dependent on access to marine fishery resources, and UFA has a general obligation to address any Federal Subsistence Board action that can compromise that access. Although UFA is aware of ANILCA mandates that provide a priority for Federally qualified subsistence users, we are concerned that proposal FP09-05, which would close Federal waters near Makhnati Island in Sitka Sound to commercial herring fishing, does little or nothing for subsistence users while usurping State jurisdiction in the commercial fishery. The Alaska Board of Fisheries-approved management plan for the Sitka herring fishery has been designed with a herring biomass threshold that provides subsistence opportunities before any commercial fishery can take place, ensuring opportunity for subsistence harvest. We oppose proposal FP09-05 as an unnecessary intrusion into State fisheries management.

A similar measure was proposed in the 2007 cycle, deferred to 2008 and turned down by the Federal Subsistence Board. Commercial herring seiners, as indicated in testimony before the Board, provided

transportation of subsistence users to and from Makhnati Island in the spirit of cooperation between commercial and subsistence fishing communities during the 2008 fishery.

UFA urges the Federal Subsistence Board to reject proposal FP09-05 or any related RAC variations that can compromise well-managed and sustainable commercial fisheries in waters that—except for an oversight in title transfer related to statehood—would clearly be State of Alaska territorial waters.

Mark Vinsel, Executive Director, United Fishermen of Alaska

FP09-15 (Deferred) Executive Summary													
General Description	Proposal FP09-15 requested that a “no Federal subsistence priority” customary and traditional use determination be made for all fish in the Juneau road system area (all waters crossed by or adjacent to roads connected to the City and Borough of the Juneau road system). In January 2009, the Federal Subsistence Board deferred Proposal FP09-15 to allow time to develop an analysis of the customary and traditional uses of fish in Districts 11 and 15. <i>Submitted by the Alaska Department of Fish and Game</i>												
Proposed Regulation	<table border="0"> <tr> <td><i>District 11—Juneau Road System Area (all waters crossed by roads connected to the City and Borough of Juneau)</i></td> <td><i>All fish</i></td> <td><i>No Federal subsistence priority</i></td> </tr> <tr> <td><i>District 15—Juneau Road System Area (all waters crossed by roads connected to the City and Borough of Juneau)</i></td> <td><i>All fish</i></td> <td><i>No Federal subsistence priority</i></td> </tr> <tr> <td><i>Remainder of the Southeastern Alaska Area</i></td> <td><i>Dolly Varden, trout, smelt, and eulachon</i></td> <td><i>Residents of Southeastern Alaska and Yakutat areas.</i></td> </tr> <tr> <td><i>Remainder of the Southeastern Alaska Area</i></td> <td><i>All other fish</i></td> <td><i>No determination—all rural Alaska residents</i></td> </tr> </table>	<i>District 11—Juneau Road System Area (all waters crossed by roads connected to the City and Borough of Juneau)</i>	<i>All fish</i>	<i>No Federal subsistence priority</i>	<i>District 15—Juneau Road System Area (all waters crossed by roads connected to the City and Borough of Juneau)</i>	<i>All fish</i>	<i>No Federal subsistence priority</i>	<i>Remainder of the Southeastern Alaska Area</i>	<i>Dolly Varden, trout, smelt, and eulachon</i>	<i>Residents of Southeastern Alaska and Yakutat areas.</i>	<i>Remainder of the Southeastern Alaska Area</i>	<i>All other fish</i>	<i>No determination—all rural Alaska residents</i>
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<i>Remainder of the Southeastern Alaska Area</i>	<i>All other fish</i>	<i>No determination—all rural Alaska residents</i>											
OSM Conclusion	Support Deferred Proposal FP09-15 with modification to address customary and traditional use determinations for all fish in Districts 11 and 15 and to define the area in which the “No Federal Subsistence Priority” applies—the Juneau Nonrural Area. <i>See the analysis for the modified regulation language.</i>												
Southeast Regional Council Recommendation	Oppose												
Interagency Staff Committee Comments	See comments following the analysis.												
ADF&G Comments	Support												
Written Public Comments	1 Oppose												

STAFF ANALYSIS DEFERRED FP09-15

ISSUES

Proposal FP09-15, submitted by the Alaska Department of Fish and Game (ADF&G), requested that a “no Federal subsistence priority” customary and traditional use determination be made for all fish in the Juneau road system area (all waters crossed by or adjacent to roads connected to the City and Borough of the Juneau road system). In January 2009, the Federal Subsistence Board (Board) deferred Proposal FP09-15 to allow time to develop an analysis of the customary and traditional uses of fish in Districts 11 and 15.

DISCUSSION

Proposal FP09-15 is the second proposal submitted by ADF&G to address its request for a “no subsistence priority” for the Juneau road system area. Their initial request for a “no Federal subsistence priority” determination for the Juneau road system area (FP08-04) was rejected by the Board. ADF&G subsequently submitted Proposal FP09-15 because, in its view, the Board did not evaluate the eight factors describing customary and traditional use for each fish stock used by specific rural communities when considering Proposal FP08-04. At its January 2009 meeting, the Board deferred Proposal FP09-15, and directed that an analysis be developed that examined customary and traditional uses of fish in all of Districts 11 and 15, rather than just the Juneau road system area (FSB 2009a:123–125).

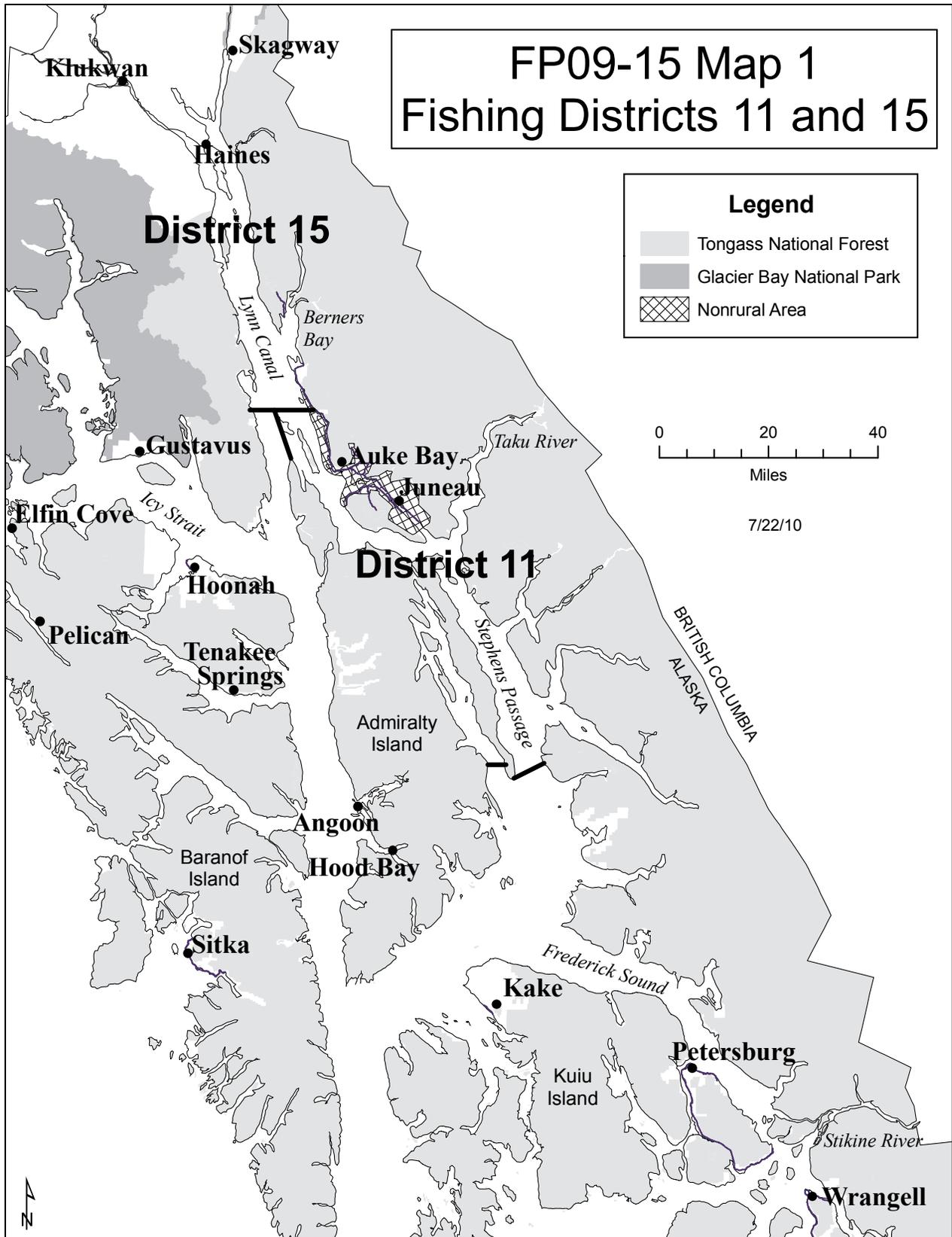
Southeast Alaska consists of two different fisheries management areas: (1) the Southeastern Alaska Area and (2) the Yakutat Area. The Juneau road system area is within fishing Districts 11 and 15 (**Map 1**). Currently, all rural residents of Southeastern Alaska and Yakutat areas are included in the customary and traditional use determinations for Dolly Varden, trout, smelt, and eulachon for Districts 11 and 15. No determination has been made for salmon in Districts 11 and 15; therefore, all rural residents of Alaska may harvest salmon under Federal subsistence regulations. Districts 11 and 15 currently are in the “remainder of the Southeastern Alaska Area” in the regulations. The proposal removes these districts as well as the Juneau road system out of the remainder area.

The populated area of the Juneau road system area is designated as nonrural under the Federal Subsistence Management Program. The Juneau Nonrural Area includes the communities of Douglas and Auke Bay. However, the nonrural area does not extend the entire length of the road north of Juneau (**Map 1**). As a result of the nonrural designation, Juneau residents are not eligible to harvest fish and wildlife under Federal subsistence regulations. As is true of all state residents, however, they may fish the streams of the Juneau road system under sport fishing regulations. The Juneau road system has expanded in recent years, continues to expand, and has the potential for expansion to the Haines/Skagway area. For this reason, a boundary needs to be delineated as to what constitutes “the Juneau road system.”

Existing Federal Regulations

Southeastern Alaska Area—All fish—Customary and traditional use determinations

<i>Remainder of the Southeastern Alaska Area</i>	<i>Dolly Varden, trout, smelt, and eulachon</i>	<i>Residents of Southeastern Alaska and Yakutat areas.</i>
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<i>Remainder of the Southeastern Alaska Area</i>	<i>All other fish</i>	<i>No determination—all rural Alaska residents</i>
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Proposed Federal Regulations

Southeastern Alaska Area—All fish—Customary and traditional use determinations

<i>District 11—Juneau Road System Area (all waters crossed by roads connected to the City and Borough of Juneau)</i>	<i>All fish</i>	<i>No Federal subsistence priority</i>
<i>District 15—Juneau Road System Area (all waters crossed by roads connected to the City and Borough of Juneau)</i>	<i>All fish</i>	<i>No Federal subsistence priority</i>
<i>Remainder of the Southeastern Alaska Area</i>	<i>Dolly Varden, trout, smelt, and eulachon</i>	<i>Residents of Southeastern Alaska and Yakutat areas.</i>
<i>Remainder of the Southeastern Alaska Area</i>	<i>All other fish</i>	<i>No determination—all rural Alaska residents</i>

Extent of Federal Public Waters

For purposes of this discussion, the phrase “Federal public waters” is defined as those waters described under 50 CFR 100.3 and 36 CFR 242.3. All fresh waters on the Juneau road system area are within the exterior boundaries of the Tongass National Forest and are considered Federal public waters.

Background

Proposal FP09-15 focused on the Juneau road system area, an area situated within fishing Districts 11 and 15, and estimated to account for less than 10% of the area encompassed by these two fishing districts (**Map 1**). Federal subsistence fishing permits for salmon/trout have been in place for the Juneau road system area since 2002 and steelhead permits were established in 2005. The fisheries are closely monitored and management issues have been addressed by permit conditions such as increased minimum size limits and restricted methods and means. Permits conditions are determined by the local Federal fisheries manager in consultation with ADF&G (§ _____.27(i)(13)(xx)(A)) (SERAC 2005:290). As of November 2010, no fish have been reported harvested from the Juneau road system area with Federal permits (Reeves 2010, pers. comm.). All reported harvests from the Juneau road system have been with a State sport fishing license.

Regulatory History

In the late 1980s, the State of Alaska Joint Boards of Fisheries and Game made customary and traditional use determinations that applied to individual communities and specific fish species in particular geographic areas (FWS 2007:155). At that time, 12 Southeast Alaska communities—Angoon, Craig, Haines, Hoonah, Hydaburg, Kake, Kasaan, Klawock, Klukwan, Saxman, Sitka, and Yakutat—were recognized as having a customary and traditional pattern of use of various fish species in Southeast Alaska. The Joint Boards did not make positive determinations for 17 other rural communities: Coffman

Cove, Edna Bay, Elfin Cove, Gustavus, Hollis, Hyder, Meyers Chuck, Pelican, Petersburg, Point Baker, Port Alexander, Port Protection, Skagway, Tenakee Springs, Thorne Bay, Whale Pass, and Wrangell, or for any residents of the region living outside the boundaries of any organized community.

In 1998, the Federal Subsistence Board adopted the State’s customary and traditional use determinations for fish (63 FR 124, 35343–35344, June 29, 1998) and then modified them to include, at the request of the Southeast Alaska Subsistence Regional Advisory Council (Council), all species of salmon, Dolly Varden, trout, smelt, and eulachon (64 FR 5, 1300–1301, January 8, 1999). As a consequence, customary and traditional use determinations for specific species of fish were adopted in all or portions of Districts 1, 2, 3, 5, 9, 10, 12, 13, and 14, but no specific determinations were made for Districts 4, 6, 7, 8, 11, and 15—which are in the *remainder* area. Thus, in the remainder area of the Southeastern Alaska Area, all rural residents of Alaska were eligible to harvest fish under Federal subsistence regulations.

In 2000, Proposal FP01-22 requested that the customary and traditional use determinations for cutthroat trout, rainbow trout, and Dolly Varden be expanded to include all rural residents of Southeast Alaska, for the Southeastern Alaska Area geographically—as well as changes to methods, seasons, and harvest limits for these species (FSB 2000a:13). The Council recommended expanding the determination to include trout, Dolly Varden, smelt and eulachon and to include all of Southeast Alaska (SERAC 2000:178). In response, the Board expanded the customary and traditional use determination to include trout, Dolly Varden, smelt, and eulachon, but only to “the *remainder* area” of the Southeastern Alaska Area (FSB 2000b:4–15; 66 FR 30, 10146–10147). In doing so, a Board member reasoned that:

...retention of the existing customary and traditional use determinations would maintain opportunity for eligible subsistence users while the addition of the remainder area would recognize the uses of other eligible subsistence users until a review of existing information could be conducted to further refine the relationships between communities or areas and their uses of fish... (FSB 2000a:7)

In 2005, Proposal FP06-31 was submitted to remove the area-wide Federal subsistence fishing regulations for steelhead, cutthroat trout, and Dolly Varden in streams on or adjacent to the Juneau road system area and replace them with State of Alaska sport fishing regulations. The stated impetus for the proposal was conservation concerns (SERAC 2005:304). At its January 2006 meeting, the Board rejected this proposal (71 FR 60, 15570, March 29, 2006).

In 2007, Proposal FP08-04 was submitted by ADF&G requesting that a “no Federal subsistence priority” determination be made for customary and traditional use of fish for the Juneau road system area. The proponent was concerned that fish stocks in Juneau area streams could be adversely affected if even a few Federally qualified rural residents chose to travel to Juneau and subsistence fish on the Juneau road system (FSB 2007:175). The Council stated that there was “no information presented that indicated that subsistence fishing in the Juneau area waters was inappropriate. . . . No need was seen to make a location-specific customary and traditional use determination for the Juneau road system” (FSB 2007:174). At its December 2007 meeting, the Board agreed with the Council and rejected this proposal (73 FR 51, 13763, March 14, 2008). Subsequent to the Board’s decision, ADF&G requested that the Board reconsider and rescind its action to reject FP08-04. At its meeting in July 2009, the Board rejected the request for reconsideration, concluding that none of the claims raised by ADF&G in its request warranted further consideration (FSB 2009a:6–10).

Based on comments made regarding Proposal FP08-04, the ADF&G submitted Proposal FP09-15. At its fall 2008 meeting, the Council recommended the Board reject Proposal FP09-15 (SERAC 2008:202–236). In explaining its recommendation, the Chair of the Council told the Board that:

“ . . . the Council determined that subsistence fishing in the Juneau area waters was appropriate and would not result in a conservation concern for any species. The proposal would not affect nonsubsistence users, but would be potentially detrimental to subsistence users. There was no evidence presented that a conservation concern currently exists or would potentially exist in the future. . . . The narrow interpretation of the eight criteria was described by the State; we don't believe it's very valid. The Council interprets the regulation more boldly and agrees that there is sufficient evidence to support the continued customary and traditional use of this area by rural residents (FSB 2009b:91).

In January 2009, the Board deferred the proposal. In making the motion to defer, a Board member noted that:

I make a motion... to defer this [Proposal FP09-15]... in opposition to the Southeast Alaska Regional Advisory Council's recommendation. But, considering all the dialogue we've had today, there are still questions and I still think that being able to look at a C&T of 11 and 15, which includes the Juneau area, ... there's a reason to take a look at this ... I think it's worth doing ... (FSB 2009b:120).

Community Characteristics

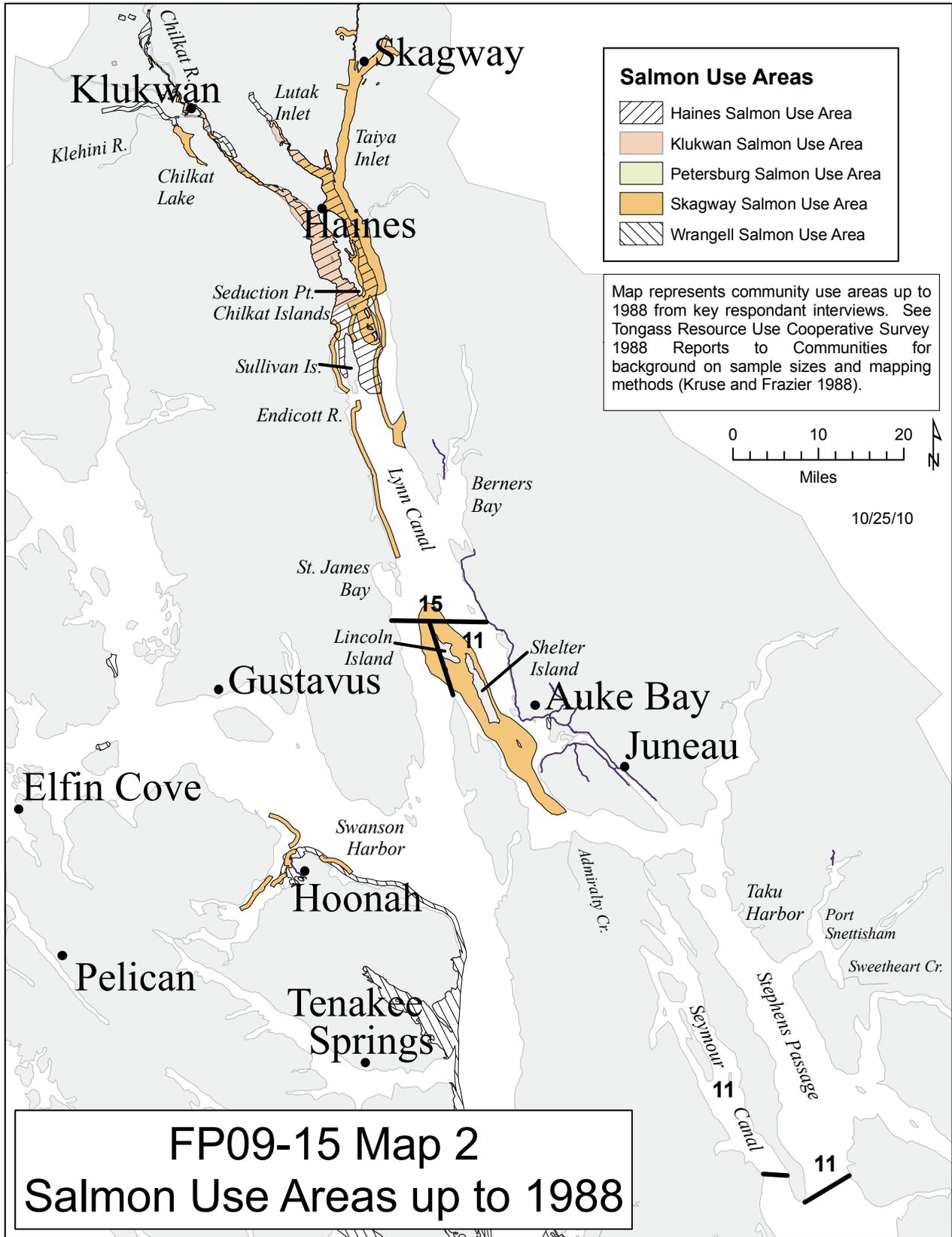
Fish are harvested for subsistence in Districts 11 and 15 by residents of Skagway, Klukwan, Haines, Petersburg, and Wrangell (**Maps 2 and 3**) based on research conducted in the mid 1980s as part of the Tongass Resource Use Cooperative Survey (TRUCS) (Kruse and Frazier 1988).

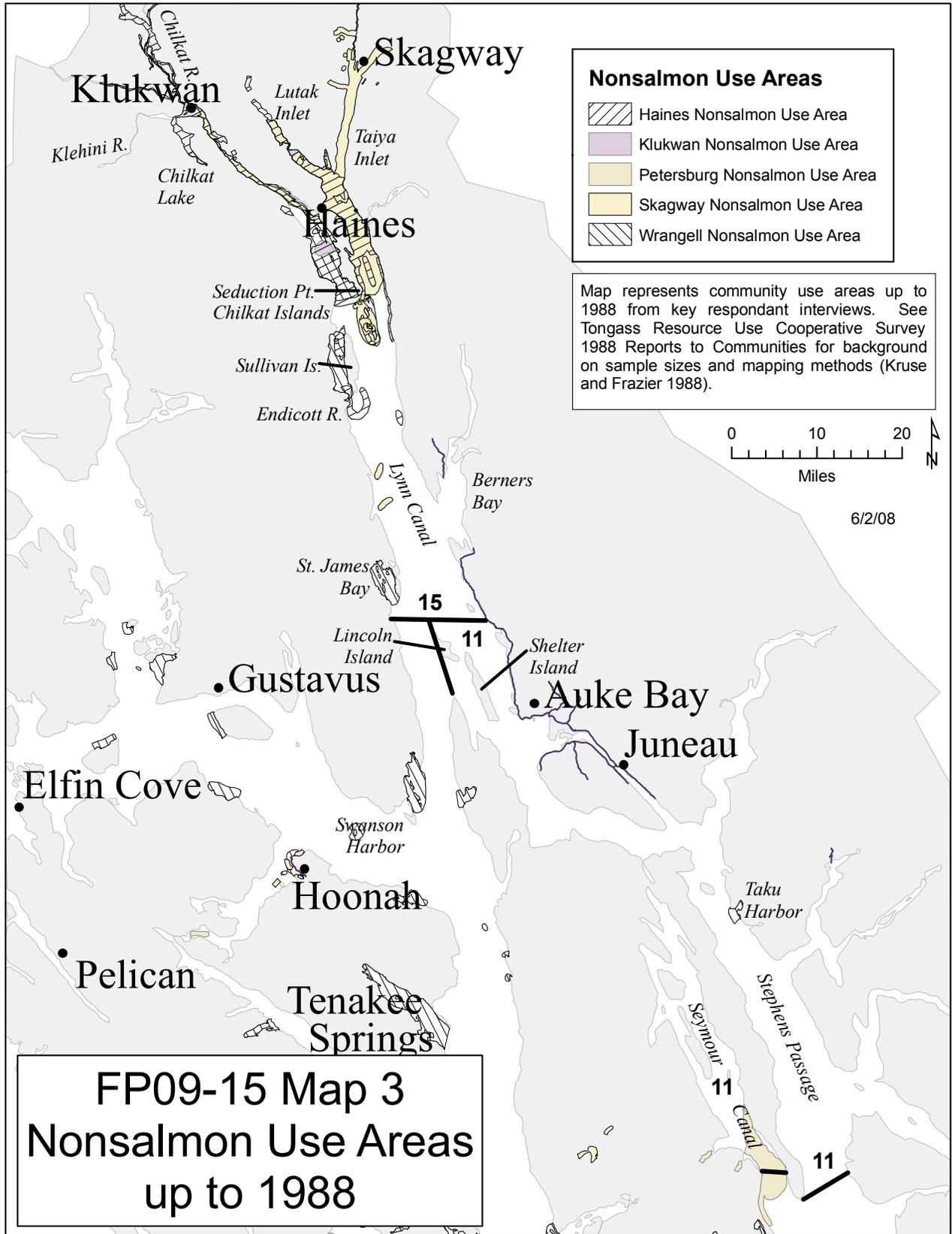
Historical Overview

The areas around each community in the region were originally occupied by Tlingit, either in established villages, semi-permanent villages, or seasonal camps (**Map 4**). In the eighteenth century, Russian explorers and colonizers entered Alaska from the west establishing settlements in the Aleutian and Kodiak Islands. The first Russian settlement in Southeast was the outpost at Yakutat in 1795, followed by the major settlement at Sitka in 1799 (Schroeder and Kookesh 1988:15). Attracted by the sea otter trade, Russians had limited influence on the Tlingit largely because they were unable to conquer them outside of Sitka (Schroeder and Kookesh 1988:15). Sea otters were reaching depletion at the time of the sale of Alaska to the U.S. in 1867 (George and Bosworth 1988:15).

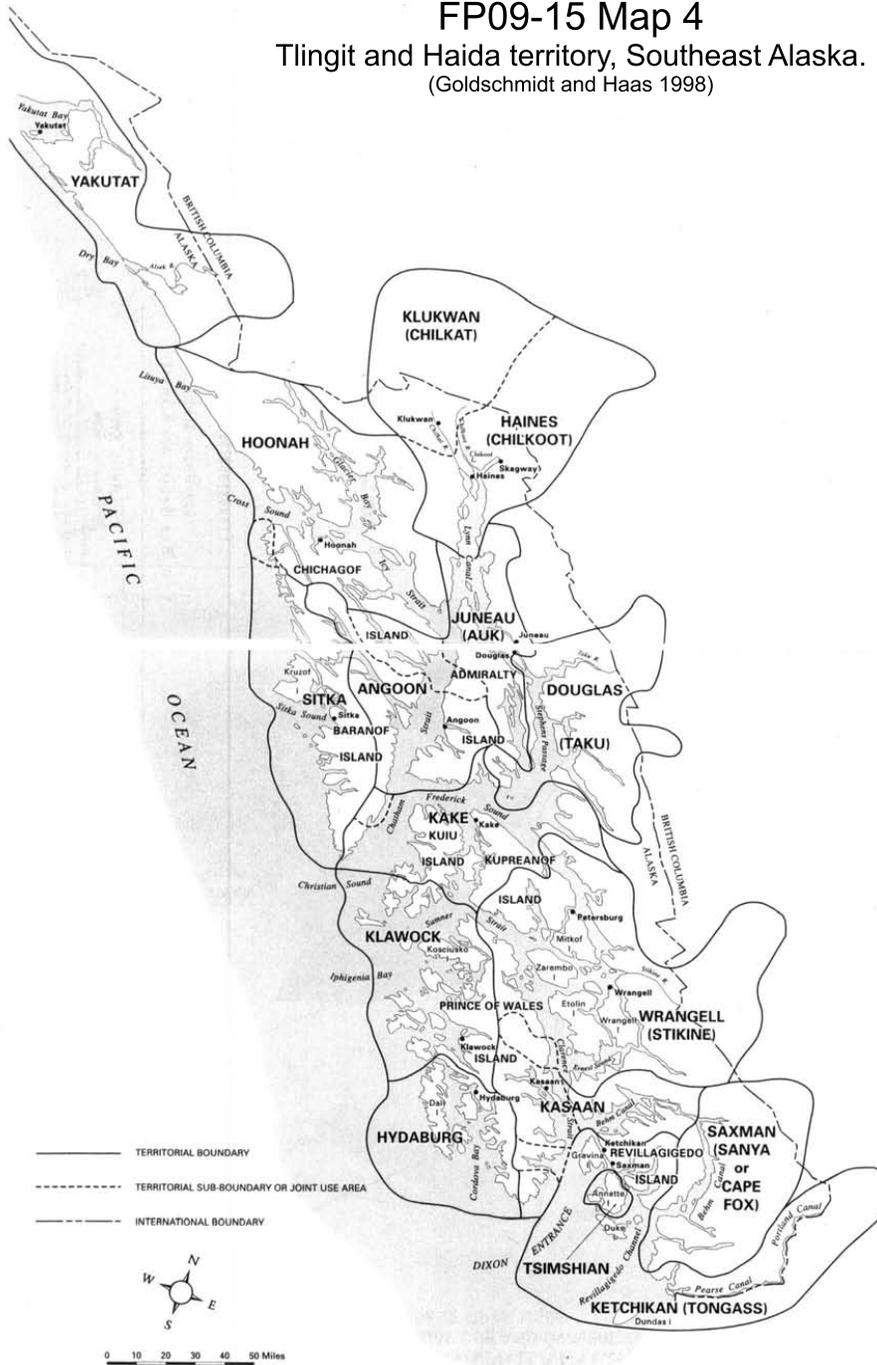
Other settlers began arriving in the region for the purposes of mining, missionary work, and whaling (George and Bosworth 1988:15). When gold was discovered in the Klondike, Yukon Territory, in the 1890s, Skagway was at a major route into the Interior and the gold fields. Settlers began arriving in large numbers beginning in the 1880s with the establishment of salmon canneries in Southeast Alaska. The commercial salmon fishing industry continues to be the economic mainstay of the regional economy. When a salmon cannery was constructed, people from established communities often stayed at sites near canneries seasonally in temporary structures, some of which became permanent communities (Smythe 1988:21). Communities also came together around established schools. Fox farming added to the economy beginning in the 1920s and continued into the 1940s, when demand dropped off after World War II (Smythe 1988:26). Large scale logging began in the 1960s (Smythe 1988:21).

In the 1880s, canneries often acknowledged Tlingit clan rights in some drainages, and some canneries made payment for the right to fish in owned streams, but this practice was discontinued early in the history of the industry (George and Bosworth 1988:29–30). Over-harvesting with seines and fish traps depleted many salmon runs by the late 1930s. Commercial salmon traps, fisheries, and canneries were





FP09-15 Map 4
Tlingit and Haida territory, Southeast Alaska.
 (Goldschmidt and Haas 1998)



followed by fisheries for halibut and herring for bait, and later salted herring, red king crab beginning in the 1950s, and black cod in the 1930s and 1950s. In 1925 there was a commercial fishery for Dolly Varden (Smythe 1988:25). The introduction of large cold storage facilities at communities with room for large buying scows, in Petersburg for example, further expanded fisheries.

Community Descriptions

This section provides brief descriptions of the rural communities whose residents harvest fish in Districts 11 and 15, based on TRUCS (Kruse and Frazier 1988) (**Table 1**). Subsistence uses by these communities have also been documented in Betts (1994), Betts et al. (1999a, 1999b, 1999c, 1999d), Goldschmidt and Haas (1998), and Paige (2002). The Juneau area is not under consideration in this analysis because it is nonrural and residents are not eligible to harvest fish under Federal subsistence regulations. They may, however, harvest fish under State sport fishing regulations, as may all residents of Southeast Alaska.

Table 1. Population of selected Southeast Alaska communities (2006 population ADOL 2007; Origin USDA 1997; and 2000 population USDC 2007a).

Community	2000 Population	2006 Population
Skagway City	862	854
Klukwan CDP ¹	139	112
Haines Borough ²	2,392	2,241
Juneau City and Borough	30,711	30,650
Petersburg City	3,224	3,129
Wrangell City	2,308	1,911

¹ CDP = Census Designated Place. The U.S. Census Bureau creates CDPs as counterparts of incorporated places. The boundaries of a CDP usually follow visible features or the boundary of an adjacent incorporated place.

² The City of Haines dissolved in October 2003 in favor of a boroughwide government.

Skagway

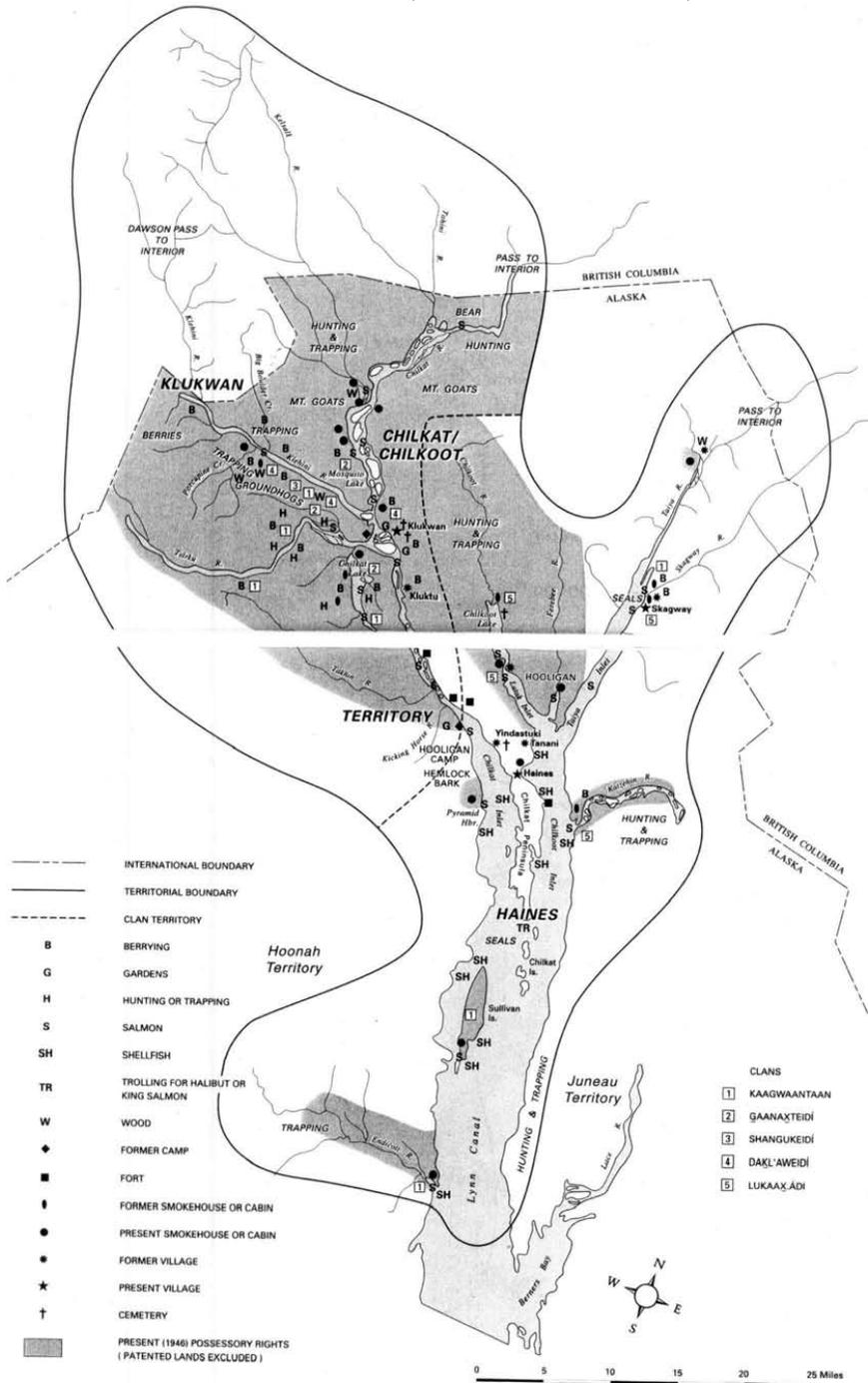
Skagway, located in District 15, is situated on the mainland at the extreme northern end of Lynn Canal, where the Skagway and Taiya rivers enter Taiya Inlet, approximately 15 miles north of Haines (**Map 1**) (Paige 2002:291). The location of Skagway was once the site of a Chilkat Tlingit village (Betts et al. 2000; Goldschmidt and Haas 1998:32) (**Map 5**). Other seasonal camps and smokehouses existed along the Skagway River. Chilkat Tlingit controlled this area that includes what is known today as the Chilkoot Trail, the trade route over Chilkoot Pass to the Canadian Interior. Trade with the Canadian Interior was supervised by Tlingit into the twentieth century. Gold was discovered in the Klondike in the 1890s and the Chilkoot Trail was the most accessible route to the gold fields. The discovery of gold attracted miners, and soon a railway over White Pass superseded the trail. Skagway became Alaska’s first incorporated city in 1900. When the gold rush waned, other industries, such as independent, local mining and tourism, replaced it. Tourism has become an increasingly important factor in Skagway’s economy (Betts et al. 2000). In 1978 the South Klondike Highway opened into the Interior.

Klukwan

Klukwan, located in District 15, is situated on the north bank of the Chilkat River, 22 road miles north of Haines at the northern end of Lynn Canal (**Map 1**) (Paige 2002:167). Klukwan is a Chilkat Tlingit village of long standing and the principal town of the Chilkat Tlingit, whose territory generally includes

FP09-15 Map 5

Chilkat (Klukwan-Haines) Tlingit territory, showing use and ownership, pre-1946.
(Goldschmidt and Haas 1998)



the Chilkat River and its upper drainages and the Lynn Canal area to Berners Bay (Betts et al. 1999a) (**Map 5**). Several salmon canneries were located along Chilkat Inlet beginning in 1882. The nearby Dalton Trail was a route to the Canadian Interior used by many during the Klondike gold rush in the 1890s. However, the village has remained predominantly Tlingit. In 1942 the Haines Highway was completed into the Interior, which connected Klukwan to this road system (Betts et al. 1999a).

Haines

Haines, located in District 15, is situated at the mouth of the Chilkat River at the northern end of Lynn Canal, 80 air miles northwest of Juneau (**Map 1**). The communities of Haines and nearby Klukwan were originally occupied by Chilkat Tlingit who had villages located throughout the area (**Map 5**). People from Haines and Klukwan shared land and waterway ownership in the Chilkat Tlingit territory, which includes the shores of Lynn Canal and its tributaries south to Berners Bay (Paige 2002:75). A United States military base opened in Haines in 1904 and operated through 1945. By the 1990s most canneries had closed and the initial growth of the community from the timber industry had slowed as the timber industry declined. The Haines economy relies increasingly on tourism.

Juneau

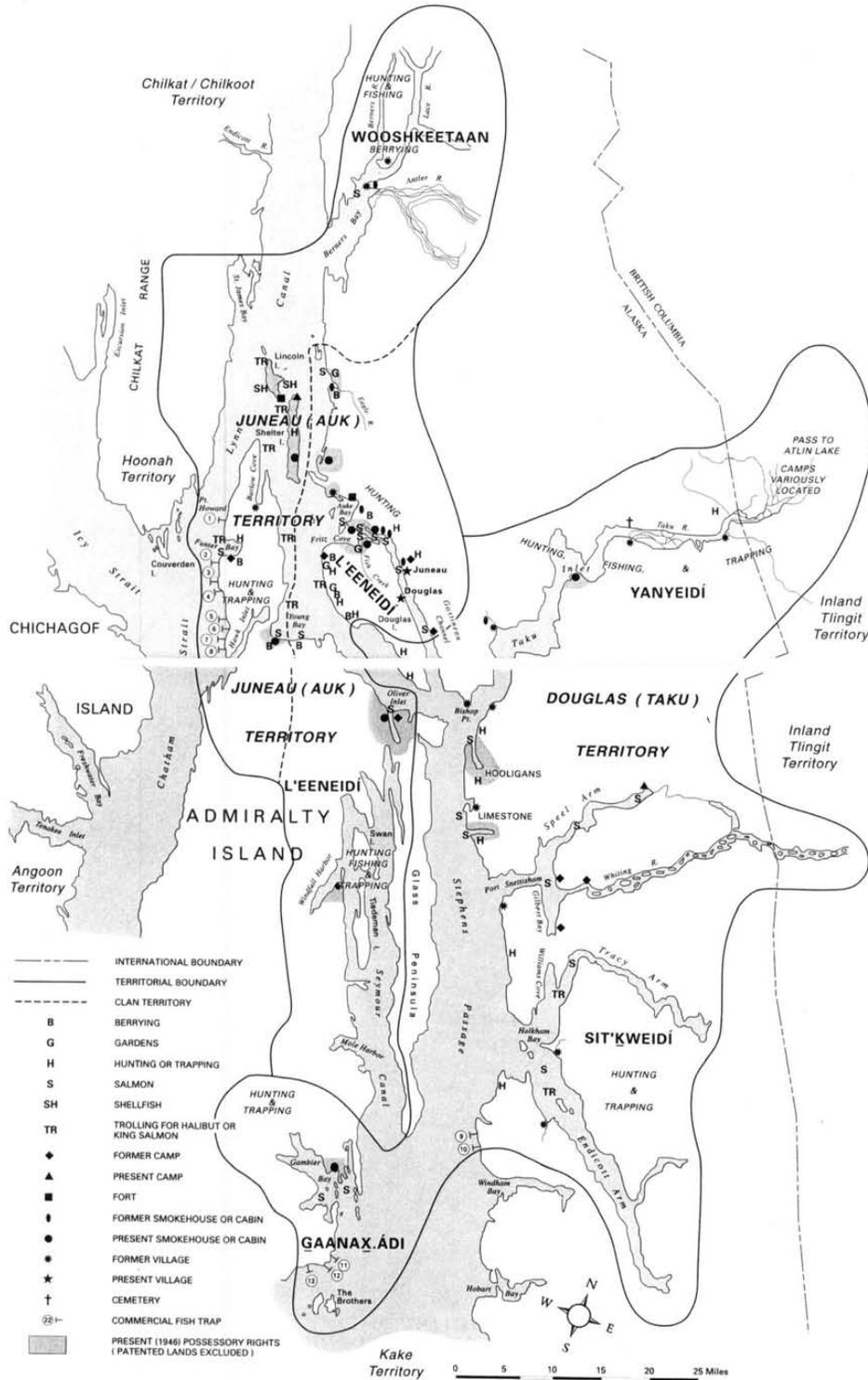
Residents of Juneau are within the Juneau Nonrural Area and are not eligible to harvest fish under Federal subsistence regulations. It should be noted, however, that prior to the establishment of the community of Juneau in about 1880, Auk and Taku clans (Tlingit) resided in the area that now includes the Juneau road system and whose traditional territory stretches from the mainland at Berners Bay to portions of Admiralty Island and Lynn Canal to the north (**Map 6**). Both groups resided in numerous camps and villages in the Juneau area. One, in particular, located at Swanson Harbor, at the confluence of Icy Strait and Lynn Canal, was apparently a village jointly used by the Chilkat, Auk, and Hoonah people as a trading center. Taku also traveled inland up the Taku River. Various clans held ownership of resource harvest areas. Many within the Auk and Taku clans moved into the developing town of Juneau once gold was discovered there in 1880 (Goldschmidt and Haas 1998:37). Thus, it is clear that before the establishment of the town of Juneau, the Juneau area was used by the Tlingit for harvesting subsistence resources.

Petersburg

Petersburg is situated at the north end of Mitkof Island on Wrangell Narrows (**Map 1**). The town of Petersburg grew up around a cannery established in 1899, on the northwest shore of Mitkof Island on Wrangell Narrows (Betts et al. 1999c). The community was established predominantly by immigrants who had come directly from Europe, particularly Norwegians. Prior to Petersburg's development by homesteaders and fishermen at the turn of 20th century, Tlingit use of the area occurred at many small settlements. As fish camps or seasonal harvest and production sites, they were part of the traditional land use pattern of Tlingit society (Betts et al. 1999c; Goldschmidt and Haas 1998:73). Along with the evolution of the commercial fishing industry, in which Petersburg has always been a leader in Southeast Alaska, a larger Tlingit community developed in the expanding town. This Indian community has been a permanent and stable component of the town throughout its development. Prior to the founding of the cannery, the Wrangell Tlingit shared control of Frederick Sound with Kake Tlingit (**Map 7**). Salmon were harvested at a creek, across from present-day Petersburg, which belonged to a Wrangell clan (see description of the Wrangell territory below). Commercial fishing dominates the local economy (Betts et al. 1999c; Goldschmidt and Haas 1998:73).

FP09-15 Map 6

Juneau-Douglas Tlingit territory, showing use and ownership, pre-1946.
(Goldschmidt and Haas 1998)



Wrangell

Wrangell is located on the north end of Wrangell Island on Zimovia Strait, and near the mouth of the Stikine River, which reaches into the Canadian Interior (**Map 1**). According to Betts et al. (1999d), the town dates from the construction of the Russian-American trading post in 1836. Two large villages of Wrangell existed at the locations of present-day Wrangell and Deserted Village located on Zimovia Strait (**Map 7**) (Goldschmidt and Haas 1998:73). Wrangell territory extended along the mainland approximately to Cape Fanshaw, across to Kupreanof Island, and to just south of Etolin Island, areas not in Districts 11 or 15. Descended from the Stikine clans, a riverine people with villages and camps that extended 160 miles up the Stikine River, they controlled the trade network that developed around this drainage. After the Cassiar gold rush in the 1860s permanent settlers began to arrive at Wrangell to fish and log. Both industries continue to dominate the local economy.

Eight Factors for Determining Customary and Traditional Uses

A community or area's customary and traditional use is generally exemplified through the following eight factors: (1) a long-term, consistent pattern of use, excluding interruptions beyond the control of the community or area; (2) pattern of use recurring in specific seasons for many years; (3) a pattern of use consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics; (4) the consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the community or area; (5) a means of handling, preparing, preserving, and storing fish or wildlife which has been traditionally used by past generations, including consideration of alteration of past practices due to recent technological advances, where appropriate; (6) a pattern of use which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation; (7) a pattern of use in which the harvest is shared or distributed within a definable community of persons; and (8) a pattern of use which relates to reliance upon a wide diversity of fish and wildlife resources of the area and which provides substantial cultural, economic, social, and nutritional elements to the community or area.

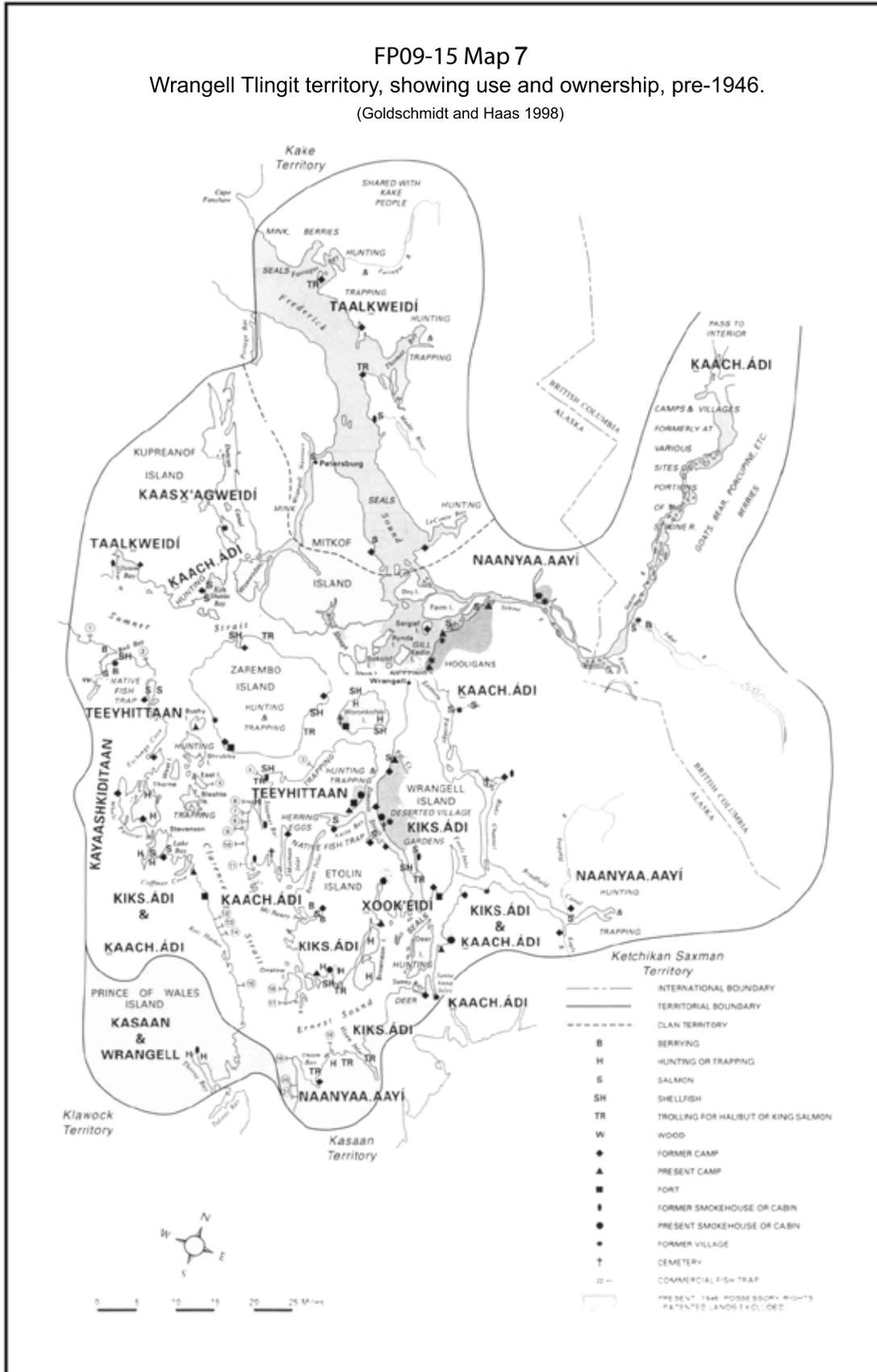
The Federal Subsistence Board makes customary and traditional use determinations based on a holistic application of these eight factors (50 CFR 100.16(b) and 36 CFR 242.16(b)). In addition, the Board takes into consideration the reports and recommendations of any appropriate Regional Advisory Council regarding customary and traditional use of subsistence resources (50 CFR Part 100.16(b) and 36 CFR 242.16(b)). The Board makes customary and traditional use determinations for the sole purpose of recognizing the pool of users who meet the eight factors. The Board does not use such determinations for resource management or restricting harvest. If a conservation concern exists for a particular population, the Board addresses that concern through the imposition of harvest limitations or seasonal restrictions rather than by limiting the customary and traditional use finding.

Long-Term, Consistent Pattern of Use

Salmon, trout, char, smelt, and eulachon have been seasonally harvested and used by Tlingit communities in Southeast Alaska since well before historic contact to the present.¹ Non-Natives living in communities throughout the region have also established a long-term pattern of harvest and use of these fish in the streams, lakes, and marine waters where they are found. Variation from traditional patterns stem from a variety of factors, including regulatory restrictions on eligibility, seasons, daily and annual harvest limits,

¹ Cf. Betts 1994; De Laguna 1972, 1990; Emmons and De Laguna 1991; George and Bosworth 1988; Goldschmidt and Haas 1998 (original 1946); Kookesh 2004; Langdon 2006; Mills 1982; Mills et al. 1983; Mobley and McCallum 2001; Moss et al. 1990; Newton and Moss 2005; Niblack 1890; Paige et al. 2007; Price 1990; Ratner and Dizard 2006; Ratner et al. 2006; Smythe 1988; Stewert 1977; Turek 2005; Turek et al. 2006; and Thornton et al. 1990.

FP09-15 Map 7
 Wrangell Tlingit territory, showing use and ownership, pre-1946.
 (Goldschmidt and Haas 1998)



gear types, and bait; increased competition from out-of-state and nonrural residents; variations in resource availability for reasons including changes in abundance related to habitat change, over harvesting, and commercial harvesting; and changes in available technology. Where able to, rural residents of the region have adopted enhanced harvest technologies, such as outboard boat motors and mechanical rod and reel gear, in addition to traditional techniques such as the use of nets, gaffs, and spears. Many aspects of the traditional pattern of use, including uses of resources obtained through gifting and exchange, continue throughout the region. Other aspects of the traditional pattern of use include various kinds of processing and preservation of fish for household consumption and customary trade, involving the gifting and sharing of fish, fresh and processed, with individuals and groups of Natives and non-Natives. Historical dependence on wild resources by both Natives and non Natives continues into the modern era. For many rural Alaskans in Southeast Alaska, the harvest and use of wild fish is a way of practicing and teaching young people important cultural values and customary rules, such as harvesting only what is needed and not wasting (Newton and Moss 2005:2).

People residing in the communities under consideration in this analysis have consistently harvested fish for subsistence. Numerous studies have documented the harvest and use of these resources, as presented in **Tables 2, 3, and 4**. These tables indicate the estimated harvests, based on reported harvest, of chum, coho, Chinook, pink, and sockeye salmon, as well as nonsalmon species, such as eulachon, Dolly Varden, cutthroat trout, rainbow trout, and steelhead. These data present a one-year snap shot. While harvest patterns for fish species vary annually, the underlying importance of these fish resources is clear.

People continue to harvest and use trout. Based on ADF&G studies, there is considerable variation in percentages of households using char and trout. In recent surveys the portion ranged from 17% to 61% of households using char and trout, and from 15% to 58% of households harvesting char and trout, in five communities included in this analysis (**Table 3**). Considerable variation also exists among communities in the amount of char and trout harvested (**Table 3**).

Seasons of Use

For anadromous fish species, peak harvests of fish tend to occur during spawning runs. However, some species are stream resident and taken year-round, or at specific times of year. This varies by locality somewhat due to the availability of other resources, the timing of the harvest in conjunction with other activities, and local custom. Steelhead are generally harvested in the spring (mid-March to mid-June), though some communities reported harvest of steelhead over a much longer time period (ADF&G 1989, 1991). While published reports are somewhat inconsistent in reporting harvest seasons for specific species, it is clear that many communities have a long history of harvesting Chinook salmon year-round. Chum, coho, pink, and sockeye salmon are harvested in slightly staggered and overlapping spring and summer seasons. Some areas are used for longer harvest periods, with considerable variation in effort within those longer periods. Traditionally, whole families moved to their fish streams where intense harvesting and processing of salmon, meat, other fish, and berries took place (Newton and Moss 2005:36). Fish were dried in September and October (Goldschmidt and Haas 1998:114). This practice is continued by some, while many choose to harvest fish, particularly salmon, on day or over-night trips.

While the seasonal patterns of use of smelt and eulachon are not as well documented as those for salmon, trout, and char, sources (cf. Betts 1994) indicate that harvest and use of eulachon was, and continues to be, an integral part of the subsistence round of the Tlingit living in communities in proximity to the major eulachon runs in the Southeast Alaska region.

Table 2. The estimated harvest of salmon for home use, by community, most recent harvest surveys (ADF&G 2007; Paige 2002).

Species	Estimated Total		Per	Per	Per	Per
	Number	Pounds	Household Number	Person Number	Household Pounds	Person Pounds
Skagway 1987 (N=296)						
Salmon	2,011	10,291	9.9	3.5	50.5	17.7
Chum Salmon	333	2,063	1.6	0.6	10.1	3.5
Coho Salmon	282	2,168	1.4	0.5	10.6	3.7
Chinook Salmon	187	2,866	0.9	0.3	14.1	4.9
Pink Salmon	955	2,100	4.7	1.6	10.3	3.6
Sockeye Salmon	254	1,094	1.3	0.4	5.4	1.9
Klukwan 1996 (N=32)						
Salmon	5,460	29,715	151.7	50.6	825.4	275.1
Chum Salmon	1,008	6,975	28.0	9.3	193.8	64.6
Coho Salmon	690	3,753	19.2	6.4	104.3	34.8
Chinook Salmon	154	1,958	4.3	1.4	54.4	18.1
Pink Salmon	29	63	0.8	0.3	1.8	0.6
Sockeye Salmon	3,579	16,965	99.4	33.1	471.3	157.1
Haines 1996 (N=92)						
Salmon	22,937	125,619	29.1	10.6	159.6	57.8
Chum Salmon	2,957	20,463	3.8	1.4	26.0	9.4
Coho Salmon	3,754	20,420	4.8	1.7	26.0	9.4
Chinook Salmon	1,398	17,727	1.8	0.6	22.5	8.2
Pink Salmon	1,279	2,789	1.6	0.6	3.5	1.3
Sockeye Salmon	13,549	64,220	17.2	6.2	81.6	29.6
Petersburg 2000 (N=125)						
Salmon	25,192	177,210	23.5	8.6	165.6	60.2
Chum Salmon	1,566	10,873	1.5	0.5	10.2	3.7
Coho Salmon	5,958	31,214	5.6	2.0	29.2	10.6
Chinook Salmon	9,056	106,222	8.5	3.1	99.3	36.1
Pink Salmon	4,828	12,018	4.5	1.6	11.2	4.1
Sockeye Salmon	3,784	16,883	3.5	1.3	15.8	5.7
Wrangell 2000 (N=98)						
Salmon	6,990	50,022	9.4	3.6	67.0	25.5
Chum Salmon	252	1,746	0.3	0.1	2.3	0.9
Coho Salmon	1,753	9,185	2.4	0.9	12.3	4.7
Chinook Salmon	2,424	28,430	3.2	1.2	38.1	14.5
Pink Salmon	389	968	0.5	0.2	1.3	0.5
Sockeye Salmon	2,172	9,694	2.9	1.1	13.0	5.0

Table 3. The estimated harvest and use of eulachon, Dolly Varden, cutthroat trout, rainbow trout, and steelhead for home use, by community, most recent harvest surveys (ADF&G 2007, Paige 2002).

Species	Percentage of Households				Estimated Number Harvested			Estimated Pounds Harvested		
	Using (%)	Harvesting (%)	Receiving (%)	Giving (%)	Total	Per House-	Per Person	Total	Per House-	Per Person
						hold			hold	
Skagway 1987^a										
Eulachon	8%	6%	3%	3%	1512	7.4	2.6	189	0.9	0.3
Dolly Varden	39%	24%	16%	7%	1,132	5.5	1.9	3,057	15.0	5.3
Klukwan 1996										
Eulachon	81%	61%	58%	58%	211,104	5,861.0	1,951.0	26,390	733.1	236.7
Dolly Varden	61%	58%	36%	48%	386	10.7	3.6	1,041	28.9	9.3
Cutthroat Trout	16%	16%	10%	13%	69	1.9	0.6	103	2.9	0.9
Rainbow Trout	16%	13%	10%	10%	58	1.6	0.5	116	3.2	1.0
Steelhead	7%	3%	3%	0%	1	0.0	0.0	10	0.3	0.1
Haines 1996										
Eulachon	40%	29%	14%	16%	858,960	1,094.0	396.0	107,371	136.3	49.9
Dolly Varden	47%	37%	14%	10%	6,507	8.3	3.0	17,570	22.3	8.2
Cutthroat Trout	18%	17%	1%	2%	856	1.1	0.4	1,284	1.6	0.6
Rainbow Trout	3%	2%	1%	0%	203	0.3	0.1	407	0.5	0.2
Steelhead	8%	5%	2%	1%	59	0.1	0.0	504	0.6	0.2
Petersburg 2000										
Dolly Varden	17%	15%	3%	5%	2,448	2.3	0.8	6,610	6.2	2.2
Cutthroat Trout	17%	15%	3%	3%	1,267	1.2	0.4	1,900	1.8	0.6
Steelhead	3%	2%	2%	0%	265	0.2	0.1	2,256	2.1	0.8
Wrangell 2000										
Eulachon	5%	1%	4%	1%	7,622	10.2	3.9	1,906	2.6	1.0
Dolly Varden	9%	7%	2%	2%	899	1.2	0.5	2,429	3.3	1.2
Cutthroat Trout	30%	24%	9%	9%	3,964	5.3	2.0	5,946	8.0	3.0
Rainbow Trout	10%	8%	3%	4%	907	1.2	0.5	1,814	2.4	0.9
Steelhead	16%	4%	13%	8%	107	0.1	0.1	907	1.2	0.5

^a The 1987 household harvest survey for Skagway did not collect information on cutthroat trout, rainbow trout, or steelhead (Betts et al. 1999b).

Methods and Means

Before European contact and in historic times, technologies used in harvesting finfish included, at least, weirs, spears, traps, gaff hooks, set hooks, trolling hooks, and throat gorges (Newton and Moss 1993, Stewart 1977). Later gear included gill nets, seine nets, long line, and rod and reel gear, which are all efficient methods of harvest. Current subsistence regulations allow retention of fish caught incidental to the catch of fish for which permits are required, which fits with traditional values of using all of the resources harvested, including incidental catches.

Areas of Use

Historically, people in Southeast Alaska took fish from bays and streams that they either traditionally owned or had permission to use, a practice that continues in some form today. Traditional clans owned specific streams and clan leaders controlled access and use of the resources there. Infringement on streams was a serious offense and could result in retribution. These clan-owned areas are documented in Goldschmidt and Haas' report *Haa Aani, Our Land* (1998) and other sources (cf. Langdon 2006). Not all streams that were traditionally used were adjacent to villages. People sometimes traveled long distances and harvested fish along the way while engaged in hunting or trapping. As people in Southeast Alaska

Table 4. The estimated harvest and use of wild resource for home use, by resource category and community, most recent harvest surveys (ADF&G 2007, Paige 2002).

Resource Category	Percentage of Households Using	Harvest Level in Pounds Usable Weight		Percentage of Total Wild Resource Harvest
		Pounds Per Household	Pounds Per Person	
Skagway 1987				
All Resources	95.8%	137.5	48.1	100%
Fish	93.7%	94.8	33.2	68.9%
Salmon	72.8%	50.5	17.7	36.7%
Non-Salmon Fish	80.7%	44.3	15.5	32.2%
Land Mammals	36.3%	10.4	3.6	7.6%
Marine Mammals	0.5%	0.0	0.0	0.0%
Birds and Eggs	18.6%	1.0	0.4	0.7%
Marine Invertebrates	76.0%	25.6	9.0	18.6%
Vegetation	46.2%	5.7	2.0	4.1%
Klukwan 1996				
All Resources	100%	1,881.8	608.3	100%
Fish	100%	1,605.8	518.6	85.3%
Salmon	100%	825.4	266.5	43.9%
Non-Salmon Fish	100%	780.4	252.0	41.5%
Land Mammals	90.3%	85.2	27.5	4.5%
Marine Mammals	71.0%	8.1	2.6	0.4%
Birds and Eggs	35.5%	2.8	0.9	0.1%
Marine Invertebrates	77.4%	43.3	14.0	2.3%
Vegetation	100%	136.6	44.7	7.3%
Haines 1996				
All Resources	97.8%	534.8	195.8	100%
Fish	95.7%	380.2	139.2	71.1%
Salmon	89.2%	159.4	58.4	29.8%
Non-Salmon Fish	86.0%	220.8	80.8	41.3%
Land Mammals	78.5%	79.7	29.2	14.9%
Marine Mammals	9.7%	2.7	1.0	0.5%
Birds and Eggs	32.3%	3.8	1.4	0.7%
Marine Invertebrates	77.4%	28.7	10.5	5.4%
Vegetation	87.1%	39.7	14.5	7.4%

(Continued)

Table 4. (Continued).

Resource Category	Percentage of Households Using	Harvest Level in Pounds Usable Weight		Percentage of Total Wild Resource Harvest
		Pounds Per Household	Pounds Per Person	
Petersburg 2000				
All Resources	92.8%	444.0000	161.4	100%
Fish	88.0%	281.9	102.4	64.1%
Salmon	75.2%	165.6	60.2	37.6%
Non-Salmon Fish	76.8%	116.2	42.2	26.4%
Land Mammals	52.8%	47.5	17.3	10.8%
Marine Mammals	0%	0.0	0.0	0%
Birds and Eggs	17.6%	1.7	0.6	0.4%
Marine Invertebrates	80.0%	102.1	37.1	23.2%
Vegetation	59.2%	10.9	4.0	2.5%
Wrangell 2000				
All Resources	93.9%	439.1	167.4	100%
Fish	86.7%	156.2	59.6	35.6%
Salmon	78.6%	67.0	25.5	15.3%
Non-Salmon Fish	74.5%	89.3	34.0	20.3%
Land Mammals	60.2%	102.0	38.9	23.2%
Marine Mammals	0%	0.0	0.0	0%
Birds and Eggs	15.3%	3.6	1.4	0.8%
Marine Invertebrates	80.6%	156.2	59.6	35.6%
Vegetation	64.3%	21.1	8.0	4.8%

began participating in commercial fisheries in the nineteenth century, subsistence fishing often took place immediately before, during, or after commercial openings. This pattern of harvest in streams closely accessible as well as farther away in conjunction with commercial fishing persists in contemporary life (cf. Paige et al. 2007).

All five salmon species are found in the region, but their spawning streams are not distributed uniformly. For instance, some residents travel 20 or 30 miles, or more, to harvest sockeye salmon at stream sites. Similarly, Chinook salmon spawning is limited to a few mainland rivers and one stream on Admiralty Island (ADF&G 1989). Local knowledge of fish behavior and life cycles and the ability to use specialized harvest methods are important for successful harvest.

Based on the State's Subsistence/Personal Use Salmon Permit system data 1990–2009, District 11 is used by residents of Southeast Alaska communities to harvest salmon in Federal public waters (Fall, Brown, Caylor, Coffing et al. 2003; Fall, Brown, Caylor, Georgette, et al. 2003; Pappas 2010, pers. comm.). Residents of Skagway, Haines/Klukwan, Gustavus, Hoonah, Tenakee Springs, Angoon, Sitka, and Petersburg reported harvesting small amounts of salmon in District 11 on State salmon permits, but not in waters of the Juneau road system area.

Some data are available from the Statewide Sport Fish Harvest Survey; a mail out survey conducted by ADF&G and designed to provide statewide and regional estimates of effort and harvest of fish by sport fish license holders using sport fish gear under sport fish regulations. The survey methodology does not allow an expansion of the data to estimate harvest and effort. From 1996 to 2006 there were

107 responses to the statewide harvest survey from rural residents of Southeast Alaska who reported sport fishing in Districts 11 and 15. Of these 107 entries, 32 fished in fresh waters. Further examination of which streams were fished found that 24 of these entries were for waters crossed by the Juneau road system, including fishers from the communities of Skagway, Sitka, Wrangell, Pelican, Haines, and Gustavus (a single survey respondent may have provided more than one of the 107 entries in survey results). The survey methodology does not allow an expansion of these data to estimate harvests for these communities. Between the years 1996–2006, most of the freshwater sport fishing effort within Districts 11 and 15 by Southeast Alaska residents was exerted by the residents of Juneau (identified as survey responders who reside within zip codes 99801, 99802, 99803, 99812, 99824, 99850). Roughly 5,000 entries of anglers fishing in Districts 11 and 15 were from Juneau residents fishing in salt water and 1,200 entries were from Juneau residents fishing in freshwater (Pappas 2007, pers. comm.). As stated earlier, no reports of fish harvests with a Federal subsistence permit have been reported through October of 2010 in the Juneau road system.

Eulachon runs occur in specific areas and are targeted for their oil for use and trade by those communities closest to those areas, including, from north to south: Situk River and Dry Bay near Yakutat; Chilkat River in District 15; Taku Harbor in District 11; Excursion Inlet near Gustavus; Stikine River near Wrangell; Chickamin River and Unuk River near Ketchikan; and others (Goldschmidt and Haas 1998). Eulachon oil is rendered and traded.

Skagway

Skagway residents generally harvest fish close to the community. The TRUCS study and subsequent reviews of mapped data by Skagway residents in 1992 and 1993 (Paige 2002) indicated that residents of Skagway identified salmon fishing areas (**Map 2**) within Districts 11 and 15 in Lynn Canal from Seduction Point to Sullivan Island, including waters around the Chilkat Islands as well as the waters around Lincoln, Shelter, and Douglas Islands near Juneau (Paige 2002:296). The 1987 household harvest and use survey for Skagway did not collect information on cutthroat trout, rainbow trout, or steelhead. Residents identified nonsalmon fish harvest areas in District 15 (**Map 3**) including waters of Lynn Canal at Sullivan and Chilkat Islands, and off the mouth of Endicott River (Paige 2002:299).

As described in Maps 2 and 3, Skagway's mapped subsistence use area for salmon and nonsalmon fish does not include the Juneau road system area. Based on the Statewide Sport Fish Harvest Survey, Skagway residents have fished in the Juneau road system under sport fishing regulations. However, sport fishing by Skagway residents in the Juneau road system is not reasonably accessible from Skagway, and as such would not be considered a customary and traditional subsistence use. Additionally, Skagway residents have never reported fishing with a Federal subsistence permit in the Juneau road system.

Klukwan

The Chilkat River, from its mouth to headwaters, and its tributaries (in District 15) constitute the main salmon harvest area for Klukwan residents; however, salmon are also harvested in other areas of District 15: 1) Chilkat Inlet from Seduction Point to the mouth of the Chilkat River; 2) at Klukwan; 3) several locations upriver from Klukwan; 4) portions of Big Boulder Creek and the Kelsall River; 5) Tsirku River outlet; 6) the head of Lutak Inlet, the Chilkoot River, and Chilkoot Lake; 7) Chilkat Lake; 8) the Klehini River for Chinook, coho, and chum salmon; 9) a larger extent of Lutak Inlet, as well as Lynn Canal as far south as Bridget Cove (for rod and reel trolling); and 10) William Henry Cove (for rod and reel trolling). The heaviest levels of use are adjacent to the community, at the mouth of the Tsirku River, the Chilkat River, the Chilkat Inlet, Lynn Canal, Pyramid Harbor, and Letnikof Cove (Betts et al. 1999a).

The nonsalmon fish harvest area mapping had some inadequacies, only included one or two household's use areas, and therefore, did not capture many areas used by the community (**Map 3**). Review of the map shows that Klukwan harvested nonsalmon fish within District 15 in the Chilkat River at four, six, seven, and nine mile for hooligan, trout, and char; the Tsirku River outlet for trout and char; and the Chilkat Lake for trout and char (Betts et al. 1999a).

As described in Maps 2 and 3, Klukwan's subsistence use area for salmon and nonsalmon fish does not include the Juneau road system area.

Haines

The Chilkat territory (**Map 5**) exists within District 15 as far south as Berners Bay. This area has been used by residents of Haines to harvest wild resources, including fish (Goldschmidt and Haas 1998:99). The Chilkat Islands located to the northwest of Sullivan Island are located within the boundaries of District 15 and were used for trolling for nonsalmon fish (Goldschmidt and Haas 1998:34–35).

During update and review sessions with local residents in 1992 and 1993, following the initial TRUCS study, Haines respondents reported using areas (**Map 2**) in District 15 including: 1) Berners Bay for coho, by rod and reel; 2) Chilkat Lake for sockeye and coho; 3) the Klehini River up to Big Boulder Creek, and tributaries of the Klehini River including Herman Creek for chum salmon; 4) Taiya Inlet; and 5) St. James Bay for chum, pink, and coho, by rod and reel (Paige 2002:82).

As described in **Maps 2 and 3**, Haines's mapped subsistence use area for salmon and nonsalmon does not include the Juneau road system area. Based on the Statewide Sport Fish Harvest Survey, Haines residents have fished in the Juneau road system under sport fishing regulations. However, sport fishing by Haines residents in the Juneau road system is not reasonably accessible from Haines and as such would not be considered a customary and traditional subsistence use. Additionally, Haines residents have never reported fishing with a Federal subsistence permit in the Juneau road system.

Petersburg

Only a small portion of the Petersburg use area for fish is in District 11 (Map 3). A baseline harvest survey conducted in 1987 indicated that fish other than salmon were harvested by Petersburg residents in Seymour Canal in District 11, east of Admiralty Island off of Stephens Passage. No mention was made regarding what kinds of fish were harvested (Smythe 1988:87). These harvests are in marine waters. As described in **Maps 2 and 3**, Petersburg's subsistence use area for salmon and nonsalmon fish does not include the Juneau road system area.

Wrangell

Wrangell households identified areas used for salmon fishing on maps as part of TRUCS (Map 2). Wrangell residents primarily harvested fish in areas closer to the community, but they harvested salmon in Stephen's Passage near Auke Bay in District 11 (Betts et al. 1992:28). Nonsalmon fish were harvested in Taku Harbor in District 11 and St. James Bay, Sullivan and Chilkat Island areas, Chilkat Inlet, and Lutak Inlet in Lynn Canal in District 15 (Map 3) (Betts et al. 1992:31). These harvests are in marine waters. As described in Maps 2 and 3, Wrangell's subsistence use area for salmon and nonsalmon fish does not include the Juneau road system area. Based on the Statewide Sport Fish Harvest Survey, Wrangell residents have fished in the Juneau road system under sport fishing regulations. However, sport fishing by Wrangell residents in the Juneau road system is not reasonably accessible from Wrangell and as such

would not be considered a customary and traditional subsistence use. Additionally, Wrangell residents have never reported fishing with a Federal subsistence permit in the Juneau road system.

Summary of fish harvest areas by community in Districts 11 and 15:

District 11—Salmon: Based on subsistence use studies, the residents of Skagway have harvested salmon in District 11; Skagway is located in District 15. The only community in District 11 is the nonrural Juneau Area; residents of nonrural areas are not eligible to harvest under Federal subsistence regulations. There are people in District 11 living outside of the Juneau Area, but no information is available on these individuals.

District 11—Nonsalmon Fish: Based on subsistence use studies, there are no residents of Federally qualified communities that harvested nonsalmon in District 11, including the Juneau road system area. There are people in District 11 living outside of the Juneau Area, but no information is available on these individuals.

Residents of Skagway, Haines/Klukwan, Gustavus, Hoonah, Tenakee Springs, Angoon, Sitka, and Petersburg have occasionally harvested small numbers of salmon in District 11 Federal public waters with State salmon permits. However, residents of these communities harvest nearly all salmon for subsistence close to their communities from areas where their customary and traditional uses have been recognized by the Board.

District 15—Salmon and Nonsalmon Fish: Based on subsistence use studies, the residents of Klukwan, Skagway, and Haines have harvested salmon in District 15, but not in the Juneau road system area. These communities are located in District 15.

Handling, Preparing, Preserving, and Storing

Fish are handled, prepared, preserved, and stored using methods common throughout Southeast Alaska. These include drying, smoking, canning, salting, pickling, freezing, and sometimes fermenting. Occasionally subsistence products may be preserved in seal or eulachon oil. Traditional means of taking care of fish are practiced extensively today. For instance, salmon are cut and scored for efficient drying much as they were in the past. The fish are smoked in wooden smokehouses or metal smokers, air dried, canned, frozen, refrigerated, and cooked freshly caught. Although the use of fermented salmon heads and eggs is not as common as it once was, salmon heads and roe are still aged and fermented in some communities, often by traditional methods of burying the eggs or heads in containers on the beach below high tide (ADF&G 1989).

Late runs of salmon were frozen historically, but depended on cold weather instead of electric freezers. People throughout Southeast Alaska still harvest some of their fish after they have spawned because their low fat content makes them the best for dry fish. Tlingit people of the communities in Districts 11 and 15 continue to fish for eulachon on the Chilkat River and render the fish into oil in traditional ways (ADF&G 1989).

Handing Down of Knowledge of Fishing

Knowledge of fishing skills, values, and lore are transmitted from generation to generation in ways common throughout Southeast Alaska. Among Native residents, clan and family ties continue to provide important vehicles for transmission of knowledge. The learning of skills associated with harvesting and preparing fish generally derives from a process of observation and participation with elder relatives or

community residents, as well as listening to stories describing fish lore and skills. Trout, in particular, are used to teach young children and grandchildren how to fish. Small children lack the coordination to use lures and flies (FSB 2000a:9). Traditionally the new generation learns subsistence methods from key matrilineal kinsmen. In traditional Tlingit culture, young boys learn virtually all lore and economic skills from their mother's brothers (ADF&G 1989). In District 11 and 15, amongst the Tlingit today, fishing skills and locations continue to be learned from uncles as well as other relatives and elders. Techniques and harvesting equipment are still generally shared among households (ADF&G 1989). Many rural communities in Southeast Alaska are characterized by large extended families with long history and experience in their local areas. Residents of rural communities in Southeast Alaska possess considerable depth of knowledge regarding resource skills, values, and cultural connections to salmon, trout, char, smelt and eulachon. Important learning about subsistence takes place at potlatches and other traditional celebrations where subsistence foods figure importantly. Subsistence resources may be harvested, as needed, during travel to and from these occasions.

Sharing

Giving, receiving, trading, and selling fish is ubiquitous among the Native peoples of Southeast Alaska. This tradition of distribution and exchange continues as part of the great giveaways associated with elaborate feasts and ceremonies such as the potlatch, and between individuals and families at the everyday level. Sharing occurs within and between all Southeast Alaska communities, and fish is one of the main items involved in this practice. This pattern continues, as is shown by household survey data (**Table 3**). These sharing practices are a major element of the cultures of these communities.

Reliance Upon a Wide Diversity of Fish and Wildlife Resources

Salmon were, and continue to be, the mainstay of the economy and one, if not the, most important group of subsistence species for Southeast Alaska communities. Salmon fishing has been augmented by, and is complementary to, the seasonal round of collecting other kinds of fish, hunting for terrestrial and marine mammals, collecting intertidal resources, and harvesting plants from beaches, forests, and elsewhere. The harvest and use of cutthroat trout, rainbow/steelhead trout, and Dolly Varden is widespread across the region and similarly fits in the seasonal round of subsistence activities (ADF&G 1989; ADF&G 1991).

Residents of communities who have harvested subsistence fish in Districts 11 and 15 tend to harvest significant quantities of fish and wildlife. Virtually all households use some subsistence resources, and almost all households harvest some subsistence resources for their own use. Overall harvest levels vary across the resources utilized. **Table 4** shows estimated per capita subsistence harvest levels by community, based on the most recent household surveys conducted between 1987 and 2000. These studies, some of which were part of the Tongass Resource Use Cooperative Study, show significant harvests of salmon and other finfish for the communities harvesting fish in Districts 11 and 15.

Effects of the Proposal

Adopting this proposal would likely have little effect on Federally qualified users because there is no evidence that Federally qualified users have harvested fish for subsistence from the Juneau road system area. No harvests on Federal permits have been reported in the Juneau road system area, and subsistence use areas that have been mapped do not include the Juneau road system area. However, if this proposal is adopted, Federal subsistence regulations would preclude subsistence fishing in the Juneau road system. Federally qualified users have fished in the Juneau road system area using a state sport fishing license, and this practice can continue. Adopting this proposal would have no effect on fish populations as no change in fish harvests is anticipated.

The Board asked that full analysis of all customary and traditional uses of fish in Districts 11 and 15 be conducted while revisiting Proposal FP09-15. Adopting this proposal as modified would recognize the customary and traditional uses of Federally qualified subsistence users residing in Districts 11 and 15 who have harvested fish for subsistence in Districts 11 and 15.

OSM CONCLUSION

Support Deferred Proposal FP09-15 **with modification** to address customary and traditional use determinations for all fish in Districts 11 and 15 and to define the area in which the “No Federal Subsistence Priority” applies—the Juneau Nonrural Area.

The modified regulation should read:

Southeastern Alaska Area—All fish—Customary and traditional use determinations

<i>District 11 and waters draining into that District, except the Juneau Road System within the Juneau Nonrural Area (all waters crossed by roads connected to the City and Borough of Juneau in the Juneau Nonrural Area)</i>	<i>Salmon</i>	<i>Residents of drainages flowing into District 11 and Skagway</i>
<i>District 11 and waters draining into that District, except the Juneau Road System within the Juneau Nonrural Area (all waters crossed by roads connected to the City and Borough of Juneau in the Juneau Nonrural Area)</i>	<i>Nonsalmon</i>	<i>Residents of drainages flowing into District 11</i>
<i>District 11—Juneau Road System within the Juneau Nonrural Area (all waters crossed by roads connected to the City and Borough of Juneau in the Juneau Nonrural Area)</i>	<i>All fish</i>	<i>No Federal Subsistence Priority</i>
<i>District 15 and waters draining into that District, except the Juneau Road System within the Juneau Nonrural Area (all waters crossed by roads connected to the City and Borough of Juneau in the Juneau Nonrural Area)</i>	<i>All fish</i>	<i>Residents of drainages flowing into District 15</i>
<i>District 15—Juneau Road System within the Juneau Nonrural Area (all waters crossed by roads connected to the City and Borough of Juneau in the Juneau Nonrural Area)</i>	<i>All fish</i>	<i>No Federal Subsistence Priority</i>
<i>Remainder of the Southeastern Alaska Area</i>	<i>Dolly Varden, trout, smelt, and eulachon</i>	<i>Residents of Southeastern Alaska and Yakutat areas</i>
<i>Remainder of the Southeastern Alaska Area</i>	<i>All other fish</i>	<i>No determination—all rural Alaska residents</i>

Justification

Rural residents of communities in Districts 11 and 15 have a customary and traditional pattern of use of salmon and nonsalmon fish species in most of Districts 11 and 15. A component of that customary and traditional pattern includes harvesting in close proximity to their communities. Subsistence use areas have been mapped for the communities in Districts 11 and 15, and none of the areas includes the Juneau road system area. Thus, while there is substantial evidence for a customary and traditional pattern of use of both salmon and nonsalmon fish in most of Districts 11 and 15, there is no evidence to suggest that Federally qualified subsistence users from communities in Southeast Alaska customarily and traditionally harvest fish for subsistence uses from the Juneau road system. No fish harvests have been reported on Federal subsistence permits from the Juneau road system. However, residents of Skagway, Haines, Gustavus, Sitka, and Wrangell have harvested fish from the Juneau road system, but under sport fishing regulations.

The Juneau road system has expanded in recent years, continues to expand, and has the potential for expansion to the Haines/Skagway area. For this reason, there needs to be a boundary set for what delineates “the Juneau road system.” The modified language for this proposed regulation includes language to define the area of the “no Federal subsistence priority” as the area within the Juneau Nonrural Area.

Only Skagway, Haines, Klukwan, Wrangell, and Petersburg have subsistence use areas mapped that indicate use of Districts 11 and 15; the remaining communities in Southeast Alaska do not. The subsistence use area maps for Wrangell and Petersburg indicate use of fish in marine waters, outside of Federal jurisdiction. Residents of Skagway, Haines/Klukwan, Gustavus, Hoonah, Tenakee Springs, Angoon, Sitka, and Petersburg have occasionally harvested small numbers of salmon in District 11 on State salmon permits. However, residents of these communities harvest nearly all salmon for subsistence from areas close to their communities.

Based on the analysis, there is a customary and traditional pattern of use of salmon by residents of Districts 11 and Skagway in the drainages flowing into District 11, with the exception of the road system within the Juneau Nonrural Area. Further, there is a customary and traditional pattern of use of nonsalmon fish by residents of the drainages flowing into District 11 in waters draining into District 11. None of the fish subsistence use areas in District 11 included the Juneau road system. Even though there are no Federally qualified rural communities within District 11, there are residents living outside of the Juneau Nonrural Area. How many residents there may be or what their subsistence uses are is not known.

As demonstrated in the analysis, there is a customary and traditional pattern of use of all fish by residents of the drainages flowing into District 15, with the exception of the road system within the Juneau Nonrural Area, in waters draining into District 15. This includes the residents of the communities of Klukwan, Skagway, and Haines, which are located in District 15. None of the fish subsistence use areas in District 15 included the Juneau road system.

ANALYSIS ADDENDUM

OSM CONCLUSION

Support Deferred Proposal FP09-15 **with modification** to address customary and traditional use determinations for all fish in Districts 11 and 15 and to define the area in which the “No Federal Subsistence Priority” applies—the Juneau Nonrural Area.

The modified regulation should read:

Southeastern Alaska Area—All fish—Customary and traditional use determinations

<i>District 11 and waters draining into that District, except the Juneau Road System within the Juneau Nonrural Area (all waters crossed by roads connected to the City and Borough of Juneau in the Juneau Nonrural Area)</i>	<i>All fish</i>	<i>Residents of drainages flowing into District 11</i>
<i>District 11—Juneau Road System within the Juneau Nonrural Area (all waters crossed by roads connected to the City and Borough of Juneau in the Juneau Nonrural Area)</i>	<i>All fish</i>	<i>No Federal Subsistence Priority</i>
<i>District 15 and waters draining into that District, except the Juneau Road System within the Juneau Nonrural Area (all waters crossed by roads connected to the City and Borough of Juneau in the Juneau Nonrural Area)</i>	<i>All fish</i>	<i>Residents of drainages flowing into District 15</i>
<i>District 15—Juneau Road System within the Juneau Nonrural Area (all waters crossed by roads connected to the City and Borough of Juneau in the Juneau Nonrural Area)</i>	<i>All fish</i>	<i>No Federal Subsistence Priority</i>
<i>Remainder of the Southeastern Alaska Area</i>	<i>Dolly Varden, trout, smelt, and eulachon</i>	<i>Residents of Southeastern Alaska and Yakutat areas</i>
<i>Remainder of the Southeastern Alaska Area</i>	<i>All other fish</i>	<i>No determination—all rural Alaska residents</i>

Justification

The purpose of this addendum is to remove Skagway from the customary and traditional use determination in the conclusion of the analysis. Maps of Skagway’s salmon subsistence use areas indicate that Skagway’s salmon use area in District 11, described above, is in marine waters outside of Federal jurisdiction; therefore, Skagway is not included in the customary and traditional use of salmon determination for District 11. Rural residents of communities in District 15 (Skagway, Klukwan, and Haines) have a customary and traditional pattern of use of salmon and nonsalmon fish species in most of District 15. A component of that use in District 15 includes harvesting in close proximity to communities.

For District 11, there are people residing outside of the Juneau Nonrural Area, but no information is available on these individuals. It is likely that these Federally qualified subsistence users in District 11 rely on fish species in District 11 for subsistence. Use areas have been mapped for salmon and some nonsalmon fish for 30 communities in Southeast Alaska, and none outside of the District 15 communities of Skagway, Klukwan, and Haines indicated harvesting fish from Federal public waters in District 15, and no community reported harvesting fish from Federal public waters in District 11 based on these maps. Additionally, no harvests were indicated from the Juneau road system area on these maps, and no fish harvests have been reported on Federal subsistence permits from the Juneau road system area.

Reports exist of the harvest of fish in the Juneau road system area using sport fishing permits. Reports exist of low-level, occasional harvests of salmon in District 11 Federal public waters using State subsistence/personal use permits. These uses are not customary and traditional because they are not in close proximity to the communities where fishers reside, and nearly all subsistence salmon harvests occur in close proximity to the communities where fishers reside.

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REGIONAL ADVISORY COUNCIL RECOMMENDATION

Southeast Alaska Subsistence Regional Advisory Council

Oppose Proposal FP09-15. The Council determined that the staff analysis was incomplete and the proposal was unnecessary and detrimental to the continuation of subsistence uses. There is a high degree of certainty that additional information exists regarding the use of this area by residents of various rural communities. The transcripts of the previous meeting contained evidence of subsistence use that was not recognized in the current analysis. The difficulty in documenting historical use is likely due to interruption of traditional activities due to recent regulations. Sport fishing is a subsistence harvest method and the amount of that use should be better described. The Council does not know the outcome of relevant jurisdictional issues currently under consideration by the court in *Katie John II*. In addition, it is likely there will be new and currently unknown rules regarding the evaluation of customary use, as a result of the Secretarial review of the subsistence program. The intent of ANILCA does not require the Council to determine non-subsistence use areas or make a negative customary use determination. The Council agrees that there are management challenges in this area but there are management tools available to Federal managers to provide for conservation and sustainability of these stocks. The Council heard public testimony citing economic factors that bring rural residents to Juneau as transient workers. There should be an opportunity for subsistence harvest of fish for rural residents that are forced by necessity to spend time in Juneau. This proposal is detrimental to the satisfaction of subsistence needs and would be precedent setting. The Council has already rejected two similar proposals in previous years and there should be deference shown to the Council on this issue. There is no evidence to indicate that subsistence fishing in streams on the Juneau road system is inappropriate and no evidence that Federal subsistence fishing regulations are not conservative and sustainable.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee had multiple views on the analysis. Some felt that the analysis does not contain enough information to support a positive customary and traditional use determination for the Juneau Road System, and that the analysis raised some issues as to whether or not a positive customary and traditional use determination should be recognized by the Federal Subsistence Board in that area. Others felt that additional evidence, including oral testimony presented at numerous Council meetings (including the most recent meeting in Hoonah) and written letters, point to a customary and traditional pattern of subsistence fishing in this area, by subsistence users representing a broad range of Southeast rural communities. Some Interagency Staff Committee members also were concerned that a closure to harvesting of an entire group of animals (i.e., “all fish”) by Federally qualified subsistence users has never been adopted by the Subsistence Board. It should be noted, however, that the Board has used “No Federal subsistence priority”-type closures for individual wildlife species and particular situations, in specific areas of Alaska.

ADF&G Comments FP09-15
November 30, 2010 (update of December 2, 2008, comments to FSB), Page 1 of 4

Alaska Department of Fish and Game
Comments to the Federal Subsistence Board

Deferred FP09-15: Juneau Road System – Customary and Traditional Use Determination

Introduction: Proposal FP09-15 requests that the Federal Subsistence Board demonstrate customary and traditional (C&T) findings for individual communities for fish stocks within Fisheries Districts 11 and 15 on waters crossed by roads within the current boundaries of the City and Borough of Juneau, as suggested by a member of the Federal Board on January 13, 2006. The proponent requests the eight regulatory factors concerning customary and traditional use of each specific fish stock by each community for each stream be evaluated and reviewed by the Federal Board. The Juneau non-rural area has no specific customary and traditional use determination and falls under the federal regulation category “Remainder of the Southeastern Alaska Area.” Under this designation, the Juneau road system area is open to the federal subsistence harvest of Dolly Varden, trout, smelt, and eulachon by all rural residents of the Southeast Alaska and Yakutat areas, and the area is open to subsistence harvest of salmon by all rural residents of Alaska. These overly broad designations provide a federal subsistence preference for the far north rural residents of Barrow to fish for salmon on streams in a southeastern urban community over 1,000 air miles from home and provide a preference to rural residents of the southern southeast community of Hydaburg in an urban northern southeast community over 225 air miles from home.

Background: The waters subject to this determination constitute a very small portion (less than 10%) of the freshwater fisheries in Districts 11 and 15 of Southeast Alaska. They are very important to residents of the Juneau area but are not important to rural residents and are rarely used for any purpose by rural residents of any community. In acting on previous proposals, the Federal Board suggested it would be appropriate to adopt a determination of “no Federal subsistence priority.”¹ In December 2007, the Federal Board rejected the State’s proposal (FP08-04) requesting such a determination, without evaluating the eight regulatory factors concerning customary and traditional use of each fish stock by each community. As early as 2000, the Interagency Staff Committee informed the Federal Board that there was a lack of substantial evidence to show that communities in the region have customarily and traditionally harvested and used stocks of rainbow trout, cutthroat trout, and Dolly Varden along the Juneau road system. Because there is no substantial evidence for these arguments, it is clear that any use of Juneau road system fish stocks falls outside the regulatory definition of customary and traditional use, *see* 50 CFR §100.4.

Application of the September 23, 2008, Ninth Circuit Court opinion in *State of Alaska v. Federal Subsistence Board*, 544 F.3d 1089, makes it clear that an adequate record to support a C&T determination for fisheries on the Juneau road system has not been developed and cannot be established. As the Court held in its decision, Federal Board C&T determinations must be supported by substantial evidence of a specific rural community or area’s demonstrated customary and traditional taking of a specific wildlife population or specific fish stock, not general species, within specific geographic locations. *Alaska v. Federal Subsistence Board*, at

¹ Federal Board’s analysis of FP06-31 in January 2006 and threshold analysis of the Federal Board’s denial of the State’s Request for Reconsideration FRFR 06-05, dated August 22, 2006.

1094-99. The Board's determination must have a "substantial basis in fact." *Id.* at 1094. The Court held: "Under 50 C.F.R. §100.16, C & T determinations should 'identify the specific community's or area's use of specific fish stocks and wildlife populations,'" "and not Chistochina's use of moose in general." *Id.* at 1096. The Court added that the Federal Board's "regulations clearly tie C & T determinations to the specific locations in which wildlife populations have been taken" and "each C & T **determination** must be tied to a specific community or area and a specific wildlife population." *Id.* at 1097 (emphasis in original). The Court further emphasized: "Specific communities and areas and specific fish stocks and wildlife populations are, by definition, limited to specific geographic areas" and "a C & T determination is a determination that a community or area has taken a species for subsistence use **within a specific area.**" *Id.* at 1097-98 (emphasis in original).

The Ninth Circuit pointed out that six of the Federal Board's eight C&T factors refer to a "pattern of use" of "specific fish stocks or wildlife populations," and a seventh factor also imposes explicit geographic limitations by directing the Board to consider whether there is "consistent harvest and use of fish or wildlife . . . near, or reasonably accessible from the community or area." *Id.* at 1098; *see also* 50 C.F.R. 100.16(b). Available information cannot support a determination that any rural community has a "pattern of use" of any fish stock on the Juneau road system. There has been no "consistent harvest" of fish stocks on the Juneau road system by any rural community, and the Juneau road system fish stocks are not "near or reasonably accessible" to any rural community.

In *Alaska v. Federal Subsistence Board*, the Court upheld a C&T determination for Chistochina residents to take moose upon all federal lands within Game Management Unit 12 based on: (1) the assumption, which the Court thought had support in the record, that the populations of moose which had been historically taken by Chistochina residents within a 2500 square mile area were the same populations of moose on other federal lands within the Unit; and that (2) the alternate rationale, somewhat dependent on the first, that the Federal Board was justified by a "benefit to management" in designating a C&T area for Chistochina to take those moose within all 5,900 square miles of federal lands within the Board's pre-determined areas A, B, and C, rather than being required to carve out a new area for Chistochina limited to just the 2,500 square miles of that community's actual historic use. *Id.* at 1096-97, 1099-1100.

On the Juneau road system, the situation is far different from what the Ninth Circuit Court believed the situation to be for moose in GMU 12. First, salmon and trout stocks found in individual streams on the Juneau road system represent distinct stocks. Evidence of take of the same general species of fish in other districts, or even in other portions of the same districts, cannot be used to establish historic taking of the specific stocks on the Juneau road system. The Federal Board has not developed a customary and traditional use determination specific to fresh waters of Districts 11 or 15. It is extremely unlikely that any rural community would be able to provide substantial evidence of the customary and traditional use factors for any fish stock on the Juneau road system.

Second, there has been no historic customary and traditional taking of the specific fish stocks on the Juneau road system by any Southeast rural community. The Juneau stocks are different stocks of fish than those which any Southeast rural community has historically taken. Moreover,

federal and state fisheries management both benefit by utilizing a separate regulatory framework for these easily accessed high use waters where fish stocks must be managed through much more conservative regulations than are required in other areas of the districts. Separating out this nonrural area also allows the Federal Board to carry out its responsibilities of balancing the competing purposes of ANILCA and avoiding unnecessary restrictions on nonsubsistence users.

Impact on Subsistence Users: Although both Southeast Alaska general federal subsistence fishery permits and the Southeast Alaska spring steelhead permits allow fishing on the Juneau road system and require reporting of harvest by stream, no federal subsistence harvests by rural residents have been reported for the freshwaters of the road system within the City and Borough of Juneau boundaries. In fact, only two sport-caught fish were reported as having been caught by rural residents of Southeast Alaska on the Juneau road system by responders to the Statewide Sport Fish Harvest Survey from 2004 through 2006. There is no evidence of customary and traditional taking of specific fish stocks for subsistence use by any rural resident in freshwaters that cross the road system within the City and Borough of Juneau boundaries. Meaningful subsistence fishing priorities for rural residents exist in streams that are closer to their respective communities. Eligible rural residents would have to travel substantial distances by boat or airplane in order to fish on Juneau roads, and such harvest would not be cost effective. Based on the lack of documentation of any subsistence use, the Federal Board should exempt the fresh waters of the Juneau City and Borough road system area from region-wide regulations by making a negative customary and traditional finding for all communities for all fish stocks in freshwaters that cross the road system within the City and Borough of Juneau boundaries. This action would have no impact on federally qualified rural subsistence users.

Opportunity Provided by State: State regulations provide for a variety of sport fishing opportunities in freshwaters and adjacent shoreline areas, but these opportunities are more restricted than elsewhere in Southeast Alaska. Most people fish for subsistence and recreational use in marine waters. The Department's sport fisheries website for the Juneau road system lists only 15 freshwater streams and, although saltwater shoreline areas are also available for anglers to fish, fishing in saltwater for trout and Dolly Varden is more restricted and subject to lower bag limits than in other areas of Southeast Alaska. Nearly all freshwater sport fishing activity (roughly 80%) along the Juneau road system takes place in four primary streams (Cowee Creek, Montana Creek, Peterson Creek, and Fish Creek). Fish populations in these streams are relatively small. Given Juneau's relatively large human population and road access, the potential exists for over harvesting local fish resources if additional harvest opportunity is provided. Several small roadside streams are closed to sport fishing altogether, and others are closed to salmon or Dolly Varden fishing. Restrictive bag and possession limits are in effect for many species as well. Juneau roadside bag limits, possession limits, and size requirements differ in several respects from regional regulations. Bag and possession limits have been reduced for coho salmon, sockeye salmon, and Dolly Varden. In addition, cutthroat trout size limits are more conservative in the Juneau area than in other areas of Southeast Alaska. These restrictions on Dolly Varden and cutthroat trout are also effective in all salt water adjacent to the Juneau City and Borough road system to a line ¼ mile offshore.

Because Juneau is a non-rural area, residents of Juneau who historically used fish stocks in the area are ineligible to participate in the federal subsistence fishery and cannot qualify for a federal

customary and traditional use determination. The existing federal subsistence regulations could lead to even more restrictions on non-federally qualified users (e.g., Juneau residents) in the non-rural area along the Juneau road system on both state and federal lands. These further restrictions could potentially force Juneau residents to travel long distances to rural areas to participate in freshwater sport fisheries. They might also result in increased state subsistence and personal use participation in these areas. They could thus create increased competition and be detrimental to the satisfaction of subsistence needs in those rural areas. Further state restrictions along the Juneau road system would also impact opportunities for those who relocate from rural areas to Juneau and rely upon opportunity in the Juneau area to continue their fishing activities.

Conservation Issues: While conservation concerns are not a factor in the Federal Board's C&T analysis, they do provide a common sense rationale for separating the Juneau Road system and specific stocks in the area from other "remainder" areas of Southeast Alaska and for making sure that only communities with established customary and traditional use of the specific stocks in the area receive a federal subsistence priority on those stocks. The Department has continually expressed conservation issue concerns to the Federal Board about sustainability of highly accessible fisheries on the Juneau road system if these fisheries are subjected to any participation under liberal federal subsistence harvest regulations. This proposal specifically requests a Customary and Traditional determination for specific fish stocks in a specific area. Comments illustrating the Department's ongoing concerns and conservation issues were previously presented to the Federal Board for proposals FP06-31, FP08-04, the Department's Fisheries Request for Reconsideration 06-05, and FP09-04.

Jurisdiction Issues: According to the Department's Fish Distribution Database, the majority of fish habitat and documented fish observations in these streams are not located within federal lands. Some streams have relatively inaccessible headwaters on federal land, but they flow through State, private, and other land ownership and **are not within the Tongass Forest boundary prior to crossing Juneau roads to enter marine waters**. Other streams along the Juneau road system flow entirely on non-federally owned land. We request that the federal maps be corrected to accurately portray the Tongass Forest boundary, which specifically excludes a significant portion of the Juneau area. The Juneau area was an exclusion from the Tongass Forest long before statehood.

In order for rural residents to know where they can legally participate in federal subsistence fisheries, and to aid enforcement personnel in determining whether activities are legal, we request detailed land status maps depict specific boundaries of waters claimed to be within federal subsistence jurisdiction. Maps provided by the federal program are not accurate enough to ensure federal subsistence users do not inadvertently fish from lands not claimed under federal jurisdiction. Significant portions of lands surrounding the Juneau road system are bordered by state or private lands, where there either is no federal jurisdiction or where persons cannot participate in federal subsistence fisheries while standing on non-federal lands.

Recommendation: Support.



Sitka Tribe of Alaska

Tribal Government for Sitka, Alaska

September 21, 2010

VIA FACSIMILIE AND U.S. MAIL

Tim Towarak, Chair
Federal Subsistence Board
1011 E. Tudor Road
Anchorage, Alaska 99503
Fax: (907) 786-3333

Re: Request for deferment of Federal Subsistence Proposal FP09-05

Dear Mr. Towarak,

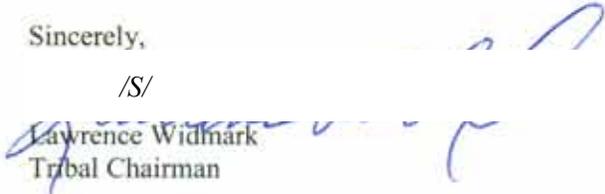
I write on behalf of Sitka Tribe of Alaska (STA), tribal government responsible to protect the health, safety, welfare and cultural preservation for our 4,100 tribal citizens. I write today to provide a written request to defer the Federal Subsistence Proposal FP09-05.

Sitka Tribe of Alaska submitted FP09-05 in March 2008 requesting that the Federal public waters in the Makhnati Island area, as defined in 36 CFR 242.3(b)(5) and 50 CFR §100.3(b)(5) be closed to the harvest of herring and herring spawn except for subsistence harvest by Federally qualified subsistence users. This proposal was deferred for a period not to exceed two years by the Federal Subsistence Board in January 2009. We appreciate the Office of Subsistence Management's consideration of our proposal, however at this time we request that this proposal be deferred to a later date. STA has a research paper on herring management and population assessment that still requires peer review, in addition, our Makhnati Island herring assessment funded through the Fisheries Resource Monitoring Program is currently in review, and we believe the new FSB Chairman may need more time to fully engage in this issue. Additionally, STA has recently begun a Herring Research Priority Planning Group to collaborate on herring management issues, which may result in further recommendations to support our proposal.

Thank you for the opportunity that the Federal Subsistence board process offers Tribes in the management and conservation of customary and traditional resources. Please contact our Resources Protection Department Director, Jeff Feldpausch, if you have any questions about this matter.

Sincerely,

/S/



Lawrence Widmark
Tribal Chairman

456 Katlian Street • Sitka, Alaska 99835 • (907) 747-3207 • Fax (907) 747-4915

cc: Theo Matuskowitz, OSM, Regulations Specialist, Fax (907) 786-3898

Bertrand J. Adams, Chairman, SERAC, C/O Robert Larsen, Council Coordinator, United States Forest Service, Wrangell/Petersburg Ranger Districts, PO Box 1328, Petersburg, AK 99833, Fax (907)772-5995

September 21, 2010

Southeast Alaska Regional Advisory Council
Robert Larson, Subsistence Council Co-coordinator
Tongass National Forest, Petersburg Ranger District

12 North Nordic Drive
PO Box 1328
Petersburg, AK 99833-1328

Re: FP09-15
District 15-Juneau Road System Area

To Whom It May Concern;

The Douglas Indian Association is a Federally recognized tribe pursuant to the Indian Reorganization Act of June 18, 1934. Our tribal membership includes descendents of the traditional territory of the T'aaku Kwáan (Douglas and Juneau) and Aak'w Kwáan (Juneau and Auke Bay) and other Alaska Natives and American Indians residing in our region.

We take exception to comments issued by the Alaska Department of Fish & Game(ADF & G), e.g., "Because the Juneau non-rural area has no specific customary and traditional use determination," (page 32) and, "There is no evidence of a customary and traditional use of Juneau area fish stocks by any rural resident." (Pg. 33) and Table 1, "Juneau City and Borough Settled in 1880" (pg. 133), although other communities such as Wrangell and Skagway origins are designated Traditional Tlingit.

On its Historical Overview, ADF & G stated, "Russians had limited influence on the Tlingit largely because they were unable to conquer them outside of Sitka (Schroeder & Kookesh 1988:15). In the last comment, legal opinion showed, "Alaska Natives under the Russian rule enjoyed rights and privileges that would evaporate as the Americans purchase the right to occupy Alaska. The Imperial law of Russia recognized the settled natives, including the Aleuts, Kodiaks, Eskimos and Tlingit who embraced the Christian faith; as Russian citizens on the same footing as white subjects." (Cohen's Handbook of Federal Indian Law, Sec. 6 pg. 404.)

The other comments can be summarized with the assumption that Juneau was not inhabited and no customary and traditional use of Juneau existed prior to the discovery of Gold by Juneau and Harris in 1880. It was the Tlingit, one in particular, Chief Kowee, who brought these two gold seekers to Juneau. At the time, there were two permanent villages in Douglas and Treadwell and the present site of Juneau was a summer fish camp for the Auk Tribe who had a permanent village in Auke Bay. Anthropologists have shown historically eight villages that were occupied and half as many forts within a 25 mile radius of Juneau.

NOAA's Community Profiles for the North Pacific Fisheries-Alaska/Southeast Alaska/City and Borough of Juneau (page 99) states, "The area had been previously inhabited by Tlingit groups. They had developed an ecologically adapted system of life based on hunting, fishing, and gathering practices combined with complex trading networks. The Gastineau Channel was one of their main fishing grounds. In fact, records exist showing that after Chief Kowee's transgression, other Chiefs from the Taku and Auk Tribes organized and petitioned for protection from the influx and aggression of the White man in the Juneau area."

To summarize, the Douglas Indian Association objects to the characterization that there was no customary and traditional use of the Juneau area fish stocks and we request that ADF&G and other agencies as well follow the lead of certain Federal agencies in working with local tribes in developing their Tradition Ecological Knowledge (TEK).

Sincerely,

Frank Miyasato, President

Cc: DIA Tribal Council

Dear Federal Subsistence Board Members,

I would like to address proposed regulations on Chinook salmon on the Yukon River. This magnificent and uniquely irreplaceable run of salmon, are becoming more and more threatened.

I understand that you folks are in the process of drafting and considering new regulations for this resource. Included in these regulations are regulations concerning the “barter trade”.

Before you do anything, I think it important for you to understand that this Chinook salmon, is simply the rarest and most desirable salmon on earth. If you can find one, fillets of this salmon regularly go for upwards of \$40 to \$50 a pound.

Considering the incredible value of these fish, and the dearth of economic opportunities in communities up and down the river, this is a recipe for wide spread poaching of fish. With the current reporting system being so weak and voluntary, this is a situation ripe for abuse.

The poaching of fish on the Yukon is not new, but for the most part has a history of being un-enforced. Consider that in 1987 4,000,000 lbs. of chum salmon were poached from this river. Most of this poaching went on under the noses of the fisheries managers in Fairbanks.

The hotbed of poaching is predictable using simple common sense. It is the area of the Yukon which is easily accessible via the road system, and close to Fairbanks which is a major population center, providing a ready cash market.

The other known about poaching is, that it often happens under the guise of “subsistence”.

The bottom line is that commercial poaching under the guise of “subsistence” and “barter trade” has been going on for a decade now, with virtually zero enforcement. I cannot find a single case being enforced. The sales of Yukon Chinook salmon is done openly with no paperwork or ability to even tell if the products are legally caught.

This trade is growing, and has been an open secret for some time now.

Before I go on, I think it is important to point out that not all subsistence users are abusing this system. Most are not, but FWS is now on the road pointing out inadvertently that this practice is legal to many subsistence users, that have not been selling Chinooks to so far. If the entire human population start entering the barter trade, there will not be any spawners. If this happens, would the managers know in enough time to save the spawning population?

I have my doubts under the current system.

This poaching has been an open secret for a decade, and fisheries managers have conspicuously not taken any enforcement actions. You are sending a bad signal here.

Much of these ‘barter’ or poached Chinook salmon are entering the consumer food market, with no food safety checks and balances. It is only a matter of time until someone becomes ill with *lysteria*, or *salmonella*, or *botulism*; **All of which can be fatal.**

When there are potential fatal consequences, failure to act on a known and very serious problem, produces extensive liabilities.

Some of this poaching would not be significant enough to matter, but considering the dire straights of this resource, every fish matters. The subsistence harvest that is being sold commercially now exceeds the Alaska Yukon River commercial harvest.

Right now the “subsistence harvest” and the “barter trade harvest” are numbers which are rally piss poor estimates at best. Managers get these numbers sometimes a year after the fishery has ended.

A reporting system that has all the essential motivating factors in place to poach fish, with lax reporting, is irresponsible management considering the rarity of this unique stock of salmon and its well known conservation issue. This reporting system is an example of irresponsible fisheries management practices.

There is a regulation change coming concerning the legal mesh size for harvesting Chinooks. This mesh size change will increase the number of Chinook harvested per hour significantly; Maybe as much as 35%. Additionally the introduction of free nets will inevitably replace nets that have not been in use for years, with brand new nets, increasing the actual numbers of nets in the river. These new nets are replacing obsolete nets, with nets that are more invisible in the water. Together this scenario is setting up a substantial increase in fishing capacity targeting Yukon Chinook, over previous years.

Last, let me point out that I have personal knowledge of the Chinook fishery in and around Kaltag. Barter trade is non-existent, and the commercial fishermen utilizing fishwheels have voluntarily been returning all Chinooks caught unharmed and alive back into the river. This practice is a laudable practice, and good for the Chinook populations, and all salmon users on the Yukon.

In *four years* not a single commercially caught Chinook has died.
Zero landed.
Zero sold.
Zero bartered.

Will this practice continue into the future?

That will depend upon a number of factors. *One*, if they recognized for their environmentally friendly method of catching chum salmon, this conservation effort will certainly continue.

Second, if it is apparent that other users along the river are not genuinely sharing the conservation sacrifices, it will be tougher not join the barter trade, because to not do so makes them look like fools.

If you add all the facts above, you will easily see that this is a Perfect Storm. This could be the end of the Yukon Chinook salmon run. Most of these facts have been obvious for years, with little effective management.

The conflict between upriver urban fishers and downriver fishers, is counter productive, and only decrease the success of rebuilding this run, which is the ultimate solution. Greed and envy will doom this resource, as it has others around the globe. Watching sales of Chinook products in Fairbanks, while pointing the blame finger downriver to the users there, inflames people, which is decidedly unhelpful.

In the case of the middle river constructive encouragement towards more environmentally friendly selective fishing practices, rather than punishing them for catching Chinook salmon, when in fact they are voluntarily not catching Chinook salmon, would be responsible management.

The Canadians have been at the forefront of this movement which is sponsored worldwide by the United Nations leadership.

Selective fishing practices should be encouraged and rewarded, rather than punished.

Sharing sacrifices; understanding the downriver residents' plight with no alternative economic opportunities, and their incredible suicide rates; realistic regulations that are easy to enforce; the will and backbone to actually enforce them against the serial abusers (poachers); all play a vital role in getting more Chinooks on the spawning grounds.

There is a lot of the blame game going around, and nothing prevents coordinated and genuine cooperation on conservation issue, than falsely accusing folks of something they know in their hearts they did not do. To fix this situation, we will require real cooperation, and the squelching of petty politics and resource grabs disguised and Holy Acts.

In short get control of this fishery now, because this fishery may only be a year away from an Endangered Species listing. Trust me; it is in everybody's best interests, including the trawl industry, that we prevent this from happening. While some will view an Endangered Species listing as good for their interests, I am dubious, when we have this much uncontrolled poaching going on.

If there is a spike in uncontrolled fishing on this river this upcoming season, the blame will be placed upon the shoulders of in-river subsistence users and the Federal government and its role as the fisheries manager. The trawl industry will hammer this home, and they will have plenty of facts to back up their claims. The trawl industry has plenty of money and a billion reasons to make this an issue, if they have the facts to back it up.

Let's deny them the facts.

We all know we have a problem in the ocean with trawlers, but it is hard to isolate the problem in the ocean, when there are known conservation problems in the river.

In closing we have a Treaty with Canada, and like the other users on the river; ...

... how can we expect them to hold up their end of the bargain, unless we hold up ours?

Thank you for taking the time to consider my comments. I know this is a tough issue, and I sincerely appreciate your efforts to manage the tough issues.

Warmest personal regards,

Doug Karlberg

Tanana Tribal Council
PO Box 130
Tanana, AK 99777
Phone: (907) 366-7170
Fax: (907) 366-7195
Email: geraldnicholia@yahoo.com

October 19, 2010

Federal Subsistence Board
Office of Subsistence Management
1011 East Tudor Road, MS-121
Anchorage, AK 99503

Re: Yukon River fighting for fishing opportunity

Dear Board members

The Yukon River districts need to sit down and come up with a better plan then to nit pick away at each others right to fish. I have seen the proposals in your 2011 – 2013 fisheries proposals. It is frustrating to see these kinds of proposals that causes more damage then good. I was once on the Eastern Interior RAC and work with the Western RAC and the Yukon Delta RAC. I knew John Hanson and Harry Wilde and along with Ron Sam we work towards consensus on issues that provided harvest opportunities for all Yukon River fishers. I would like to see the three RAC's sit down and hash their issues out instead of fighting for the limited amount of salmon that is left.

How long have the managing agencies been trying to rebuild Yukon River salmon stocks, have been for the last twenty years and it is only getting worst. Something has to be done right instead of wrong. I encourage the board to seriously look into having a tri-council meeting to make the Yukon River fishers work together instead of fighting with each other.

Your response to this letter would be greatly appreciated by me. Thank you.

Sincerely,

/S/

Gerald Nicholia
Realty Director

Cc: TTC

Comments on the Federal Subsistence Proposals

2011

A report to
Federal Subsistence Western Interior Regional Advisory Council

from
Kwik'pak Fisheries

October 5-6, 2010

McGrath, Alaska

By
Gene J. Sandone¹

¹ Gene J. Sandone
G.Sandone Consulting, LLC
4950 W. Clayton Ave.
Wasilla, AK 99654

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*

OSM Preliminary Conclusion Oppose proposals FP11-01 and FP11-06

State of Alaska Recommendation: Oppose proposals FP11-01 and FP11-06.

Kwik'pak Fisheries Recommendation: Agree with OSM's Preliminary Conclusion and the State of Alaska Recommendation: **Oppose Proposals FP11-01 and FB11-06.**

Comment: Note that the recent BOF and FSB change from unrestricted mesh gillnets to a maximum mesh size of 7.5in stretch mesh effectively caused the gillnets to be shallower since the 45 mesh in the lower Yukon and the 60 mesh depth restriction in the Upper Yukon did not change. Changing from an 8.5" stretch mesh gillnet to a 7.5" stretch mesh gillnet, effectively decreases the webbing of the depth of the net by 45 inches or 3.75 feet, or 12%. If adopted, Proposal FP11.01 would reduce the depth of the 7.5 in stretch mesh gillnet to 35 meshes that would result in an additional depth restriction of 6.25 ft. The overall depth reduction from the 8.5 inch stretch mesh gillnet would be 10 feet or 31% of the original mesh depth of the 8.5" stretch mesh net.

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*

OSM PRELIMINARY CONCLUSION Oppose Proposal FP11-02.

State of Alaska Recommendation: Oppose Proposal 'FP11-02.

Kwik'pak Fisheries Recommendation: Agree with OSM's Preliminary Conclusion and the State of Alaska Recommendation: **Oppose Proposal FP11-02**

Comment: Harvests, both commercial and subsistence, should be commensurate with the run size. State subsistence fishing opportunity is directly linked to abundance and is not restricted unless run size is inadequate to meet escapement needs. In most years subsistence fishing restrictions are not necessary to achieve escapement goals. Additionally, the new maximum mesh gillnet mesh size, 7.5",

may play an important role in allowing more larger and older aged fish to escape the fisheries and be allowed to spawn in greater numbers.

Some form of first pulse protection may be necessary in some years to protect the Canadian component when that segment of the run is poor. During the most recent AYK BOF meeting in January 2010, the BOF adopted a regulation that gives ADF&G managers emergency order authority to sequentially close fisheries to allow pulses of Chinook salmon to migrate upstream with little or no exploitation through all fisheries to their spawning grounds. This regulation will be also used to bolster escapement to a particular section of the river when those runs are very poor. Shifting too much of the harvest onto Alaskan stocks, however, can have detrimental consequences on those stocks. Harvests should be spread out over the entire Chinook salmon run. Since District 5 harvests mostly those stocks bound to Canada; it may be prudent to reduce the harvest of the first pulse of Chinook salmon within the mainstem Yukon River in Districts 1, 2, and 3. Those districts harvest Chinook salmon from all Yukon salmon stocks. A slight restriction on the first pulse, for example, pulling one period, may provide enough fish for upriver subsistence users and for escapement into Canada. The Lower Yukon Area will be able to harvest on the second and third pulse and thereby harvest slightly more Chinook salmon bound for Alaskan tributaries and reduce their exploitation on the Canadian component. Approximately 90% of the subsistence harvest is complete by the midpoint of the run. Slightly delaying that harvest may not only provide benefits to the Canadian component of the Yukon River Chinook salmon stock, but may also provide economic benefits because allowing more Canadian fish to pass upriver may prompt an earlier commercial fishery for summer chum salmon in the drainage.

The complete closure of the first pulse of Chinook salmon would unnecessarily cause hardship to all subsistence fishermen within the Alaskan portion of the Yukon River drainage and, in most years, is totally unwarranted.. 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. Additionally, a record escapement was observed in 2003; escapements observed in 2005 and 2009 ranked third and fourth behind the 1996 escapement. The escapement objective for the Canadian mainstem was not met in 2007, 2008, and 2010.

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

OSM Preliminary Conclusion

Oppose

ADF&G Comments

Oppose

Kwik'pak Fisheries Recommendation: Agree with OSM's Preliminary Conclusion and the State of Alaska Recommendation: **Oppose Proposal FP11-03**

Comment: This is a good idea but should be submitted to the Alaska Board of Fisheries first because of jurisdictional issues. The length of Subdistrict 5D, the inefficiency of the fishing gear, the relatively

small catches per unit area, needs to be considered when submitting a proposal to split Subdistrict 5D into more management units.

Note that Subdistrict 5D widow subsistence fishing schedule calls for fishing to occur 24-h a day, 7-days a week because of the inefficiency of the gear and the decreased number of fish in that most upper portion of the Yukon River in Alaska..

Between 1999 and 2008, Subdistrict 5D has taken between 40% and 66% of the total District 5 Chinook salmon subsistence harvest, averaging about 53% of the District 5 harvest and approximately 16% of the total Alaskan harvest within the Yukon River. For comparative purposes, District 1, 2, and 3 have taken an average of approximately 13%, 20%, and 11%, respectively of the total Alaskan Yukon River harvest during the same time period.

Also Subdistrict 5D subsistence fishers have taken between 5% and 61% of the fall chum subsistence harvest within District 5, averaging about 45% of the District 5 subsistence harvest and nearly 27% of the total Alaskan subsistence harvest within the Yukon River. For comparative purposes, District 1, 2, and 3, have taken an average of approximately 8%, 5% and 1%, respectively.

It is important to note, however, that the vast majority of the Chinook salmon and a substantial portion of the fall chum salmon harvested in District 5, and more so in Subdistrict 5D above the confluence of the Yukon and Chandalar and Yukon and Porcupine Rivers, are Canadian-origin salmon. This fact alone, may necessitate more management units within Subdistrict 5D so that subsistence harvests could be appropriately distributed.

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

OSM Preliminary Conclusion

Oppose

ADF&G Comments

Oppose

Kwik'pak Fisheries Recommendation:: Agree with OSM's Preliminary Conclusion and the State of Alaska Recommendation: **Oppose Proposal FP11-04**

Comments:

In our opinion, fishwheels harvest predominantly small Chinook salmon. Even in the rapids, information from fishwheel harvests and gill net harvests dramatically differ on the size of fish captured. Figure 1 presents this year's (2010) data collect by Stan Zuray at the rapids for both fishwheel and gillnets along with the length information of salmon captured at the Mountain Village Chinook Salmon Drift test fish project.

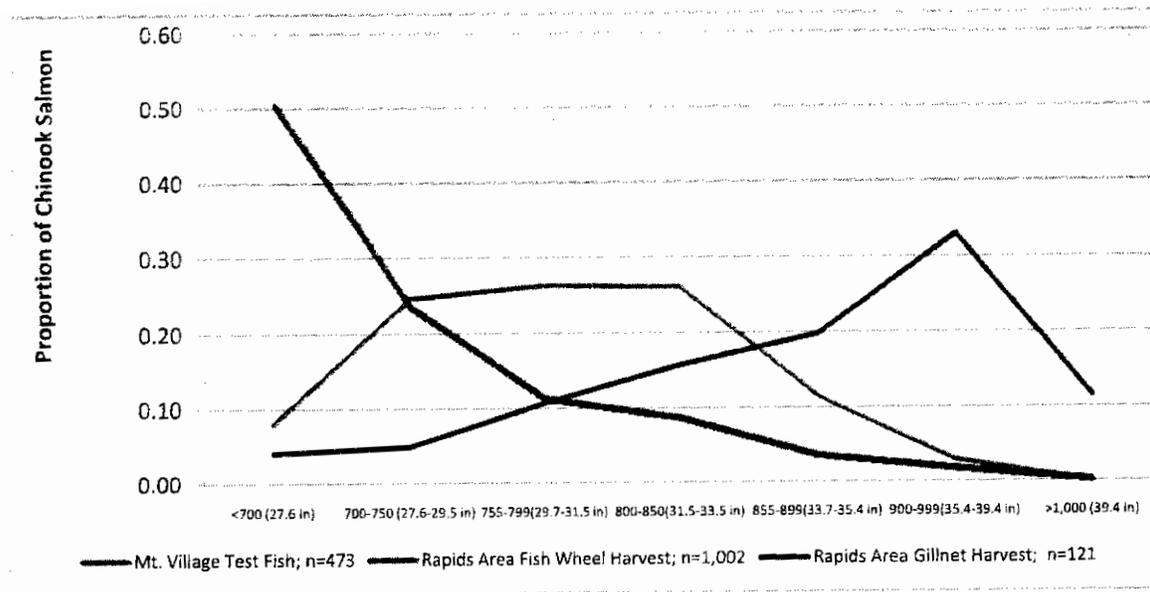


Figure 1. Length frequency of sampled Chinook salmon captured in the Mountain Village test fishery, the Rapids test fish wheel project, and from gillnets fished in the Rapids area in District 5.

The majority, 51%, of Chinook salmon sampled from Stan Zuray’s test fishwheel are very small fish, less than 700mm (27.6 inches). Chinook salmon greater than 800mm (31.5 inches) accounted for only 14% of the total sample. Additionally, Chinook salmon greater than 900mm (35.4 inches) accounted for approximately 2% of the sample (Figure 1). Females accounted for approximately 14% of the sample. Average length of the sampled salmon was 681mm (SD=113mm) (26.8 inches; SD= 4.4 inches) (Figure 2). Average weight was 4.9 kg (SD 2.4kg) (10.8 lbs; SD=5.3 lbs)

Although the sample taken from the subsistence gillnet harvest was small, 121 Chinook salmon, there are marked differences between the fishwheel sample and the gillnet sample from the same area. The vast majority, (119) of the gillnet-caught fish sample were taken from 8.0 inch gillnets. Two sampled gillnet caught Chinook salmon were taken from 8.25 inch gillnets. Note that the bin that contained the most Chinook salmon was the 900mm to 999mm (35.4 inches to 39.4 inches) length bin. The sample of Chinook salmon from the gillnet harvest in the rapids area were much larger fish than the fishwheel sample and contained a higher proportion of female salmon. Chinook salmon over 800mm (31.5 inches) accounted for 80% of the sample and fish greater than 900mm (35.4 inches) accounting for 45% of the sample (Figure 1). Approximately 41% of the total number of Chinook salmon sampled from the gillnet harvest were female. Average length of the salmon sampled was 889 mm (SD=107mm) (35.0 inches; SD=4.2 inches) (Figure 2). Average weight was 8.4 kg (SD 2.9kg) (18.4 lbs; SD=6.4 lbs)

The Mountain Village Drift test fish sample from 7.5 inch mesh gillnets consisted mainly of fish between 700mm and 850mm (27.6 inches and 33.5 inches), 77% of the sample. Approximately 41% of the Chinook salmon captured were greater than 800mm (31.5 inches) but only 3% were greater than 900mm (35.4 inches) (Figure 1). Approximately 40% of the Chinook salmon sampled from the Mountain Village test fishery were female. Average length was 782 mm (SD=73mm) (30.8 inches; SD= 2.9 inches) (Figure 2). Chinook salmon sampled from this test fishery were not weighed.

Although not strictly comparable to the data collected at the rapids because of stock specific differences and removals between the two locations, it appears that the mean length of fish captured in 7.5 inch gillnets at Mountain Village was larger than the fishwheel sample but smaller than sample from the rapids gillnet sample (Figure 2). Note however, that the proportion of fish greater than 900mm was very similar in the Mountain Village test fish sample and the rapids fishwheel sample, 3% and 2%, respectively (Figure 1). However, the proportion of females in both gillnet samples was very similar, 41% and 40%, but much greater than the fishwheel sample, 14%. Similar to the difference in mean length between the fishwheel and gillnet samples taken from rapids vicinity harvests, fish weights were markedly different, 4.9 kg (10.8 lbs) and 8.4kg (18.4 lbs), respectively.

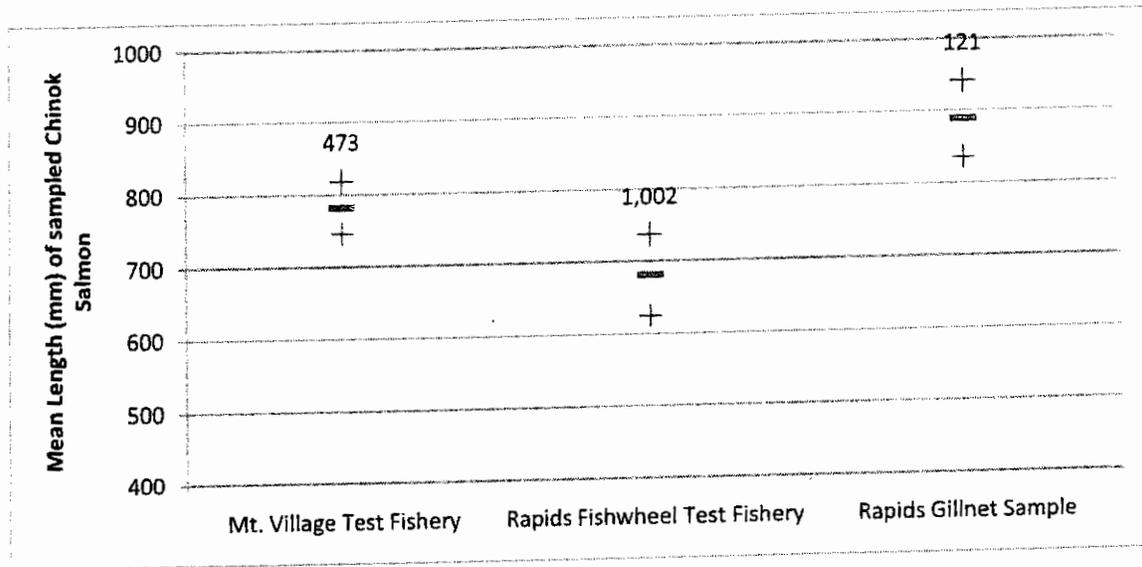


Figure 2. Mean length and standard deviation of Chinook salmon sampled in the Mountain Village test fishery, the Rapids Fishwheel test fishery and gillnet harvest in the Rapids vicinity, Yukon River, 2010. Number above the upper SD limit indicates sample size.

It appears that from these data, fishwheels serve a valuable purpose in harvesting small Chinook salmon that gillnets of 7.5in and greater may not harvest. It is our opinion that the length, age, and sex structure of the escapement should be comparable to the annual run, or the long-term brood year return. If the exploitation of small fish is less than the larger fish, then more of the younger, smaller and predominantly male fish will be allowed to spawn. Although this probably has some minor consequences overall, we should still strive to allow the optimum number of females and large fish to reach the spawning grounds regardless of the number of small male fish on the spawning grounds. It appears from the data in Figure 1, that the use of 7.5" mesh gillnets and fishwheels may complement each other.

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*

OSM Preliminary Conclusion

Oppose

- ADF&G Comments**
- . **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.
 - . **Oppose** prohibiting use of salmon other than Chinook salmon for dog food in subdistricts 4 and 5.
 - . **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.
 - . 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.

Kwik’pak Fisheries Recommendation:

Disagree with OSM’s Preliminary Conclusion;
AGREE with State of Alaska Recommendation and reference their comments.

While we support limitations on sale of subsistence harvested salmon for cash, we believe that this proposal is not the vehicle to define “significant commercial enterprise”. There needs to be specifications on fish weight or number limits, and establishes reporting requirements for cash sales of subsistence harvested salmon. Regulations for customary trade may vary within regions, but should be applied drainage-wide. We don’t understand the reluctance at setting up some limitations regarding customary trade or defining “significant commercial enterprise”. However, we don’t believe that this proposal is the vehicle to define “significant commercial enterprise”.

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*

OSM Preliminary Conclusion

Oppose

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.

Kwik'pak Fisheries Recommendation: Subdivide this proposal and consider the drift net prohibition in Subdistricts 4A separate from the prohibition in subdistricts 4B and 4C separately.

Agree with State of Alaska.

Oppose prohibition of drift gillnets in Subdistrict 4A;

Support prohibition of drift gillnets in subdistricts 4B and 4C.

We support the prohibition of drift gillnets in Subdistricts 4B and 4C because it is not a traditional gear type used in the area and it expands and increases the harvest on the Canadian-origin Chinook salmon stock. When efforts are being considered to transfer subsistence harvest from the Canadian stock to Alaskan stocks when runs are poor, the continuation of this drift gillnet fishery is counterproductive. Although participation and Chinook salmon harvest has been low in this fishery there is concern that this fishery could support more participation and higher harvests.

One important change in the methods that people use to fish salmon in the lower river, as reported by Wolfe and Scott (2009), that fewer fishwheels are being employed and that fishermen are drifting with gillnets are now being utilized in some areas. As we have seen in the FP11-04, fishwheels catch smaller and more male fish than gillnets. This change not only allows a higher proportion of the smaller, predominantly male fish to arrive on the spawning grounds, but also increases the harvest on the larger and largest Chinook salmon as well. In District 4, the number of Chinook salmon is increasing (Figure 3) and with the decline of fishwheel use, these harvests probably include a larger number of large fish.

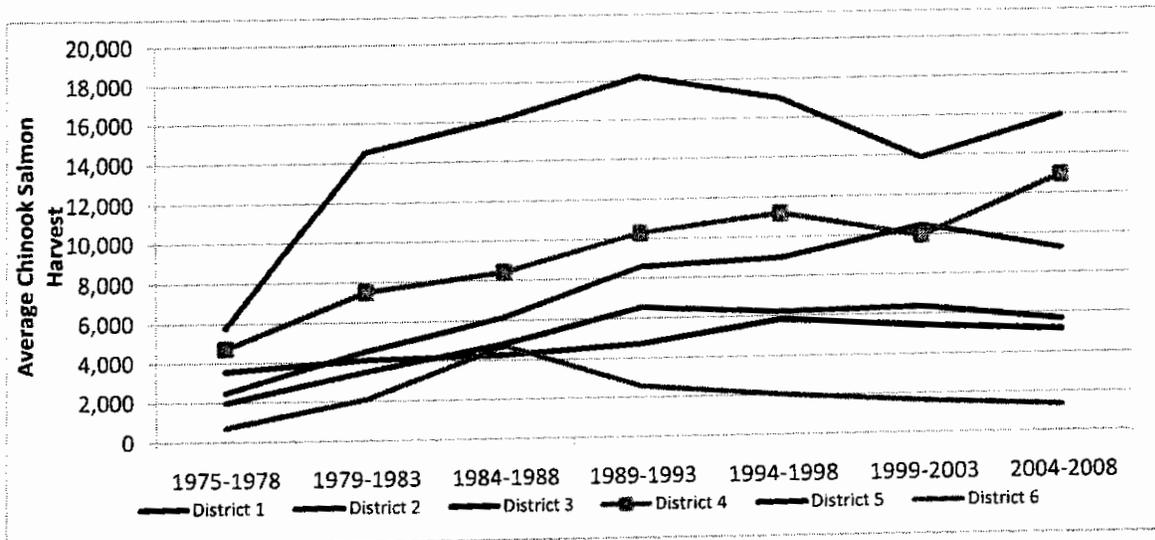


Figure 3. Average number of Chinook salmon taken in subsistence fisheries, by district, Yukon Area Management Area. (Data taken from Busher et. al 2009 and Golembeski and Bergstrom. 1999)

Additionally, as Wolfe and Scott (2009) also point out,

Increased drifting appeared to be associated with an increased reliance of Chinook salmon in middle river villages, as measured by per capita harvests. Previously, a greater mix of gear types (fish wheels, dip nets, set nets, and drift dip nets) caught substantial quantities of chum salmon. Shifts from shore-based gear (because of reduced local needs for dog food and the closure of roe fisheries) toward the large-mesh gill nets drifted in mid-river appear to be associated with increased per capita Chinook catches for subsistence food.

Figure 4 displays the increase in Chinook salmon harvest per fishing household.

Therefore, the increase in Chinook salmon harvest in the middle river not only translates into more Chinook being harvested, but also may result in larger Chinook salmon being harvested.

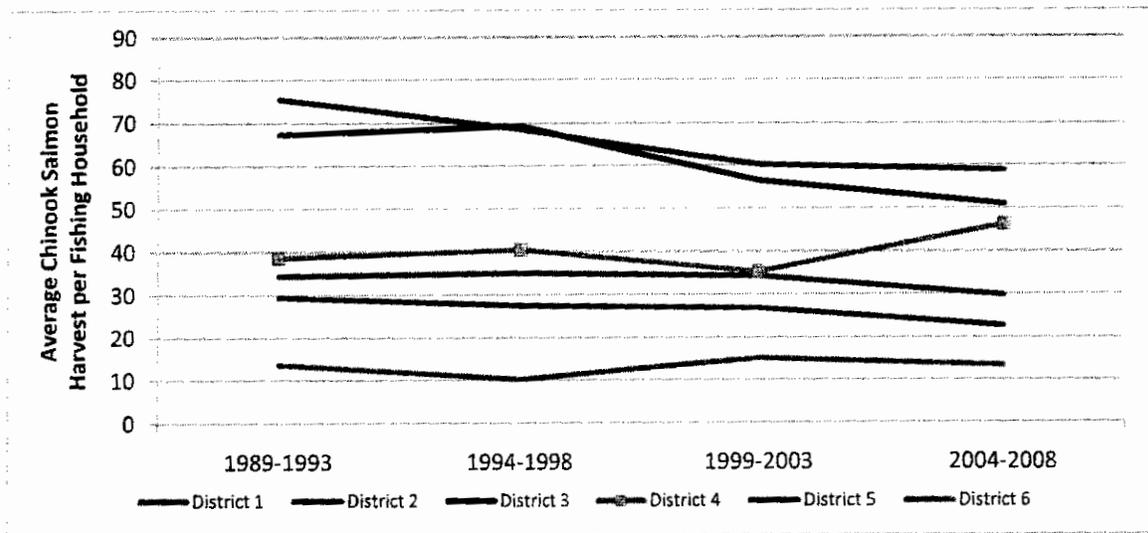


Figure 4. Average Chinook salmon per Fishing Household by Yukon Area Management District, 1989-1993 to 2004-2008. (Note data for 2004-2008 do not include data that are unavailable for 2006 and 2007)

Literature Cited

Busher, W. H., T. Hamazaki, and D. M. Jallen. 2009. Subsistence and personal use salmon harvests in the Alaska portion of the Yukon River drainage, 2008. Alaska Department of Fish and Game, Fishery Data Series No. 09-73, Anchorage.

Golembeski, V., and D. Bergstrom. 1999. Subsistence fishing and king salmon subsistence harvests in the Yukon River: An updated reports to the Alaska Board of Fisheries. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 3A99-21.

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*

OSM Preliminary Conclusion **Oppose**

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.

Kwik’pak Fisheries Recommendation: Agree with 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.

We also recommend that the proposal is modified to include the addition of 27(c)(12), which addresses customary trade between rural and others.

Comments:

The federal response states:

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.

Therefore, we recommend that the RACs support this proposal with modification of adding 27©(12), which addresses customary trade between rural residents and others.

The federal response also states:

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.

We believe that this statement by the federal government is unresponsive. Regulations from other RAC for the entire river, or for sections of the river beyond their portion of the river have been common. All share a common stock of salmon. Important regulations such as limiting customary trade should be drainage-wide. This issue affects subsistence users in the entire Yukon River drainage and should be discussed during a joint meeting of the Regional Councils within the Yukon drainage.

It also appears that the federal response indicates that they believe 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.

*However, they go onto say... 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.***

However, please note that on under FP11-05 (p 123) on the Effects of the Proposal, the federal government states: 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 RACs should also insist on a definition of a significant commercial enterprise so that enforcement is not problematic. Currently, the question of what is customary trade and what are prohibited sales of subsistence caught fish under federal regulations remains. As we understand it, since there is not a definition of "significant commercial enterprise", then we suspect that all sales of subsistence caught fish may be allowed. Without a clear definition of "significant commercial enterprise, there is no clear line between sales that are allowed under customary trade and sales that are not. Both federal and state enforcement agencies have refused to take action on fishers that abuse the resource by selling large amount of subsistence-caught salmon. Two advertisements on Craig's List for Yukon River Chinook salmon strips were observed this year. One was noted last year. Rumors and hear say abound about very large sales of Yukon Chinook salmon strips in front of the AFN convention; on the North Slope and testimony by Western Interior and Eastern Interior Regional Advisory Council members last year indicate that the Yukon River is unique regarding sales of subsistence caught Chinook salmon. We believe that the Yukon River is fast becoming the Chinook salmon strip basket of Alaska. The Yukon River Chinook salmon is a unique and prized fish. The high oil content of this fish stock makes it a delicacy. We believe that demand is high for Yukon king strips and it is growing.

Finally, the federal response state: 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.

In other words, subsistence uses are not prioritized. When a shortage occurs, subsistence users are restricted but not the uses. Depending on Section 804, a household that depends on a salmon stock for subsistence may not be allowed to fish, while a person who practices customary trade, or harvests fish to feed his dog team which he races for prize money, may. We believe that not prioritizing subsistence uses in ANILCA was a mistake. However, we know that it will take an act of Congress to change ANILCA and this may be very difficult to do. It is interesting to note however, that the FSB has already prioritized uses for Chinook salmon when they passed a regulation that prohibited the feeding of Chinook salmon to dogs, except under special circumstances.

We totally agree with the state's position and recommendation:

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.

At the most recent Y-K Delta RAC meeting last week, this proposal was modified to allow for, but limit customary trade for salmon between rural residents to \$750 per fishing household per year. They also voted to allow but limit customary trade for salmon between rural residents and others to \$750 per fishing household per year. The Bristol Bay regulations that limit customary trade between rural residents and between rural residents was used as a template to craft this proposal.

We believe that this is a good starting point for discussions to proceed. We encourage the Western Interior and Eastern Interior RACs to either support this modified proposal or to make changes to the dollar amount, but not to completely oppose this proposal.

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 Record keeping 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*

OSM Preliminary Conclusion: Oppose

ADF&G Comments: Support

Kwik'pak Fisheries Recommendation: Support with modifications:

Comment: Many of the comments provided in FP11-08 pertain here regarding the federal response statements. Specifically, the subsistence regional council needs to modify the proposal to include both rural and non-rural sales.

The federal response states that,

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.

It appears that the federal government does know that selling 200 pounds of Chinook salmon would diminish the small amounts of cash generated by the sale of subsistence-caught Chinook salmon. Why can they not define "significant commercial enterprise".

In closing we agree with the state comments on this proposal:

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.

At the most recent Y-K Delta RAC meeting last week, this proposal was modified to allow for, but limit customary trade for salmon between rural residents to \$750 per fishing household per year. They also voted to allow but limit customary trade for salmon between rural residents and others to \$750 per fishing household per year. The Bristol Bay regulations that limit customary trade between rural residents and between rural residents and others was used as a template to craft this proposal. Additionally, the Y-K Delta RAC also modified the proposal to allow for reporting of customary trade sales. The Y-K Delta RAC members used the same reporting form as use for reporting customary trade sales in the Bristol Bay Area. We believe that this is a good starting point for discussions to proceed. We encourage the Western Interior and Eastern Interior RACs to either support this modified proposal or to make changes but not to totally oppose this proposal.

Hello Kathleen

Just want to let you know and the EIRAC that I do not support the banning of fish wheels in tis district 5 or any other proposal that would restrict this district more then we are already restricted. Another thing is that all Yukon River districts have to learn how to work together for the fish and those who rely upon the fish to feed their families thru out the long winter. Money is not everything, money can't get the fsih back to what it was. All managing agencies have to understand the the fish are not going to get back to their historical numbers and another form of management has to be form to deal with dwindling fish stocks and how to allow those who rely upon fish for food to keep harvesting fish. Thank you, take care and have a good meeting.

Gerald Nicholia
Tanana
Yukon River D5