SEWARD PENINSULA SUBSISTENCE REGIONAL ADVISORY COUNCIL

Meeting Materials

October 23 - 24, 2018
Unalakleet

What's Inside

On the cover...

Unalakleet weir design allows for a complete census of all but the smallest returning salmon. Two enclosed passage chutes and live traps were installed to serve as platforms for enumeration and age, sex, and length sampling of migrating salmon.

USFWS photo by Jarred Stone

What's Inside

SEWARD PENINSULA SUBSISTENCE REGIONAL ADVISORY COUNCIL

Native Village of Unalakleet Community Building
Unalakleet

October 23-24, 2018
9:00 a.m. daily

TELECONFERENCE: call the toll free number: 1-866-820-9854, then when prompted enter the passcode: 4801802.

PUBLIC COMMENTS: Public comments are welcome for each agenda item and for regional concerns not included on the agenda. The Council appreciates hearing your concerns and knowledge. Please fill out a comment form to be recognized by the Council chair. Time limits may be set to provide opportunity for all to testify and keep the meeting on schedule.

PLEASE NOTE: These are estimated times and the agenda is subject to change. Contact staff for the current schedule. Evening sessions are at the call of the chair.

AGENDA

*Asterisk identifies action item.

1. **Invocation**
2. **Call to Order** (*Chair*)
3. **Roll Call and Establish Quorum** (*Secretary*).....4
4. **Welcome and Introductions** (*Chair*)
5. **Review and Adopt Agenda*** (*Chair*) 1
6. **Review and Approve Previous Meeting Minutes*** (*Chair*) 5
7. **Reports**
   - Council Member Reports
   - Chair's Report
8. **Public and Tribal Comment on Non-Agenda Items** (available each morning)
9. **Old Business** (*Chair*)
   - a. Marine Mammal/Seabird Die-off (*Gay Sheffield, Alaska Sea Grant*) 13
10. **New Business** (*Chair*)
    - a. Fisheries Proposals* (*OSM Fisheries/Anthropology*)

14. Closing Comments

15. Adjourn (*Chair*)

To teleconference into the meeting, call the toll free number: 1-866-820-9854, then when prompted enter the passcode: 4801802.

Reasonable Accommodations

The Federal Subsistence Board is committed to providing access to this meeting for all participants. Please direct all requests for sign language interpreting services, closed captioning, or other accommodation needs to Karen Deatherage, 907-786-3564 or karen_deatherage@fws.gov or 800-877-8339 (TTY), by close of business on October 15, 2018.

REGION 7
Seward Peninsula Subsistence Regional Advisory Council

Seat	Year Appointed *Term Expires*	Member Name and Community	
1	1993 ***2018***	**Theodore Katcheak** Stebbins	
2	2016 ***2019***	**Brandon D. Ahmasuk** Nome	
3	2010 ***2019***	**Louis H. Green, Jr.** Nome	**Chair**
4	2003 ***2019***	**Tom L. Gray** Nome	
5	2017 ***2020***	**Deahl Katchatag** Unalakleet	
6	2016 ***2020***	**Leland H. Oyoumick** Unalakleet	
7	2008 ***2020***	**Fred D. Eningowuk** Shishmaref	**Vice-Chair**
8	1994 ***2018***	**Elmer K. Seetot Jr.** Brevig Mission	**Secretary**
9	2012 ***2018***	**Charles F. Saccheus** Elim	
10	2015 ***2018***	**Ronald D. Kirk** Stebbins	

SEWARD PENINSULA SUBSISTENCE REGIONAL ADVISORY COUNCIL
Meeting Minutes

March 5-6, 2018
Nome Mini-Convention Center
Nome, Alaska

Meeting called to order at 10:26 a.m.

Roll call

A quorum was established with the following Council members present at the meeting or via teleconference: Louis Green, Jr., Brandon Ahmasuk, Elmer Seetot, Jr., Charles Saccheus, Tom Gray, Leland Oyoumick. Fred Eningowuk, Ronald Kirk and Deahl (Doug) Katchatag via telephone. Absent: Ted Katcheak.

Welcome and Introductions

Agency Staff/Public in Attendance
Karen Deatherage, Office of Subsistence Management (OSM), Anchorage
Karen Hyer, OSM, Anchorage
Robbin LaVine, OSM, Anchorage
Glenn Chen, Bureau of Indian Affairs (BIA), Anchorage
Jeanette Koelsch, National Park Service (NPS), Nome (telephone)
Ken Adkisson, NPS, Nome
Nicole Braem, NPS, Nome
Bill Dunker, Alaska Department of Fish and Game (ADFG), Nome
Letty Hughes, ADFG, Kotzebue
Brian Uberlaker, Bureau of Land Management (BLM), Nome
Walker Gusse, BLM Law Enforcement
Eric Osborne, Fisherman
Neil DeWitt, Anchorage (Telephone)
Orville Lind (Telephone)
Hannah Atkinson, NPS, Kotzebue (Telephone)
Sandra Medearis, Arctic News for the Nome Nugget
Tonia Osborne, University of Alaska Southeast, U.S. Fish and Wildlife Service (USFWS) Intern
White Mountain/Nome
Tara Tucker, Nome Public
Austin Pate, Nome Public
Bruce Seppi, BLM
Tom Spark, BLM
Jim Menard, ADFG Commercial Fisheries, Norton Sound, Kotzebue, North Slope Region
Justin Leon ADFG, Commercial Fisheries, Nome, Arctic Region
Gay Sheffield, Alaska Sea Grant

Review and Adopt Agenda

Seetot moved to approve the agenda. The following amendments were presented: Under Old Business, added WP18-46/47 regarding caribou in Unit 23. Under New Business, added Call for Nonrural Determination Proposals and Council Charter Update. Gray moved to adopt the agenda as amended, seconded by Ahmasuk and carried unanimously.

Elections

Gray nominated Louis Green for Chair, seconded by Seetot. Louis Green Jr. was elected Chair; Gray nominated Fred Eningowuk for Vice-Chair, seconded by Seetot. Fred Eningowuk was elected as Vice Chair; Katchatag nominated Elmer Seetot for Secretary. Seconded by Gray. Elmer Seetot Sr. was elected Secretary.

Review and Approve Previous Meeting Minutes

Seetot moved to approve the minutes, seconded by Ahmasuk. A spelling correction was noted for page 5, to change the spelling of AIR Mountain to EAR Mountain. Motion carried unanimously.

Council Member Reports

Eningowuk – The winter in Shishmaref was good in light of climate change. Some of the 36 walrus that washed up dead tested over the PSP limit. This is likely due to climate change and the oceans getting warmer. Eningowuk attended the Bering Sea crab trawl survey meeting last October. Surveys from 2010 to 2017 show a 90% decrease in blue/Arctic cod, 69% decrease in smelt, Tom cods are down 17% and Red King crabs decreased by 8%. People are harvesting caribou in the community and wolves are being seen in nontraditional areas. It was unusual to have waves in February and is the first time in his lifetime. Thin ice followed but it wasn't the kind of ice they used to have and will affect spring subsistence.

Gray – Gray attended the trawl survey presentation in Nome and encouraged locals to stay on top of this as it could impact commercial operations. Different fish are showing up and there are issues with shellfish, as well as walrus die-offs. Caribou came into the area late and the road closure prevented hunters from getting them. The oceans are angry and rough and catching beluga is getting harder and harder. There are lots of red and silver salmon, and the snow conditions should provide a good berry year. Weather changes are bringing both good and bad effects.

Kirk – The community is concerned about the walrus and PSP, and worried it could be happening to bearded seals, walrus and sea clams. Scientists need to be researching this to find out the cause.

Oyoumick – Oyoumick would like to know how much King salmon is caught on the high seas as bycatch and how much this impacts the King salmon coming into the Unalakleet River. Oyoumick supports continued FRMP funding for the Unalakleet River weir to understand what is happening to the fish.

Seetot – Port Clarence Bay usually freezes in December but froze January 4th this year. Caribou were present this past fall, but the wolves moved in and pushed them east towards Serpentine. Tom cod fish was late this winter and, with mild temperatures, the snow didn't accumulate until last month. Low pressure systems were coming in from the west and bringing in airborne particles, causing concern over polluted subsistence animals. Red salmon were abundant and benefited Teller and Brevig Mission, as well as a lot of Nome people.

Ahmasuk – It was a late winter and freeze-up, which is becoming the norm. Bearded and ring seal proposed listings are not due to population size but receding sea ice in the next 50-100 years. Marine mammals are testing positive for PSP which concerns locals who eat walrus, seals and clams. This has become a food security issue and needs resources for area testing. The red salmon run was good on the Pilgram and Sinuk rivers. There haven't been complaints about caribou; but moose hunting is becoming more and more competitive. A marine mammal expert will be coming to speak to the Council today on recent toxicity, which is not new, but the levels are higher.

Green – Green welcomed Doug Katchatag to the Council. There are concerns over moose in the area and with just 56 harvested on the road system a moratorium or Tier II hunt is needed. Subsistence on moose is very competitive and without a boat becomes more difficult. There needs to be more discussion on salmon migration, as there are arguments over salmon statewide. One defense used with the Area M fisheries was how a fishery 1,000 miles away can affect local areas. There needs to be state fisheries representatives at our meetings to have respectful dialog about the issues. There are fewer feeder fish but more salmon.

Katchatag – Katchatag would like to see moose season opened September 15 as moose are coming down later. It's difficult to get across to where the moose are due to high water from climate change. Locals are saying Nome residents are coming down to get their bag limit and they would like to see something done. Bearded seals and walrus are moving north due to contaminated food, lack of sea ice and junk from the fishing industry. Communities have successfully stopped the Norton Bay oil drilling proposal.

Walrus Die-Off Discussion

Gay Sheffield from Alaska Sea Grant discussed PSP from saxatoxins and domoic. Saxatoxins occur naturally but can increase to toxic levels from algae blooms. Toxins concentrate in clams and crabs, but do not seem to affect cold blooded animals. Birds and mammals can have issues from consuming clams, crabs and fish with high levels of saxatoxins. These events are more common in Southeast Alaska. Last summer there was a walrus and seabird die-off. The walrus found at Diomede and Shishmaref were fat with no bullet holes. Four animals registered saxatoxins. Though the birds died from starvation and were very decomposed, liver tests registered saxatoxins. Algae blooms were likely due to warming ocean waters. These events have human implications. The Coast Guard has been very helpful with getting carcasses in a timely manner. Council members and Sheffield discussed the need for more funding and research. There are kits available that will only tell you if saxatoxins are present but not the amount. Ahmasuk mentioned agency concerns over testing because it may cause a panic.

ANSEP Student Presentation
Tonia Osborne of White Mountain and Nome presented information on her field work in the Alaska Maritime National Wildlife Refuge, including eagle captures, and sightings of sea lions, a white sea otter, a harbor seal giving birth, albatross and other seabirds, cows and fox.

Public and Tribal Comments on Non-Agenda Items

Neil DeWitt – DeWitt sits on the Anchorage and Matanuska Valley Fish and Game Advisory Committees, as well as the Western Arctic Caribou Herd (WACH) Working Group, but he was speaking on his own behalf. He asked the Council to reconsider their position on WP18-46/47 regarding non-resident hunting restrictions for caribou in Unit 23. He would like this hunt open to all Alaskans, who combined with non-residents only took 5% of the caribou. The different survey technique shows more animals, and by restricting hunts in Unit 23, hunters will move to other areas to hunt the WACH. DeWitt also expressed opposition to the Ambler Road and its impacts on caribou migration. Lastly, DeWitt mentioned he was also at the trawling meeting recently held in Nome.

Old Business

a) WP18-46/47
Robbin La Vine presented new information for WP46/47; namely, higher survey numbers with a new survey technique, and support from the WACH working group for boundaries established in WSA17-03 (Map #1 in handout). Green inquired about herd migration and the interagency take on Map #1. Gray replied that the WACH group had considerable discussion and wanted this boundary in place for two years only. He stated that regulations need to take into account the ever-changing herd migration. Gray moved to support WP46/47 with Map #1 for a two-year period. Seconded by Seetot.

Ken Adkisson from NPS reported that it has the capacity to manage its commercial services program. They have delayed entry for big game transporters and guides in the Western Noatak Special Management Area. The NPS may shift timing until a week later in the fall to reduce conflicts to subsistence users.

Bill Dunker stated that ADFG feels comfortable with increased numbers due to lower cow mortality, high calf survival and increases in calf recruitment. ADFG does not support WP18-46/47 because it will not affect the herd's population status. They believe recent Board of Game actions to expand the Noatak Special Use Area, along with registration harvest permits, will be sufficient to reduce conflicts.

Seetot expressed concerns over too many hunters affecting the caribou in late winter, which impacts hunters from Brevig Mission. Oyoumick stated that the Council should let the people in that region decide. Ahmasuk said that although bull/cow ratios were up, there are still concerns about the new survey technique. Dunker responded that another photo census was scheduled for summer 2018. ADFG feels confident with the survey results because the calf, bull and cow data are corroborating the new survey census. Gray outlined the WACH working group management plan and explained why they stayed with a conservative approach until there are more data.

Ream shared that the Northwest Arctic Subsistence Regional Advisory Council supported Map #1 indefinitely, Western Interior Alaska Subsistence Regional Advisory Council adopted Map #1 for two years and the North Slope Subsistence Regional Advisory Council adopted an indefinite full closure for all Federal public lands in Unit 23.

Gray rescinded his motion and restated the motion to support WP18-46/47 with Map #1 indefinitely. Seconded by Leland and carried unanimously.

b) Update Council on Federal Subsistence Board Proposals
Deatherage updated the Council on regional Federal wildlife proposals that will come before the Board in mid-April.

New Business

a) Call for Federal Fisheries Proposals/FRMP/Partners
Hyer introduced the call for Federal fisheries proposals. Katchatag expressed concerns over sport fishermen damaging fish with catch and release. Hyer encouraged Council members to call OSM to get assistance to craft proposals.

Hyer also introduced the Partners Program and invited Council members and the community to consider a candidate from this region to participate in the program. Suggestions were made to engage Kawerak, other rural non-profits and tribes. Gray asked if Kawerak would distribute the flyer to the communities.

Hyer stated that the Board recommended $1.5 million in funding for the FRMP projects. The OSM Assistant Regional Director will finalize the plan. Funding is dependent upon the budget and allocation from Washington, D.C. Kirk inquired about funding projects in his area around Stebbins. Hyer stated that a monitoring program had been conducted in the Pikmiktalik River and this might be a good Priority Information Need (PIN) for the Council to consider for the upcoming FRMP Call for Proposals.

b) Call for Proposals for Non-Rural Determination
LaVine presented the Call for Proposals for Non-Rural Determinations. The Council did not comment on this issue.

*c) Review and Approve Final FY2017Annual Report **
Deatherage outlined the annual report purpose, and action needed from the Council. Eningowuk asked that the section on the walrus die-off be corrected to show that the majority of walrus washed up from the Chukchi not Bering Sea. Kirk moved to approve the Council's FY2017 Annual Report, seconded by Ahmasuk and carried unanimously.

d) Council Charter Review
Deatherage read the changes applied to the Council Charter, pursuant to Secretarial Orders 3347 and 3356.

Agency Reports

National Park Service/Bering Land Bridge National Preserve
The Bering Land Bridge Alaska (BELA) unit has now been separated from the Western Arctic National Parklands Unit, which will allow BELA unit to have less competition for funding. BELA is recruiting for a biologist who will work cooperatively with ADFG and others. The next biannual cooperative census of muskoxen will be conducted in 2019. Muskox in Unit 22E went from a Tier I to Tier II hunt. All of the muskoxen hunts are now in Tier II status. BELA is also working with ADFG on 22D and 22E moose populations. Adkisson referred to a notice in the meeting book to revisit the NPS predator management regulations put in place 2015

[Meeting recessed for the day]

[March 6, 2018. Meeting Called to Order at 9:20 a.m.]

Bureau of Land Management
Tom Sparks discussed land use efforts south of Unalakleet and mentioned that no special recreation permits for guides have been issued for the last couple of years. BLM has continued issuing muskox and moose permits for subsistence. One muskox permit went to White Mountain, 5 went to Nome for Units 22B and 22D. Individuals who receive a Federal and State Tier II permit can take both animals for the same household. BLM would like the Council to consider putting in a proposal to fix that issue.

Seetot asked if BLM was still the main agency issuing reindeer grazing permits. Sparks responded that they do, in cooperation with NPS. Gray stated his family ended up with a double muskox permit. Although they were legally able to take two animals, they will only take one. Gray does not have an issue with restricting hunters to a State or Federal permit. He does have trouble with State requirement to cut the horns. Gray said he still would want to apply for both permits but only take 1 animal. Brandon asked Sparks to provide information on success rates for both State and Federal hunts. Gray would like to see the permits interchangeable so permittees could hunt on Federal or State lands. Sparks explained that the Alaska National Interest Lands Conservation Act (ANILCA) determines the Federal system and Gray responded he would like to have more information on ANILCA from staff. Seppi confirmed that a Federal permit only applies to Federal land.

Alaska Department of Fish and Game

Bill Dunker and Letty Hughes from ADFG in Nome were present. Brynn Parr was recently hired as the only muskox research biologist in the State. The 2017 muskox harvest survey gave a harvestable surplus of 33 bulls. All permits issued for Tier II hunts on the Seward Peninsula, including Shishmaref and Wales. Moose composition surveys in 22D were 30 bulls/100 cows. In 22C, there are 31 bulls/100 cows. ADFG is hoping to get a 22D and 22E moose population survey completed, weather dependent. Ahmasuk inquired about the harvest success rate for muskox. Dunker replied that average harvest between 2014 and 2016 was 26 animals, or 70% of the quota.

Seetot asked why moose were declining in 22D, especially in the American and Igloo drainages. This is a good corridor for wolves which might be the reason for the decrease. Seetot mentioned that Port Clarence was a refuge for muskox during spring months where they have become a nuisance around chained dogs.

Hughes reported on moose harvests for 22A hunts and answered multiple questions on moose in Unit 22. Gray believes that when the harvestable surplus falls under 250 then the Amount Necessary for Subsistence kicks in. Dunker said a 3-year average of reported harvest in Unit 22 is 177. In 2016 it was 190. Hughes stated that brown bear take was "primarily" by non-residents and resulted in 12 hunters taking just two bears recently. In the Nome area, moose quotas for 22C were filled in one day, resulting in an emergency order to close the season.

ADFG Fisheries
Justin Leon and Jim Menard were present to discuss fisheries issues. Menard remarked that there was very little Federal land management in the region. Leon spoke to the Unalakleet weir and the challenges of too many pink salmon coming through. Gray inquired about an escapement goal for King salmon on the Boston River. Menard replied the State had eliminated the goal because it's a small population that is no longer managed. Green also spoke about Pilgram River bag limits and shared frustration with Gray that the bag limits weren't being managed.

Katchatag asked about how fish are counted when the Unalakleet is high and muddy. Menard responded that it was difficult from the towers but it could be done when fish come through the weir. Eningowuk shared concerns that the jurisdiction for ADFG in Nome only went to Wales so no information is available for his area. He stated that because there are no limits, fish can be fished to extinction. Menard responded that subsistence surveys are done in that area and that ADFG monitors commercial fishing to ensure that fish are available to subsistence users before the fish go to Kotzebue. Menard asked Eningowuk to coordinate with Tyler Ivanhoff to get scale samples from red salmon in that area. Oyoumick expressed concerns over declining King salmon and possible impacts from Area M fisheries.

Office of Subsistence Management
LaVine updated the Council on staffing and budget. There are still vacant positions which cannot be filled due to delays in Washington, D.C. At this time, OSM is operating on a Continuing Resolution. However, travel has been cut so fewer staff are going to Council meetings.

Future Meeting Dates
The Council confirmed its fall meeting dates of October 24-25, 2018, but changed the meeting location to Unalakleet. Ahmasuk moved to hold the meeting in Unalakleet, seconded by Gray and carried unanimously.

Gray moved to hold the winter, 2019 meeting March 5-6 in Nome. Seconded by Ahmasuk and carried unanimously.

Closing Comments

Katchatag stated it was a good meeting and looks forward to follow-up on what was discussed. His community would like to see the moose season extended to give subsistence users more opportunity. Katchatag is also interested in seeing how many King salmon are taken by commercial fisheries. Kirk and Saccheus remarked on flight and weather challenges. Oyoumick thanked everyone for being there and reminded the Council to listen to elders. Seetot thought the meeting was productive and recognizes the Council does what it can. Gray appreciated everyone's participation. Ahmasuk appreciated ADFG fisheries participation, thanked Deatherage and reminded members that subsistence is dependent upon Federal and State managers. Green also appreciated State fisheries participation and thanked the staff.

Adjourn

Seetot moved to adjourn, seconded by Kirk and carried unanimously.

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

March 6, 2018

/s/_____
Karen Deatherage, DFO
Office of Subsistence Management, USFWS

/s/_____
Louis Green Jr., Chair
Seward Peninsula Subsistence Regional Advisory Council

These minutes will be formally considered by the Seward Peninsula Subsistence Regional Advisory Council at its next meeting, and any corrections or notations will be incorporated in the minutes of that meeting.

National Park Service
U.S. Department of the Interior

NPS-Alaska Region
240 W. 5th Avenue
Anchorage, AK 99501
907-644-3512
www.nps.gov/AK

National Park Service News Release

Release Date: August 8, 2018

Contacts: Nathan Wiese, FWS, nathan_wiese@fws.gov
Peter Christian, NPS, peter_christian@nps.gov

2018 Alaska Seabird Die-off

ANCHORAGE, Alaska—Beginning in May 2018, the U.S. Fish and Wildlife Service (USFWS) and the National Park Service (NPS) began receiving reports of dead and dying seabirds from the northern Bering and southern Chukchi seas, including in the vicinity of the Western Arctic National Parklands.

In late June, NPS investigators found 100 carcasses over a total of 4 km of beach surveyed, most of these being murres along the coast of Bering Land Bridge National Preserve, although other species were found there and in Cape Krusenstern National Monument.

Coastal communities have counted hundreds of dead seabirds that include: murres, fulmars, shearwaters, kittiwakes, auklets, and puffins. Additionally, fork-tailed storm petrels have been observed in large numbers along the coasts of Katmai and Kenai Fjords national parks (including Resurrection Bay), and in Prince William Sound. It is unusual to see this species so close to shore. While carcasses were not observed in these locations, there have been carcasses recorded in Kamishak Bay in lower Cook Inlet and McNeil River Sanctuary.

The USFWS and NPS are coordinating efforts with local communities. To date, all bird carcasses sent to the U.S. Geological Survey National Wildlife Health Center for examination were determined to have died of starvation. There has been no evidence of disease, and tests are pending to determine if birds were exposed to harmful algal toxins.

Since spring, seabird die-offs have been recorded in the Pribilof Islands and the northern Gulf of Alaska. Although die-offs have occurred before, this is unusual due to the number of birds affected, the broad geographic area, and the duration of the event, which is ongoing.

It is important to continue to track this event as it unfolds. The public is requested to report observations of sick or dead birds to USFWS at 1-866-527-3358, or to local regional contacts listed in the USFWS fact sheet distributed in August 2018 (attached). Information to include:

- Location, Time and Date observed
- Type and Number of birds (counted or estimated)
- Photos of sick/dead birds
- Videos of any unusual behavior (approachable, drooping head and/or wings)

If you collect, **please wear gloves and keep carcasses frozen.**

—NPS—

USFWS Alaska Region, Migratory Bird Management
1011 East Tudor Road, Anchorage AK 99503
Phone: 1-866-527-3358 Email: AK_MBM@fws.gov

August 2018

What's Happening?

Beginning in May 2018, the USFWS began receiving reports of dead and dying seabirds from the northern Bering and southern Chukchi seas. This event continues and now includes the Pribilof Islands and the northern Gulf of Alaska. Coastal communities have counted hundreds of dead seabirds that include: murres, fulmars, shearwaters, kittiwakes, auklets, and puffins.

Although seabird die-offs occur occasionally, this die-off, similar to the Gulf of Alaska common murre die-off in 2015-2016, is unusual due to the:

- large number of birds involved
- broad geographic area affected
- duration of the event

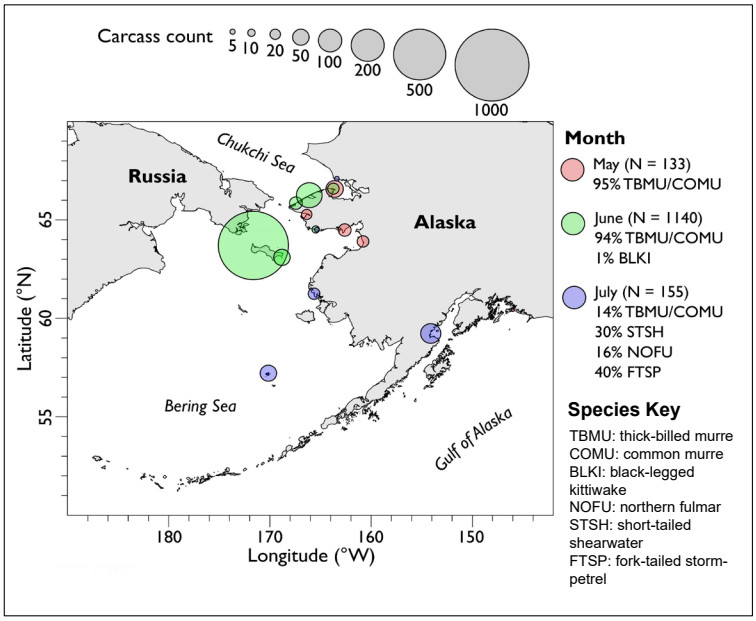
What's Being Done?

The USFWS is coordinating with the UAF-Alaska Sea Grant, Kawerak, Inc., Aleut Community of St. Paul Island, Alaska Migratory Bird Co-management Council, National Park Service, and the Coastal Observation and Seabird Survey Team (COASST) to collect reports and monitor several beaches. To date, all bird carcasses sent to the USGS National Wildlife Health Center for examination were determined to have died of starvation. Tissues sampled during the examinations will be analyzed for harmful algal bloom toxins by the USGS Alaska Science Center. Results of those analyses will be shared this Fall.

Contributing Partners:

U.S. Fish & Wildlife Service

2018 Alaska Seabird Die-off



What Can I Do?

Report observations of sick or dead birds to regional partners:

- **North Slope:** Taqulik Hepa **(907) 852-0350**
- **Northwest Arctic:** Cyrus Harris **(907) 442-7914**
- **Bering Strait region:** Brandon Ahmasuk **(907) 443-4265**
  Gay Sheffield **(907) 434-1149**
- **Yukon-Kuskokwim Delta:** Jennifer Hooper **(907) 543-7470**
- **Bristol Bay:** Gayla Hoseth **(907) 842-6252**
- **Aleutian/Pribilof Islands:** Lauren Divine **(907) 257-891-3031**

Or report by phone or email to the USFWS:
1-866-527-3358 or AK_MBM@FWS.GOV

Information to report includes:

- Location, Time & Date observed
- Type & number of birds (count or estimate)
- Photos of sick/dead birds
- Videos of any unusual behaviors (approachable, drooping head and/or wings)

Participate in monitoring efforts on your local beaches:
COASST provides baseline information. Visit www.coasst.org.

FP19–01 Executive Summary	
General Description	Proposal FP19-01 requests an expansion of the area and fishing time for the Federal subsistence drift gillnet fishery in Subdistricts 4B and 4C of the Yukon/Northern Federal Subsistence Fishery Management Area. The proponent also requests repealing the maximum mesh depth restriction of 35 meshes deep for drift gill nets used in Subdistricts 4B and 4C in the fishery. *Submitted by: Jack Reakoff.*
Proposed Regulation	*§___.27(e)(3)* ***Yukon-Northern Area*** * * * * *(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; unless closed by the Federal In-season Manager; from June 10 through August 2, the Federal In-season Manager may open fishing periods during which chum salmon may be taken by drift gillnets* *(B) In Subdistrict 4A downstream from the mouth of Stink Creek, you may take Chinook salmon by drift*

FP19–01 Executive Summary	
	gillnets less than 150 feet in length from June 10 through July 14; unless closed by the Federal In-season Manager; from June 10 through August 2, the Federal In-season Manager may open fishing periods during which chum salmon may be taken by drift gillnets. *(C) In the Yukon River mainstem, Subdistricts 4B and 4C~~: 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.~~* ***(1) Chinook salmon may be taken by drift gillnets from June 10 through July 14, unless closed by special action by the Federal in-season manager;*** ***(2) From June 10 through August 2, the Federal in-season manager may open, by special action, fishing periods during which chum salmon***

FP19–01 Executive Summary	
	may be taken by drift gillnets; and ***(3) Chum salmon may be taken drift gillnets after August 2.*** ***(D) A person may not operate a drift gillnet that is more than 150 feet in length during seasons described in (C)(1), (2), and (3) of this subsection.***
OSM Preliminary Conclusion	**Support** Proposal FP19-01.
Yukon-Kuskokwim Delta Subsistence Regional Advisory Council Recommendation	
Western Interior Alaska Subsistence Regional Advisory Council Recommendation	
Seward Peninsula Subsistence Regional Advisory Council Recommendation	
Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	**None**

DRAFT STAFF ANALYSIS
FP19-01

ISSUES

Proposal FP19-01, submitted by Jack Reakoff of Wiseman, requests an expansion of the area and fishing time for the Federal subsistence drift gillnet fishery in Subdistricts 4B and 4C of the Yukon/Northern Federal Subsistence Fishery Management Area. The proponent also requests repealing the maximum mesh depth restriction of 35 meshes deep for drift gill nets used in Subdistricts 4B and 4C in the fishery.

DISCUSSION

The proponent states that adoption of this proposal would align Federal subsistence fisheries methods, means, seasons, and area regulations with recent State regulatory changes for the drift gillnet fisheries in Subdistricts 4B and 4C of the Yukon River drainage, and would mirror the States absence of a drift gillnet mesh depth limit. The proponent indicates adoption of this proposal will reduce the amount of travel time and associated expenses for subsistence users who choose to use drift gillnets to harvest salmon. The proponent indicates that removing the drift gillnet mesh depth maximum, combined with more liberal fishing season dates for fall Chum Salmon, would reflect recent changes made by the State and will increase compliance with regulations as well as reduce enforcement concerns.

The proponent also states adoption of this proposal will result in a negligible increase in salmon harvests and therefore, would not present a conservation concern. If this proposal is adopted, drift gill nets in this area may be utilized only if Chinook and/or Chum Salmon abundances allow for a harvestable surplus. The Western Interior Alaska Subsistence Regional Advisory Council (Council) submitted written comments to the BOF in support of Proposal 230, which lead to the submission of this proposal to the Federal Subsistence Board. Although the proponent is the Council's chair, Mr. Reakoff submitted the proposal as a private citizen.

Existing Federal Regulation

§___.27(e)(3) ***Yukon-Northern Area***

* * * *

(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; unless closed by the Federal In-season

Manager; from June 10 through August 2, the Federal In-season Manager may open fishing periods during which chum salmon may be taken by drift gillnets

(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; unless closed by the Federal In-season Manager; from June 10 through August 2, the Federal In-season Manager may open fishing periods during which chum salmon may be taken by drift gillnets.

(C) In the Yukon River mainstem, Subdistricts 4B and 4C 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

§___.27(e)(3) ***Yukon-Northern Area***

* * * *

(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; unless closed by the Federal In-season Manager; from June 10 through August 2, the Federal In-season Manager may open fishing periods during which chum salmon may be taken by drift gillnets

(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; unless closed by the Federal In-season Manager; from June 10 through August 2, the Federal In-season Manager may open fishing periods during which chum salmon may be taken by drift gillnets.

*(C) In the Yukon River mainstem, Subdistricts 4B and 4C**:*** ~~*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.*~~

(1) Chinook salmon may be taken by drift gillnets from June 10 through July 14, unless closed by special action by the Federal in-season manager;

(2) From June 10 through August 2, the Federal in-season manager may open, by special action, fishing periods during which chum salmon may be taken by drift gillnets; and

(3) Chum salmon may be taken drift gillnets after August 2.

(D) A person may not operate a drift gillnet that is more than 150 feet in length during seasons described in (C)(1), (2), and (3) of this subsection.

Existing State Regulation

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.

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

(3) in Subdistricts 4-B and 4-C,

(A) king salmon may be taken by drift gillnets from June 10 through July 14, unless closed by emergency order;
(B) from June 10 through August 2, the commissioner may open, by emergency order, fishing periods during which chum salmon may be taken by drift gillnets; and
(C) chum salmon may be taken by drift gillnets after August 2.

(4) a person may not operate a drift gillnet that is more than 150 feet in length during the seasons described in (1) and (2) and (3) of this subsection.

Extent of Federal Public Lands

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 Nowitna National Wildlife Refuge (NWR) and the northern unit of the Innoko NWR within fishing Subdistricts 4B and 4C of the Yukon/Northern Federal Subsistence Fishery Management Area. This includes approximately 74 river miles of the Nowitna NWR and 16 river miles of the Innoko NWR (**Figure 1**).

Customary and Traditional Use Determinations

Rural residents of the Yukon River drainage and the community of Stebbins have a customary and traditional use determination for salmon other than Fall Chum Salmon in the Yukon River drainage.

Rural residents of the Yukon River drainage and the communities of Chevak, Hooper Bay, Scammon Bay have a customary and traditional use determination for Fall Chum Salmon in the Yukon River drainage.

Regulatory History

In 2003, the Council submitted fisheries Proposal FP04-05 (FWS 2003) to the Federal Subsistence Board (Board), which requested that the subsistence drift gillnet fishery on the Yukon River include Subdistricts 4B and 44C. 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 subsistence drift gillnet fishing area in Subdistrict 4A is about 30 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. In FP04-05, the Council argued 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.

The Council supported its Proposal FP04-05, 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 (WIASRAC 2003). The Eastern Interior Alaska Subsistence Regional Advisory Council and Yukon-Kuskokwim Delta Regional Advisory Council opposed the original proposal to expand the use of drift gillnets. The proposal and the Western Interior Council's recommendation were considered, but rejected, by the Board in December 2003 (FSB 2003).

In 2004, the Council submitted Proposal (FP05-04), 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 (FWS 2005). The Council recommended the Board adopt the proposal with modification to only apply to Subdistricts 4B and 4C; that it be limited to the harvest of Chinook Salmon from June 10 – July 14, to 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 Board adopted Proposal 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 during the final 18 hours of the weekly regulatory openings under a Federal subsistence fishing permit (FSB 2005).

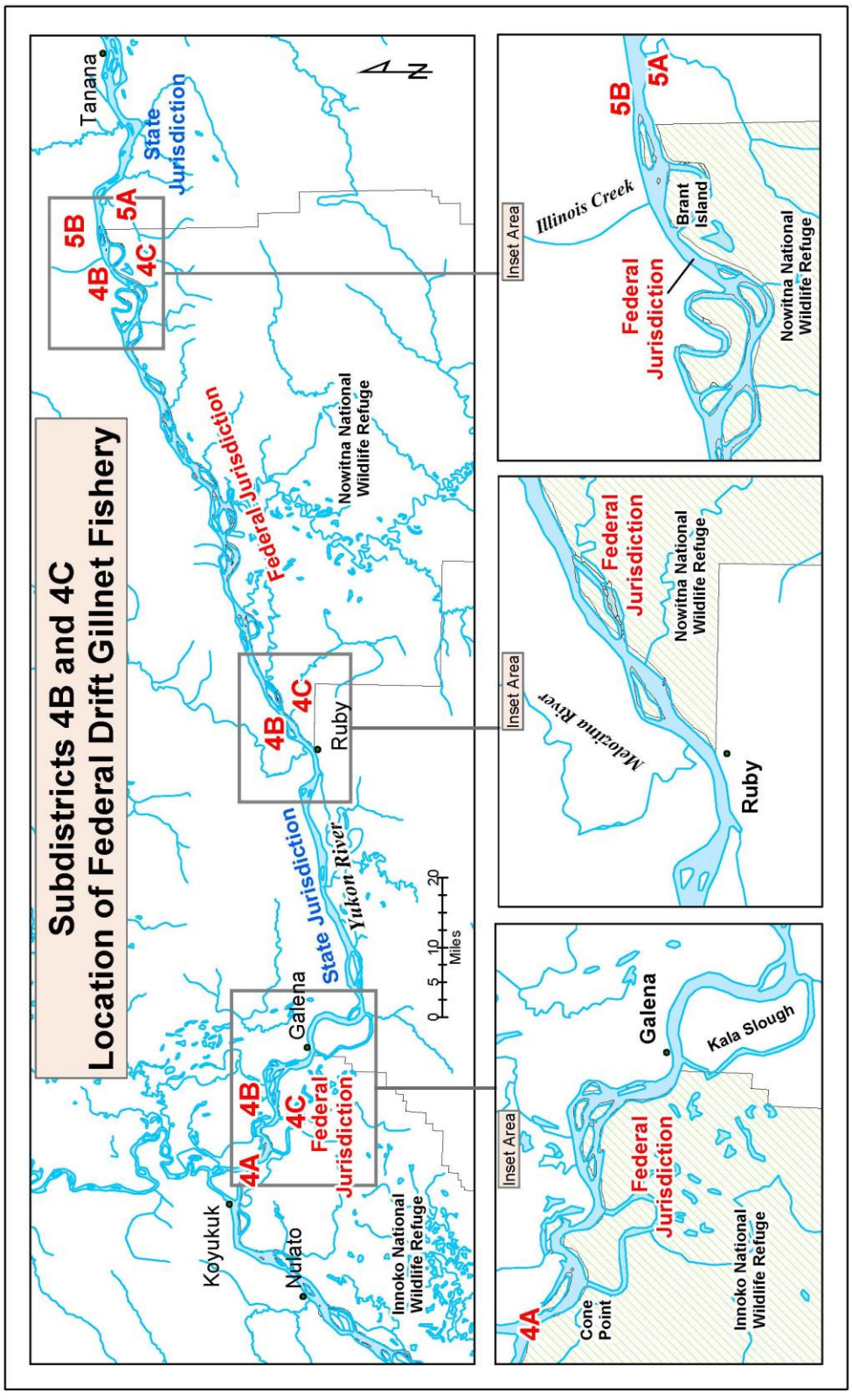


Figure 1. Map of the Subdistricts 4A, 4B, and 4C of the Yukon River. Inset area maps identify Federal subsistence fisheries jurisdiction.

During the 2007 fishing season, State and Federal subsistence fisheries in Subdistricts 4B and 4C were liberalized, by State emergency order and Federal special action, from two 48-hour openings per week to one 5-consecutive days opening per week beginning on July 1. Additionally, the Federal in-season manager liberalized the Federal subsistence 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, the State and Federal subsistence fisheries in Subdistricts 4B and 4C were further liberalized to 7 days per week by State emergency order and Federal special action. In addition, 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.

During its December 2007 public meeting, the Board adopted fisheries Proposal FP08-15, which requested the use of drift gillnets for Chinook Salmon harvest during the entire weekly subsistence opening(s) in Subdistricts 4B and 4C (FSB 2007). 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 (FSB 2007).

During its January 2011 meeting, the Board voted to withdraw FP11-07, at the request of the proponent Mountain Village Working Group. The proponent had proposed the use of drift gillnets be prohibited for the harvest of salmon in Districts 4 and 5 of the Yukon Area. The Board's action to approve withdrawal of the proposal was based on public testimony, the proponent's request, and the fact all four Councils in the region opposed the proposal (FSB 2011).

In January 2013, the Board adopted fisheries Proposal FP13-01, which eliminated the requirement for a Federal subsistence permit for the Chinook Salmon drift gill net fishery for the Yukon River Subdistricts 4B and 4C. The two prominent concerns that resulted in the permit requirement for operating a drift gillnet in this area were that 1) Chinook Salmon harvest was already fully allocated and by allowing another gear type, there was the potential for attracting additional subsistence fishermen who may compete with those already participating in a long established fishery, and 2) the additional fishing gear type would target different Chinook Salmon stocks, with unknown, adverse consequences for upriver harvesters and escapement potential. By shifting some harvest to mid-stream locations, there was a possibility the harvest could be redirected to Canadian stocks, which may migrate further offshore and at greater depths. Due to the low participation and harvest in this fishery, the Board removed the permit requirement (FSB 2013).

Current Events Involving the Species

In March 2018, the Alaska Board of Fisheries (BOF) adopted modified Proposal 230, which was submitted by the Louden, Nulato, and Koyukuk Tribes, and authorized salmon to be taken with drift gillnets in this area during subsistence fishing periods, as abundance allows. The proponent indicates the adoption of the modified proposal allows subsistence users to save time and travel expenses associated with the use of drift gillnets for harvesting salmon, especially at locations that are distant from the user's community of residence.

The Council supported BOF Proposal 230 with the amendment to remove the maximum net depth limit and have the drift gillnet fishery area be expanded to the entirety of Subdistricts 4B and 4C. The Council

also passed a motion to have a Fisheries Special Action reflecting the above liberations automatically submitted to the Board for the 2018 season if the BOF passed Proposal 230 as modified. The Council also moved to submit a parallel proposal to the Board for the 2019/2020 fisheries regulatory cycle to ensure State and Federal regulations were parallel in this area. The Council Chair submitted Proposal FP19-01 as a private individual since the Council did not have a scheduled public meeting between the BOF final action on Proposal 230 and the deadline for Federal subsistence fisheries proposals (WSIRAC 2018).

Biological Background

Chinook Salmon

Recent analyses indicate that Yukon River Chinook Salmon stocks appear to be in the third year of increasing productivity after the low returns of 2015. Historically, the stocks showed periods of above-average abundance (1982-1997) and periods of below-average abundance (1998 onwards), as well as periods of generally higher productivity (brood years 1993 and earlier) mixed with years of low productivity (brood years 1994-1996 and 2002-2005; Schindler et al. 2013).

The 2014 run was expected to be the smallest on record, with a projected size of 64,000-121,000 fish. Despite initial concerns, the cumulative passage estimate at the mainstem Yukon River sonar project in Pilot Station were approximately 138,000±17,000 (90% CI) fish (**Figure 2**). The passage estimate was still below the historical average of 143,000 fish, and below the average of 195,800 fish for years with early run timing. As a result of very conservative management actions, all escapement goals that could be assessed were achieved, even with below average run sizes (JTC 2015).

The 2015 projected run size was 118,000-140,000 fish, which was once again below average yet higher than the previous year's projection. Cumulative passage estimates at the sonar station in Pilot Station were approximately 116,000±30,000 fish (90% CI) (**Figure 2**). As with the previous year, this number was still below the historical average. Very conservative actions were taken and all escapement goals were again met (JTC 2016).

The 2016 run outlook was a below-average run of 130,000–176,000 fish (JTC 2017). Cumulative passage estimates at the sonar station in Pilot Station were approximately 176,898±18,466 fish (90% CI) (Zach Liller 2018, pers. comm.). This number was near the recent historical average of 178,300 fish (ADF&G 2018), but is considered preliminary at this time. Conservative actions were relaxed slightly from previous years and all escapement goals were met (JTC 2016).

The 2017 run outlook was slightly larger, but still below average: 140,000-194,000 fish (JTC 2017). Cumulative passage estimates at the Pilot Station sonar were approximately 263,000±29,000 fish (90% CI) (ADF&G 2018), which was the largest since 2003 (JTC 2017). These estimates are still considered preliminary. Subsistence management restrictions were further relaxed which resulted in harvests of approximately two thirds of average and most escapement goals were met despite the poor water conditions that existed throughout the drainage.

The 2018 run outlook is larger than in recent years, with a run size of 173,000-251,000 fish (ADF&G 2018). The upper end of the range could supports an average subsistence harvest, while the low end of the range would likely warrant implementing subsistence fishing restrictions.

Summer Chum Salmon

Summer Chum Salmon runs in the Yukon River have provided a harvestable surplus in each of the last 15 years, 2003-2017. The 2018 projection is expected to be similar or slightly lower than the 2017 run of approximately 3.6 million fish (JTC 2018).

In 2016, approximately 1.92 million ±80,517 (90% CI) fish passed the Yukon River sonar project at Pilot Station, which was near the historical median for the project of 1.90 million fish. In 2017, the passage estimate at Pilot Station increased to 3.09 million ±138,259 (90% CI) (**Figure 3**). Most tributaries experienced average to above-average escapement in 2017 (JTC 2018). The Henshaw Creek weir counted a record number of Chum Salmon (360,687), which was only 13% smaller than the number counted at the Anvik River Sonar (415,139). Although all 2017 numbers are preliminary at this time, the 2018 run is anticipated to provide for escapement goals, normal subsistence harvest, and a surplus for commercial harvest (JTC 2018).

Fall Chum Salmon

Fall Chum Salmon runs in the Yukon River have provided a harvestable surplus in each of the last 8 years, 2010-2017. In 2016, approximately 994,760 million ±64,434 (90% CI) Fall Chum Salmon passed the Yukon River sonar project at Pilot Station, which was above the 1995-2016 median for the project of 688,057 fish. In 2017, the passage estimate at Pilot Station increased to 1.83 million ±54,179 (90% CI) and was the second largest run in 43 years (**Figure 4**). Most tributaries experienced average to above-average escapement in 2017 (JTC 2018) although all 2017 numbers are preliminary at this time. In 2017, the projected outlooks were for a run size of approximately 1.4-1.7 million fish, while the 2018 projection of 1.6-1.8 million fish is lower than the 2017 run of approximately 2.3 million fish (JTC 2018). The 2018 run is anticipated to provide for escapement goals, normal subsistence harvest, and a surplus for commercial harvest (JTC 2018).

Coho Salmon

In 2016 approximately 168,297 ± 11,180 (90% CI) Coho Salmon passed the Yukon River sonar project at Pilot Station, which was slightly above the historical median of 160,272 fish. In 2017, the passage estimate at Pilot Station increased to 166,330 ±20,300 (90% CI), which was also slightly above the historical median (**Figure 5**). All 2017 numbers are preliminary at this time. The Coho Salmon outlook is based upon parent year escapements assuming average survival. Since Coho Salmon predominately return as age 2.1 fish (4 year old fish), the major contributor to the 2018 returns are from the 2014 parent year. Therefore, the 2018 outlook is for average to above average returns in 2018.

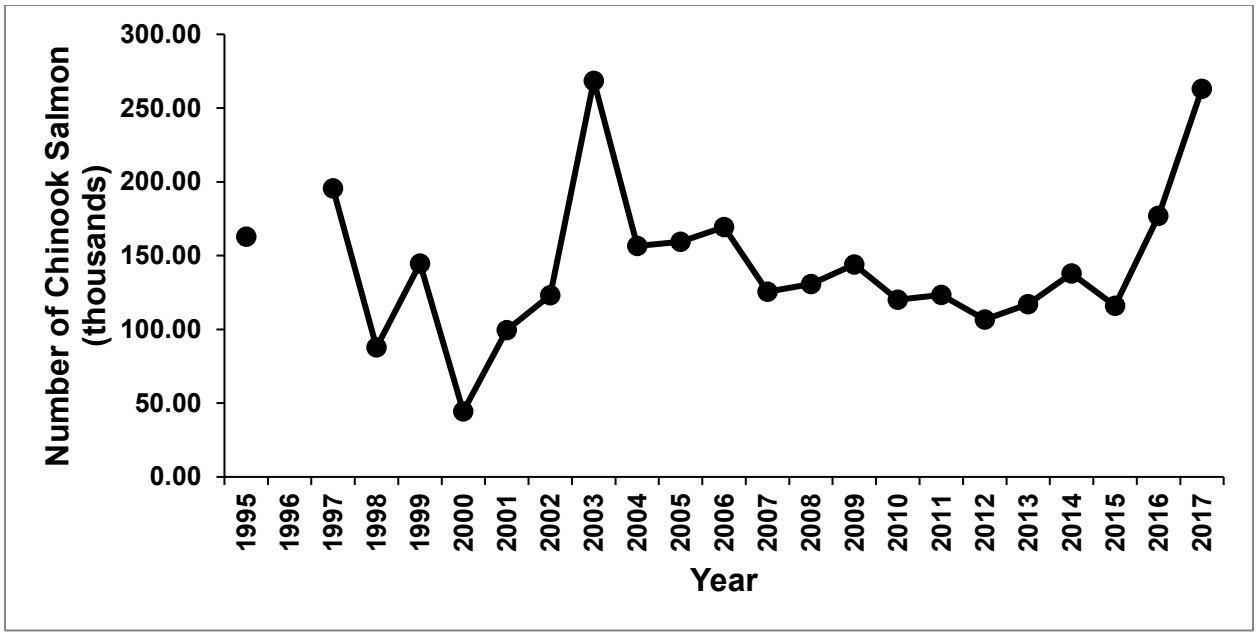


Figure 2. Chinook Salmon passage estimates based on the mainstem Yukon River sonar near Pilot Station, Yukon River drainage, 1995 and 1997-2017 (JTC 2018). Data from 2016 and 2017 are preliminary at this time.

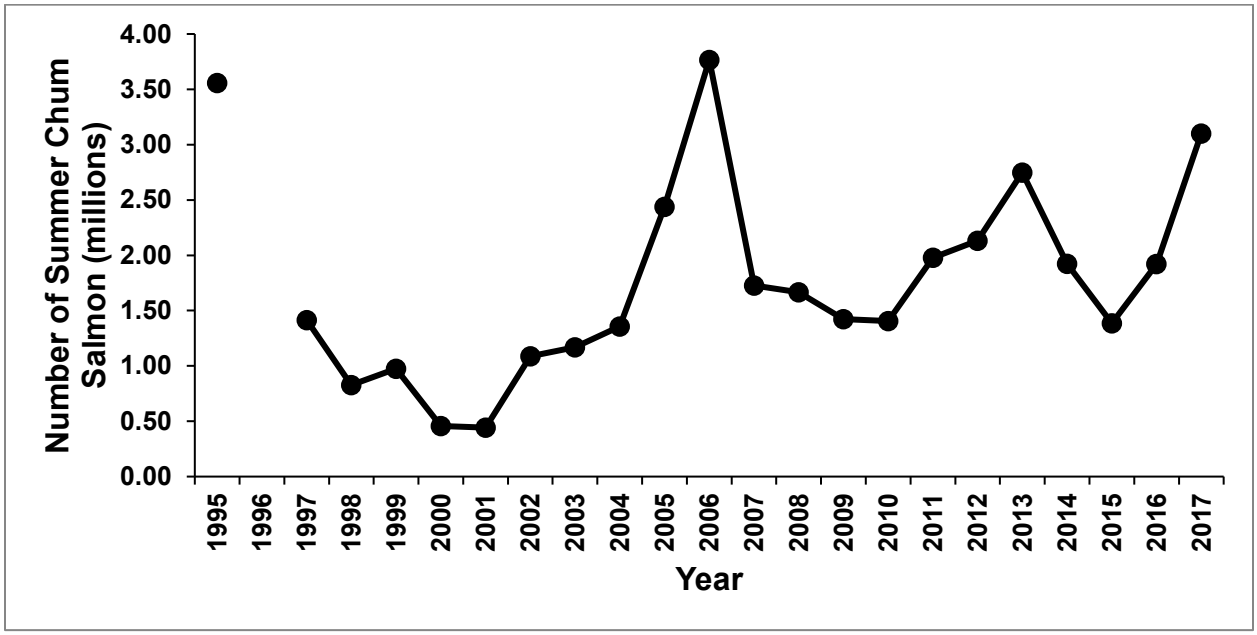


Figure 3. Summer Chum Salmon passage estimates based on the mainstem Yukon River sonar near Pilot Station, Yukon River drainage, 1995 and 1997-2017 (JTC 2018). Data from 2016 and 2017 are preliminary at this time.

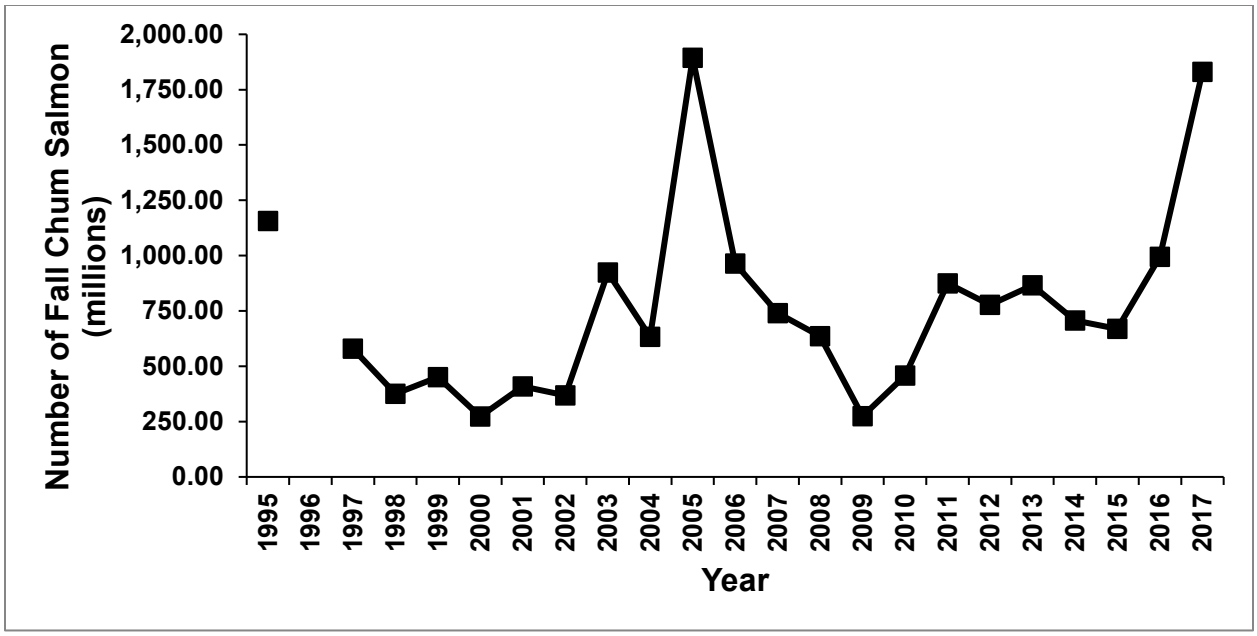


Figure 4. Fall Chum Salmon passage estimates based on the mainstem Yukon River sonar near Pilot Station, Yukon River drainage, 1995 and 1997-2017 (JTC 2018). Data from 2016 and 2017 are preliminary at this time.

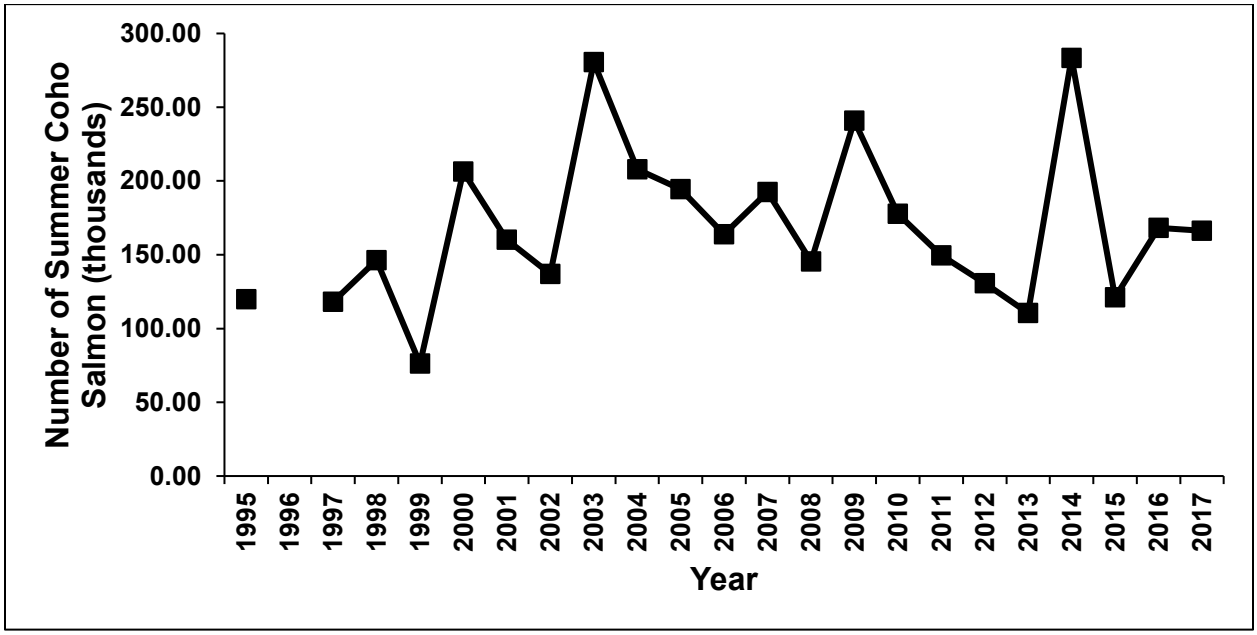


Figure 5. Coho Salmon passage estimates based on the mainstem Yukon River sonar near Pilot Station, Yukon River drainage, 1995 and 1997-2017 (JTC 2018). Data from 2016 and 2017 are preliminary at this time.

Harvest History

The Federal Subsistence drift gillnet fishery in 4B and 4C has been in place since 2005. In 2005, 70 Federal subsistence permits were issued and 9 permit holders fished for a total of 60 hours, resulting in a total harvest of 54 Chinook Salmon (**Table 1**). The catch per hours fished for Chinook Salmon was 0.9 (Holder et al. 2006). Feedback from Federal subsistence users indicated that productive drifting spots had not yet been located within the Federal public waters of Subdistricts 4B and 4C, but fishing effort would likely increase if productive drift sites were found. The 2005 Chinook Salmon harvest in the Federal drift gillnet fishery in 4B and 4C was not sufficient for ADF&G to conduct a special genetic sampling program which had been planned (Holder et al. 2006). The annual average Federal subsistence Chinook Salmon harvest in drift gill nets in this area was approximately 31 fish between 2005 and 2011, during which a total of 215 salmon was harvested in this fishery as reported on Federal subsistence permits when they were required.

Table 1. Subdistricts 4B and 4C summary of Federal permits issued, permittee post-season reporting, effort and harvest, 2005.

Residence	Number of permits issued	Number of permits returned	Total permits fished	Total hours fished	Harvests	
					Chinook Salmon	Chum Salmon
Galena	51	47	5	33	33	1
Ruby	13	12	3	22	21	0
Tanana	5	4	1	5	0	0
Koyukuk	1	1	0	0	0	0
Total	70	64	9	60	54	1

Source: Holder, et al. 2006

For 2005, the preliminary ADF&G Chinook Salmon post-season subsistence harvest estimates, encompassing all gear types, included 2,864 by Galena residents and 1,193 by Ruby residents for a total of 4,057 Chinook Salmon (Busher et. al. 2007). A high proportion of the Galena harvest came from Subdistrict 4A drift gillnetting. The 54 Chinook Salmon harvested by Galena and Ruby Federally qualified subsistence users with drift gillnets in Subdistricts 4B and 4C represented only 1.33% of the total estimated harvest.

In 2006, participation in this Federal subsistence fishing opportunity declined. Only 18 permits were issued: 16 to Galena residents, one to a Ruby resident, and one to a Koyukuk resident (**Table 2**). Of the 18 permittees who reported their fishing activity, 13 people did not fish; and five fished approximately18 hours, resulting in the harvest of 19 Chinook and 11 Chum Salmon. The catch per hour fished for Chinook Salmon was 1.7 (Holder et al., 2007).

Table 2. Subdistricts 4B and 4C summary of Federal permits issued, permittee post-season reporting, effort and harvest, 2006.

Residence	Number of permits issued	Number of permits returned	Total permits fished	Total hours fished	Harvest	
					Chinook Salmon	Chum Salmon and other species
Galena	16	16	4	10	4	0
Ruby	1	1	1	8	15	11
Koyukuk	1	1	0	0	0	0
Total	18	18	5	18	19	11

Source: Holder, et. al., 2007

In 2007, participation in this Federal subsistence fishing opportunity continued to be exploratory. A total of 12 permits were issued (8 Galena, 1 Koyukuk, and 3 Ruby) with 6 permits returned as of the end of July, and a reported harvest of 13 Chinook Salmon in 8.5 hours of fishing. The low harvest numbers and the reality that not all drift gillnet caught salmon are bound for Canada, minimized any preconceived notions about the impact of this fishery on U.S./Canada treaty obligations.

Subsistence post season harvest surveys conducted by ADF&G from 2007 through 2017 (Busher et al 2009, Jallen et al 2011, Jallen et al. 2012a, Jallen et al 2012b, Jallen et al. 2015, Jallen et al. 2017, Jallen et al 2017b, Jallen et al 2017c, Padilla, unpublished data 2018) indicated the communities of Galena and Ruby are the only two Yukon River drainage communities which are nearest to and consistently harvest salmon from all three Subdistricts 4A, 4B, and 4C (**Table 3**). This survey information also identifies the percentage of Chinook and Chum Salmon harvested by different gear type used in Subdistricts 4A, 4B, and 4C (**Table 4**). The lack of drift gillnet harvest in Subdistrict 4C from both communities' collected harvest information is due to the prohibition of use of drift gillnets for the harvest of Chinook Salmon due to conservation concerns in this area. Prior to the recent change in State regulations which authorized use of drift gillnet in Subdistricts 4B and 4C, subsistence users from Galena and Ruby who choose to use a drift gillnet to harvest fish other than Chinook Salmon had to travel to Subdistrict 4A and a portion of 4B. Distances traveled to favored drift gill net fishing spots required travel of over 100 river miles for some (**Map 1).**

Table 3. Subsistence salmon harvest by Yukon River subdistricts 4A, 4B, and 4C for the residents of Galena and Ruby from 2007-2017. (Busher et al 2009, Jallen et al 2011, Jallen et al 2012a, Jallen et al 2012b, Jallen et al 2015, Jallen et al 2017a, Jallen et al 2017b, Jallen et al 2017c, Padilla, unpublished data 2018)

		4A		4B		4C	
Salmon Species	Year	Galena	Ruby	Galena	Ruby	Galena	Ruby
Chinook	2007	1,936	-	472	219	103	1,375
	2008	813	-	404	21	1,014	616
	2009	965	-	290	42	115	500
Chinook	2010	549	-	255	87	547	1,015
	2011	662	108	195	302	537	72

		4A		4B		4C	
Salmon Species	**Year**	**Galena**	**Ruby**	**Galena**	**Ruby**	**Galena**	**Ruby**
	2012	99	-	296	-	347	1,316
	2013	145	-	15	-	-	357
	2014	-	-	-	5	1	2
	2015	99	-	141	-	126	68
	2016	636	67	81	128	276	-
	2017	1,091	-	328	174	827	97
Summer Chum	2007	242	-	216	69	113	347
	2008	105	-	121	449	532	206
	2009	126	-	1,088	47	504	556
	2010	22	-	498	-	958	1,971
	2011	46	-	3,043	728	325	47
	2012	20	-	583	-	115	3,891
	2013	127	-	52	-	-	681
	2014	-	-	377	29	-	-
	2015	559	-	500	-	-	88
	2016	588	19	16	303	940	356
	2017	14	-	979	98	236	-
Fall Chum	2007	476	-	130	868	865	1,091
	2008	48	-	26	233	1,290	424
	2009	108	-	2,382	84	1,816	50
	2010	46	-	317	20	1,284	1,006
	2011	198	-	902	592	1,458	-
Fall Chum	2012	92	-	2,393	-	462	4,408
	2013	29	-	533	-	40	2,505
	2014	1,450	-	676	369	947	603
	2015	381	-	1,054	324	1,107	389
	2016	211	-	449	526	2,659	-
	2017	345	-	2,868	-	1,561	-
Coho	2007	325	-	100	-	-	168
	2008	106	-	135	83	317	208
	2009	327	-	1,885	2	141	312
	2010	-	-	175	148	84	-
	2011	2	-	950	312	43	-
	2012	-	-	162	-	114	1,806
	2013	1	-	58	-	111	345
	2014	191	-	269	115	258	220
	2015	41	-	102	89	511	96
	2016	18	-	32	226	151	-

		4A		4B		4C	
Salmon Species	**Year**	**Galena**	**Ruby**	**Galena**	**Ruby**	**Galena**	**Ruby**
	2017	5	-	36	-	95	-

Table 4. Percentage of subsistence Chinook Salmon harvest for selected Yukon River communities by gear type for Subdistricts 4A, 4B, and 4C for the residents of Galena and Ruby from 2010-2015. (Busher et al 2009, Jallen et al 2011, Jallen et al 2012a, Jallen et al 2012b, Jallen et al 2015, Jallen et al 2017a, Jallen et al 2017b, Jallen et al 2017c, Padilla, unpublished)++

			Percentage of total harvest by gear type			
Year	**Subdistrict community located in**	**Commu-nity**	**Set Net**	**Drift Net**	**Fish Wheel**	**Other**
2010	4A	Anvik	36	64	0	0
		Grayling	1	99	0	0
		Kaltag	0	100	0	0
		Nulato	14	86	0	0
		Koyukuk	7	93	0	0
	4B	Galena	32	61	7	0
	4C	Ruby	45	0	55	0
2011	4A	Anvik	51	49	0	0
		Grayling	35	65	0	0
		Kaltag	0	100	0	0
		Nulato	7	93	0	0
		Koyukuk	10	90	0	0
	4B	Galena	57	43	0	0
	4C	Ruby	32	0	68	0
2012	4A	Anvik	52	48	0	0
		Grayling	13	87	0	0
		Kaltag	6	94	0	0
		Nulato	0	100	0	0
		Koyukuk	35	65	0	0
	4B	Galena	73	27	0	0
	4C	Ruby	72	0	28	0
2013	4A	Anvik	72	28	0	0
		Grayling	41	59	0	0
		Kaltag	0	100	0	0
		Nulato	0	100	0	0
		Koyukuk	62	38	0	0
	4B	Galena	6	94	0	0
	4C	Ruby	29	0	71	0
2014	4A	Anvik	–	–	–	–

			Percentage of total harvest by gear type			
Year	Subdistrict community located in	Commu-nity	Set Net	Drift Net	Fish Wheel	Other
		Grayling	0	100	0	0
		Kaltag	0	100	0	0
		Nulato	–	–	–	–
		Koyukuk	0	100	0	0
	4B	Galena	0	0	100	0
	4C	Ruby	100	0	0	0
	4A	Anvik	2	86	0	12
	4C	Grayling	7	93	0	0
2015	4A 4B 4C	Kaltag	0	100	0	0
		Nulato	0	100	0	0
		Koyukuk	50	50	0	0
		Galena	52	48	0	0
		Ruby	100	0	0	0

Cultural Knowledge

The use and importance of salmon for Yukon River communities has been documented through oral histories and harvest surveys conducted in the area. Historically, many Yukon communities followed a semi-nomadic, subsistence way of life, spending time at seasonal camps, migrating with the resources and harvesting various species of fish, along with hunting and gathering subsistence resources. Humans have likely lived in the Yukon area for over 10,000 years (Rainey 1940, Cinq-Mars 1979) and fishing was a family and community activity, deeply ingrained in the cultures of the people in this area. People traditionally used weirs and fish traps, and nets made of animal sinew and willow bark and more recently employed set nets along with fish wheels for salmon at their fish camps. Multi-generational family groups would travel to seasonal camps to harvest fish and wildlife. Although fewer young people spend time at seasonal camps now due to employment, school, and other responsibilities, subsistence fishing continues to be important for communities up and down the river. According to surveys, many older people recall whole families spending long hours at their fish camps, harvesting, processing, and preserving fish. Children learned about subsistence activities from their elders at fish camp (Brown et al. 2010; Brown et al. 2015).

Salmon is considered the most reliable and significant subsistence resource on the Lower Yukon River. Salmon has always been an important part of the culture, economically and socially, and the knowledge of how to catch, process, and preserve fish has been passed down from generation to generation. Before contact by outsiders, dried fish was regularly traded between Yukon villages along with other commodities such as furs and sea mammal products (Wolfe 1981).

Yukon River residents are dependent on the harvest of salmon, especially Chinook Salmon, for both subsistence and commercial uses. Starting in the late 1990s, Chinook Salmon began to decline so people harvested more summer and fall Chum Salmon along with other subsistence resources (Brown et al. 2015). In the 1960s, people started using gillnets to drift fish for salmon for personal and commercial use. Today fishing still plays an important cultural role in the communities along the lower and middle Yukon River, and the knowledge of how and when to fish is still passed down from generation to generation. Population characteristics of the four primary communities within or in proximity to Yukon River Subdistricts 4B and 4C from 1960 to 2010 are presented in **Table 5**.

Table 5. U.S. Census Bureau population estimates for communities within or in proximity to Yukon River Subdistricts 4B and 4C, 1960-2010 (ADCCED 2018).

Community	1960	1970	1980	1990	2000	2010	2010 No. Households
Nulato CDP	183	308	350	359	336	264	92
Koyukuk city	128	124	98	126	101	96	42
Galena city	261	302	765	833	675	470	190
Ruby city	179	145	197	170	188	166	62

Customary trade of fish is an important part of continuing trade networks in rural areas of Alaska. Salmon fishing takes place in the summer and timing is based on the runs for various species. Local residents also use gill nets under the ice to fish for pike, whitefish, or sheefish in the spring before breakup. Communities have used various types of nets and fish wheels to harvest fish through the generations. Fish wheels are used less now than they were in the past when people were catching more fish to feed sled dogs, but are still used in some areas, mainly to catch fish for human consumption (Brown et al. 2010). Chum Salmon, once primarily used for dog food, were caught using nets set from the shore but are now consumed largely by people in the US and overseas who purchase through the commercial market. As more village runways were built, increasing air travel, and more snow machines were brought to the villages, the dependency on sled dogs was reduced, reducing the need for harvesting fish to feed dogs (Brown et al. 2015).

ADF&G's Division of Subsistence occasionally undertakes comprehensive household surveys as time and resources allow. These document the use, harvest, and sharing of all wild foods harvested in a community in a given year and can thus provide insights on the importance of individual resources within the overall harvest and the cultural contexts of these harvests, including patterns of sharing. For the region represented by this proposal, comprehensive household surveys that include Chinook Salmon and Chum Salmon harvest were conducted in 1985 for Galena and in 2010 for Nulato, Galena, and Ruby (**Table 3**). No comprehensive household surveys have been conducted in Koyukuk to date.

The Chinook Salmon and Chum Salmon harvests and use in **Table 6** include all gear types including commercial retention, though the latter represents a small proportion of the harvest. A large percentage

of households in these communities used Chinook Salmon during the study years. Sharing of Chinook Salmon is common in these communities as is evidenced by the percentage of households giving away and receiving the resource. Sharing represents fish given away and received both within the community and with other communities.

Chum Salmon was used by fewer households as compared to Chinook Salmon in Nulato, Galena, and Ruby. Notably, the use of Chum Salmon declined substantially in Galena between 1985 (76% of households) and 2010 (43% of households) (Marcotte and Haynes, 1985). Sharing of Chum Salmon is also less prevalent in these communities compared to sharing of Chinook Salmon. In Galena, the percentage of households giving away Chum Salmon was consistent between 1985 (13.5%) and 2010 (16.3%), though the percentage of households receiving this resource declined substantially during the same period.

Table 6. Chinook Salmon and Chum Salmon harvest in communities located within or in proximity to Yukon River Subdistricts 4B and 4C as determined through available ADF&G household subsistence harvest surveys (ADF&G 2018).

Community		1985		2010	
		Chinook	Chum	Chinook	Chum
Nulato					
Household Participation	% Using	-	-	86.9	36.9
	% Giving Away	-	-	35.7	13.1
	% Receiving	-	-	45.2	14.3
Estimated Level of Harvest	Total Number Harvested	-	-	1,999.9	991.1
	Pounds per Capita	-	-	72.5	19.4
Galena					
Household Participation	% Using	74.4	75.7	67.5	42.5
	% Giving Away	10.8	13.5	30	16.3
	% Receiving	51.4	50	40	20
Estimated Level of Harvest	Total Number Harvested	3,057.0	70,180.0	1,688.5	5,360.2
	Pounds per Capita	61.1	483.2	37.5	64.2
Ruby					
Household Participation	% Using	-	-	76.6	55.3
	% Giving Away	-	-	31.9	17
	% Receiving	-	-	46.8	23.4
Estimated Level of Harvest	Total Number Harvested	-	-	1,530.3	2,735.5
	Pounds per Capita	-	-	90.4	77.4

Effects of the Proposal

Adoption of this proposal will have two effects. If the proposal were adopted, additional harvest opportunities would be provided to Federally qualified subsistence users by removing the depth restrictions on drift gill nets in Subdistricts 4B and 4C of the Yukon River. Increasing gillnet mesh depth

allows users to fish in deeper waters when targeting fish. Additionally, adoption of this proposal may increase the efficiency of subsistence users who have used legally permissible modified gill nets where users have reduced the number of meshes by binding up excess meshes to the legal limit onto the floating line of net. If this proposal is adopted, any depth net could be utilized.

If the proposal was adopted, a Federal subsistence drift gillnet Fall Chum Salmon fishing season within Subdistricts 4B and 4C of the Yukon River beginning August 2 would be provided. Currently only the State managed drift gillnet subsistence fishery for Fall Chum Salmon is authorized under State regulation but not in Federal subsistence regulation. If this proposal is adopted, Federally qualified users could drift gillnet fish under Federal regulations which would be independent to State regulations during the referenced time frame.

Aligning the Federal subsistence drift gillnet allowance with State regulations will likely result in less confusion by fishers and less administrative actions by the Federal In-season Manager. Adoption of this proposal will align State and Federal subsistence fishing regulations, which will reduce enforcement concerns and user confusion. If this proposal is not adopted, the Federal subsistence fishery in this area will be more restrictive than allowed under State of Alaska regulations. As such, it could be seen to not comply with the rural subsistence priority in Title VIII of the Alaska National Interest Lands Conservation Act.

The Federal in-season Manager, under the management authority delegated by the Board, will continue to have the authority to make in-season adjustments in fishing time and gear types in response to Chinook Salmon run strength.

OSM PRELIMINARY CONCLUSION

Support Proposal FP19-01.

Justification

This proposal was submitted to mirror recently adopted fisheries liberalizations by the State. Currently the Federal drift gillnet fishery in Subdistricts 4B and 4C of the Yukon River is more restrictive than the State managed fisheries.

Adoption of this proposal will allow Federally qualified users to fish deeper waters with drift gillnets in the identified area without mesh depth restrictions. Allowing the use of deeper nets may increase user efficiency by reducing the amount of time used to harvest the same number of fish in a deeper net in less time than it would take to do so with a shallower net.

Adoption of this proposal will also create a fall Chum Salmon drift gillnet Federal subsistence fishery beginning August 2 allowing users to target fall Chum Salmon if a harvestable surplus is determined by the inseason Federal fisheries managers with the management authority granted by the Federal Subsistence Board.

Adoption of this proposal is not expected to increase subsistence harvests as the fisheries in the affected subdistricts as participation and salmon harvest in this area has been consistently low. Although an increase in harvest is not expected, adoption of this proposal may affect management of other Federally qualified users harvesting salmon outside of Subdistricts 4B and 4C.

As the fisheries management for this area and species is abundance-based and experiences both low participation and harvest levels under Federal subsistence regulations, adoption of this proposal should not result in a conservation concern for any salmon species.

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FP19–02 Executive Summary	
General Description	Proposal FP19-02 requests the Federal Subsistence Board (Board) decrease the time the subsistence fishery is closed prior to the start of the State commercial fishing season in Yukon Districts 1, 2, 3, and 4A (excluding Koyukuk and Innoko rivers) from 24 hours to 6 hours. *Submitted by: Alissa Rogers*.
Proposed Regulation	***§___.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.* ***§___.27 Subsistence taking of fish*** *(e)(3) Yukon-Northern Area.* * * * * *(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),* ***except in Districts 1, 2, 3, and Subdistrict 4A, excluding the Koyukuk and Innoko River drainages, you may not take salmon for subsistence purposes during the 6 hours immediately before the opening of a State commercial salmon fishing season,*** *unless superseded by a Federal Special Action.* * * * * *(vi) In Districts 1, 2, 3, and Subdistrict 4A, excluding the Koyukuk and Innoko River drainages, you may not take salmon for subsistence purposes during the* ~~*24*~~***6*** *hours immediately before the opening of the State commercial salmon fishing season.*
OSM Preliminary Conclusion	**Support** Proposal FP19-02 **with modification** to provide the up-dated language only one time in the regulations to avoid redundancy.

FP19–02 Executive Summary	
Yukon-Kuskokwim Delta Subsistence Regional Advisory Council Recommendation	
Western Interior Alaska Subsistence Regional Advisory Council Recommendation	
Seward Peninsula Subsistence Regional Advisory Council Recommendation	
Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	**None**

DRAFT STAFF ANALYSIS
FP19-02

ISSUES

Proposal FP19-02, submitted by Alissa Rogers of Bethel requests the Federal Subsistence Board (Board) decrease the time the subsistence fishery is closed prior to the start of the State commercial fishing season in Yukon Districts 1, 2, 3, and 4A (excluding Koyukuk and Innoko rivers) from 24 hours to 6 hours.

DISCUSSION

The proponent states these closures do not prevent people from selling into the commercial fishery Chinook Salmon taken in the subsistence fishery because only a few Yukon subsistence fishermen do this. The proponent states there are always going to be a few bad actors that they are known and have been fined before but that the existing regulation has not stopped them. The proponent states that this regulation is burdensome on subsistence fishermen without any benefit.

Existing Federal Regulation

§___.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.

§___.27 Subsistence taking of fish

(e)(3) Yukon-Northern Area.

* * * *

(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.

* * * *

(vi) In Districts 1, 2, 3, and Subdistrict 4A, excluding the Koyukuk and Innoko River drainages, you may not take salmon for subsistence purposes during the 24 hours immediately before the opening of the State commercial salmon fishing season.

Proposed Federal Regulation

§___.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.

§___.27 Subsistence taking of fish

(e)(3) Yukon-Northern Area.

* * * *

(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), ***except in Districts 1, 2, 3, and Subdistrict 4A, excluding the Koyukuk and Innoko River drainages, you may not take salmon for subsistence purposes during the 6 hours immediately before the opening of a State commercial salmon fishing season,*** *unless superseded by a Federal Special Action.*

* * * *

(vi) In Districts 1, 2, 3, and Subdistrict 4A, excluding the Koyukuk and Innoko River drainages, you may not take salmon for subsistence purposes during the ~~*24*~~***46*** *hours immediately before the opening of the State commercial salmon fishing season.*

Existing State Regulation

5 AAC 01.240. Marking and use of subsistence-taken salmon

(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

Extent of Federal Public Lands

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 Yukon Delta National Wildlife Refuge (NWR) within fishing Subdistricts 1-3 of the Yukon/Northern Federal Subsistence Fishery Management Area (**Figure 1**).

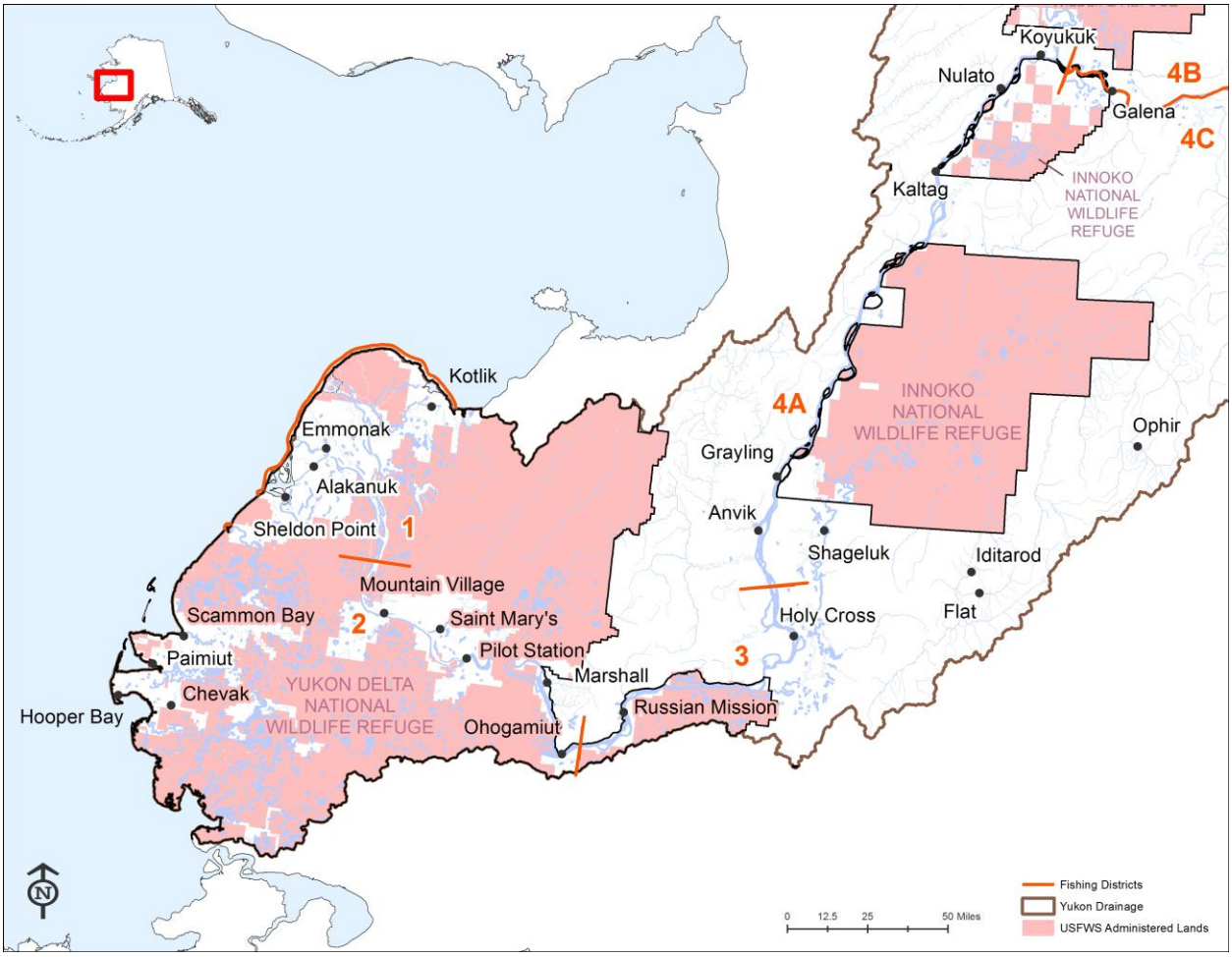

Figure 1. Lower Yukon River Districts 1, 2, 3, and 4A.

Customary and Traditional Use Determinations

Rural residents of the Yukon River drainage and the community of Stebbins have customary and traditional use determination for Salmon, other than Fall Chum salmon in the Yukon River drainage.

Residents of the Yukon River drainage and the community of Chevak, Hooper Bay, Scammon Bay, and Stebbins have a customary and traditional use determination for Fall Chum salmon in the Yukon River drainage.

Regulatory History

State Regulatory History

The current six commercial fishing districts were established in 1974. The subsistence fishing schedules were also linked to the commercial fishing schedules in districts 1-6 in the same year, and concurrent subsistence and commercial fishing for 5 days per week was implemented in the Upper Yukon Area (Districts 4-6). Beginning in 1977 the lower Yukon area was reduced to commercial and subsistence fishing for 3 days per week during the commercial Chinook Salmon season, and 3.5 days per week during the Fall Chum Salmon season. The Fall Chum Salmon fishing season was again reduced in 1979, to 3 days per week. Beginning in 1981, ADF&G began announcing in-season Lower Yukon area commercial fishing periods by emergency order, with Lower Yukon area subsistence periods announced in this manner beginning in 1984 (Jallen et al. 2015).

In December 1976, the Alaska BOF prohibited the use of drift gillnets for subsistence Chinook Salmon 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 impact both the conservation and allocation of middle and upper Yukon River salmon stocks, which were being harvested at maximum levels (ADF&G 2001). However, subsistence users in the upper Yukon areas were allowed to continue using drift gillnets throughout the Yukon River drainage until the 1977 season.

In 1981, the Alaska BOF adopted a proposal to allow drift gillnets for subsistence Chinook Salmon harvest in Subdistrict 4A (ADF&G 1982).

Beginning in 1993, regulations separated commercial and subsistence fishing times in Districts 1, 2, 3 and Subdistrict 4A. The regulations stated that subsistence fishing in Districts 1-3 was open 7 days per week, 24 hours/day until the commercial fishing season began. Once commercial fishing had started, subsistence fishing was closed 18 hours prior, during, and 12 hours after each commercial fishing period. Also, marking of subsistence caught fish was required by removal of the dorsal fin. These regulations were made based on an enforcement action where subsistence-caught fish were being sold in the commercial fishery in 1992 (Bergstrom et al. 1995).

In 1994, the Alaska BOF questioned the need for drift gillnets to provide for adequate subsistence opportunity in the middle and upper Yukon Areas. 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 could allow increased time for subsistence fishing with other gear types by emergency order, as an alternative, if subsistence needs were not being met. No BOF action was taken.

The Board added a fishing schedule for the subsistence salmon fisheries in 2001. The schedule will be implemented chronologically, consistent with migratory timing as the run progresses upstream. This schedule may be altered by emergency order if preseason or in-season indicators indicate it is necessary for conservation.. Districts 1-3 windows allowed subsistence salmon fishing for two 36 hour periods per week. Districts 4, and Subdistricts 5-B and 5-C were open to subsistence fishing for two 48-hour periods per week. Subsistence fishing in Subdistrict 4A was further defined during the commercial fishing season

in 2004 with Chinook Salmon fishing only allowed during two 48 hour drift netting periods per week by emergency order.

In February 2007, the BOF adopted a proposal changing the marking requirement for subsistence-caught salmon in Districts 1–3 from removal of the dorsal fin to removal of both tips of the tail fin. The rationale cited in the subcommittee report was to foster better compliance because marking would be easier, to make the regulation consistent with other areas of the state, to clarify when subsistence marking requirements would be in place, to use a more sanitary mark, and to discourage subsistence caught fish from entering the State's commercial fisheries (ADF&G 2007).

Commercial fishing for Chum Salmon during times of Chinook Salmon conservation was permitted with fish wheels by emergency order in Subdistrict 4-A, beginning in 2012. Fishermen are required to be present at the fish wheel, and immediately release all Chinook Salmon alive.

In March 2015, the BOF adopted a new regulation that allowed the use of drift gillnets to harvest summer Chum Salmon for subsistence purposes during times of Chinook conservation from June 10 through August 2, by emergency order, in the upper portion of Subdistrict 4A (5 AAC 0l.220(e)(1)).

In January 2016, the BOF adopted the same regulations in the lower portion of the Subdistrict 4A (5 AAC 0l.220 (e) (2)).

The BOF adopted a proposal to allow the use of drift gill nets in sub-districts 4B and 4C at the March 2018 meeting.

Federal Regulatory History

Starting in October 1999, Federal subsistence management regulations for the Yukon-Northern Area stipulated that, unless otherwise restricted, rural residents may take salmon in the Yukon-Northern Area at any time by gillnet, beach seine, fish wheel, or rod and reel unless exceptions are noted.

In 2002, the Board delegated some of its authority to manage Yukon River drainage subsistence salmon fisheries to the Branch Chief for Subsistence Fisheries, U.S. Fish and Wildlife Service, in Fairbanks. The Federal Subsistence Board's delegation allows the Federal manager to open or close Federal subsistence fishing periods or areas provided under codified regulations, and to specify methods and means.

In 2017, through fisheries proposal FP17-03, the Board modified regulations in Subdistrict 4A to allow the Federal In-season Manager to open fishing periods during which Chum Salmon may be taken by drift gillnets from June 10 through August 2 (FSB 2017). This regulation change was made to match existing ADF&G regulations that were modified in 2015 and 2016.

Current Events

The proponent for this regulatory proposal has also submitted this proposal to the BOF for its review during their Arctic/Yukon/Kuskokwim Finfish meeting that is scheduled for January 15-19, 2019. The

proponent has also submitted FP19-03 and FP19-04, which are similar proposals that aim to reduce or eliminate the required closure before a commercial fishing period. Fisheries Proposal 19-03 requests to reduce the closure time down to 6 hours prior to and 6 hours after a commercial fishing period, while FP19-04 requests that there would be no closure to subsistence fishing prior to, during, and after a commercial fishing period.

Biological Background

Chinook Salmon

Recent analyses indicate that Yukon River Chinook Salmon stocks appear to be in the third year of increasing productivity after the low returns of 2015. Historically, the stocks showed periods of above-average abundance (1982-1997) and periods of below-average abundance (1998 onwards), as well as periods of generally higher productivity (brood years 1993 and earlier) mixed with years of low productivity (brood years 1994-1996 and 2002-2005; Schindler et al. 2013).

The 2014 run was expected to be the smallest on record, with a projected size of 64,000-121,000 fish. Despite initial concerns, the cumulative passage estimate at the mainstem Yukon River sonar project in Pilot Station was approximately 138,000±17,000 (90% CI) fish (**Figure 2**). The passage estimate was still below the historical average of 143,000 fish and below the average of 195,800 fish for years with early run timing. As a result of severe management restrictions, all escapement goals that could be assessed were achieved, even with below average run sizes (JTC 2015).

The 2015 projected run size was 118,000-140,000 fish, which was once again below average but higher than the previous year's projection. Cumulative passage estimates at the sonar station in Pilot Station were approximately 116,000±30,000 fish (90% CI) (**Figure 2**). As with the previous year, this number was still below the historical average. As a result of severe management restrictions, all escapement goals that could be assessed were achieved, even with below average run sizes (JTC 2016).

The 2016 run outlook was a below-average run of 130,000–176,000 fish (JTC 2017). Cumulative passage estimates at the sonar station in Pilot Station were approximately 176,898±18,466 fish (90% CI) (Liller, 2018, pers. comm.). This number was near the recent historical average of 178,300 fish (ADFG 2018), but is considered preliminary at this time. Conservative actions were relaxed slightly from previous years and all escapement goals were again met (JTC 2016).The 2017 run outlook was slightly larger, but still for a below average run of 140,000-194,000 fish (JTC 2017). Cumulative passage estimates at the Pilot Station sonar were approximately 263,000±29,000 fish (90% CI) (ADF&G 2018), the largest since 2003 (JTC 2017), is also considered preliminary. Subsistence management restrictions were further relaxed that resulted in harvests approximately two thirds of average and most escapement goals were met despite the poor water conditions that existed throughout the drainage. The numbers reported at the Pilot Station sonar do not factor in any harvest that occurs downstream, which can be significant during some years.

The 2018 run outlook is larger than in recent years, with a run size of 173,000-251,000 fish (ADF&G 2018a). The upper end of the range could support an average subsistence harvest, while the low end of the range would likely result in restrictions to subsistence fishing.

Summer Chum Salmon

Summer Chum Salmon runs in the Yukon River have provided a harvestable surplus in each of the last 15 years, 2003-2017. In 2017, the projected outlooks were for a run size of approximately 2 million fish, while the 2018 projection is expected to be similar or slightly lower than the 2017 run of approximately 3.6 million fish.

In 2016, approximately 1.92 million ±80,517 (90% CI) fish passed the Yukon River sonar project at Pilot Station, which was near the historical median for the project of 1.90 million fish. In 2017, the passage estimate at Pilot Station increased to 3.09 million ±138,259 (90% CI) (**Figure 3**). Most tributaries experienced average to above-average escapement in 2017 (JTC 2018). The Henshaw Creek weir counted a record number of Chum Salmon (360,687), which was only 13% smaller than the number counted at the Anvik River Sonar (415,139).

Although all 2017 numbers are preliminary at this time, the 2018 run is anticipated to provide for escapement, normal subsistence harvest, and a surplus for commercial harvest (JTC 2018).

Fall Chum Salmon

Fall Chum Salmon runs in the Yukon River have provided a harvestable surplus in each of the last 8 years, 2010-2017. The 2018 projection of 1.6-1.8 million fish is lower than the 2017 run of approximately 2.3 million fish (JTC 2018).

In 2016, approximately 994,760 million ±64,434 (90% CI) Fall Chum Salmon passed the Yukon River sonar project at Pilot Station, which was above the 1995-2016 median for the project of 688,057 fish. In 2017, the passage estimate at Pilot Station increased to 1.83 million ±54,179 (90% CI) and was the second largest run in 43 years (**Figure 4**). Most tributaries experienced average to above-average escapement in 2017 (JTC 2018) although all 2017 numbers are still preliminary at this time.

The 2018 run is anticipated to provide for escapement, normal subsistence harvest, and a surplus for commercial harvest (JTC 2018).

Coho Salmon

In 2016 approximately 168,297 ± 11,180 (90% CI) Coho Salmon passed the Yukon River sonar project at Pilot Station, which was slightly above the historical median of 160,272 fish. In 2017, the passage estimate at Pilot Station decreased to 166,330 ±20,300 (90% CI) and was slightly above the historical median (**Figure 5**). All 2017 numbers are preliminary at this time. The Coho Salmon outlook is based upon parent year escapements assuming average survival. Since Coho Salmon predominately return as age 2.1 fish

(4 year old fish), the major contributor to the 2018 returns are from the 2014 parent year. Therefore, the 2018 outlook is for average to above average returns in 2018

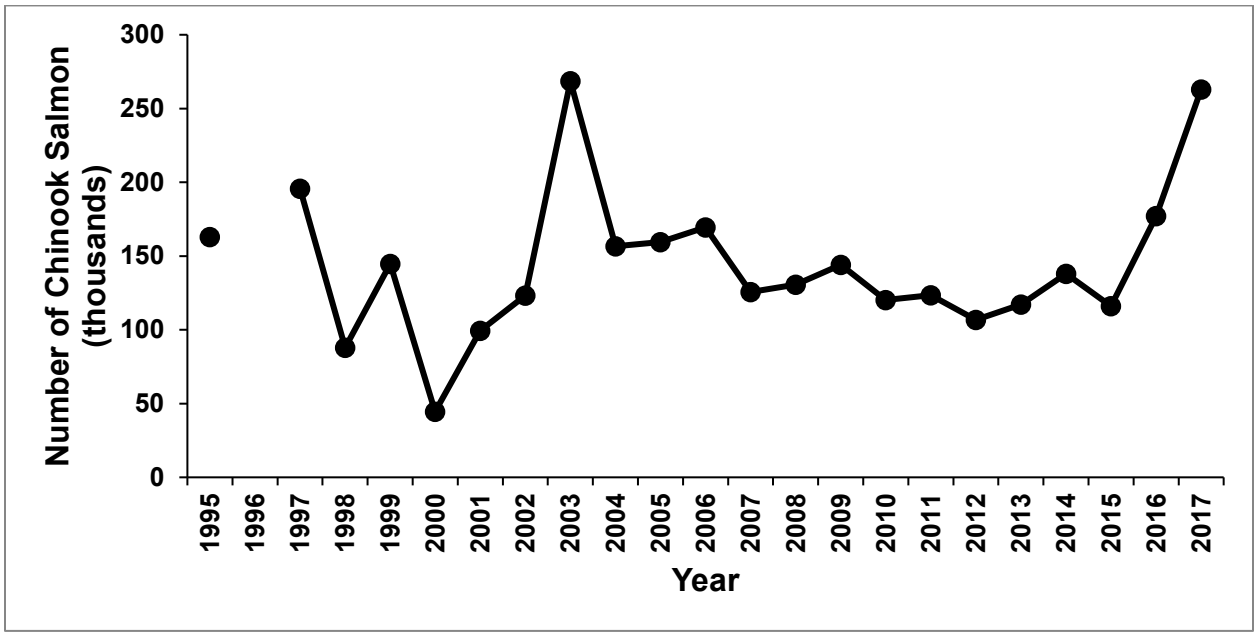

Figure 2. Chinook Salmon passage estimates based on the mainstem Yukon River sonar near Pilot Station, Yukon River drainage, 1995 and 1997-2017 (JTC 2018). Data from 2016 and 2017 are preliminary at this time.

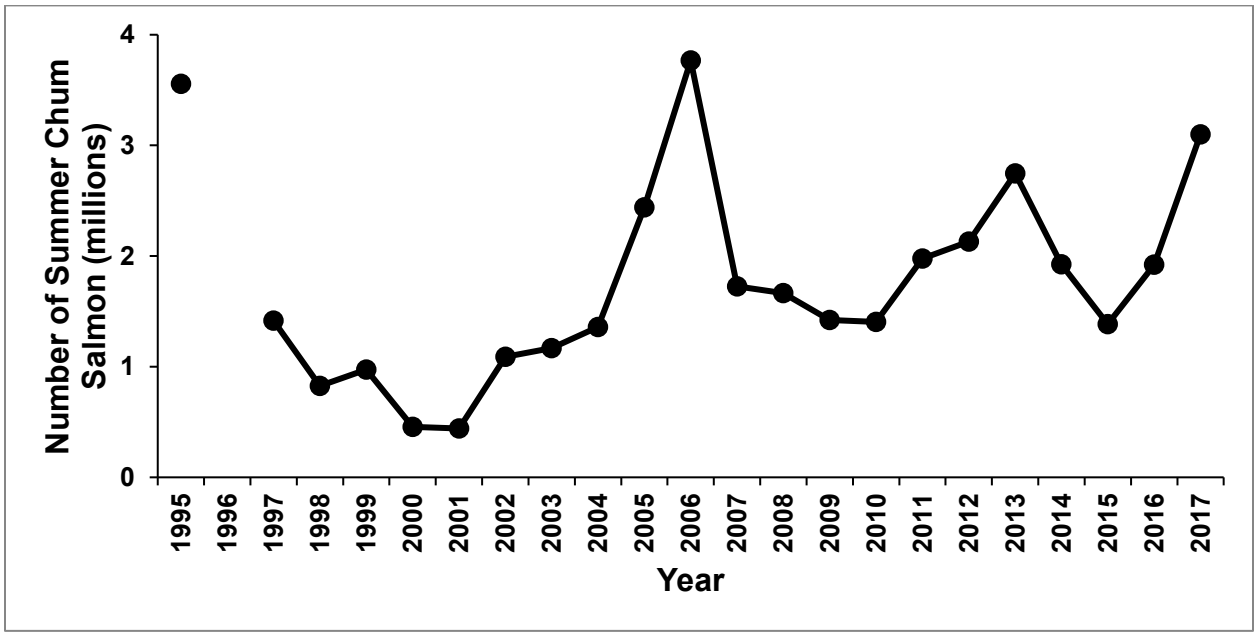

Figure 3. Summer Chum Salmon passage estimates based on the mainstem Yukon River sonar near Pilot Station, Yukon River drainage, 1995 and 1997-2017 (JTC 2018). Data from 2016 and 2017 are preliminary at this time.

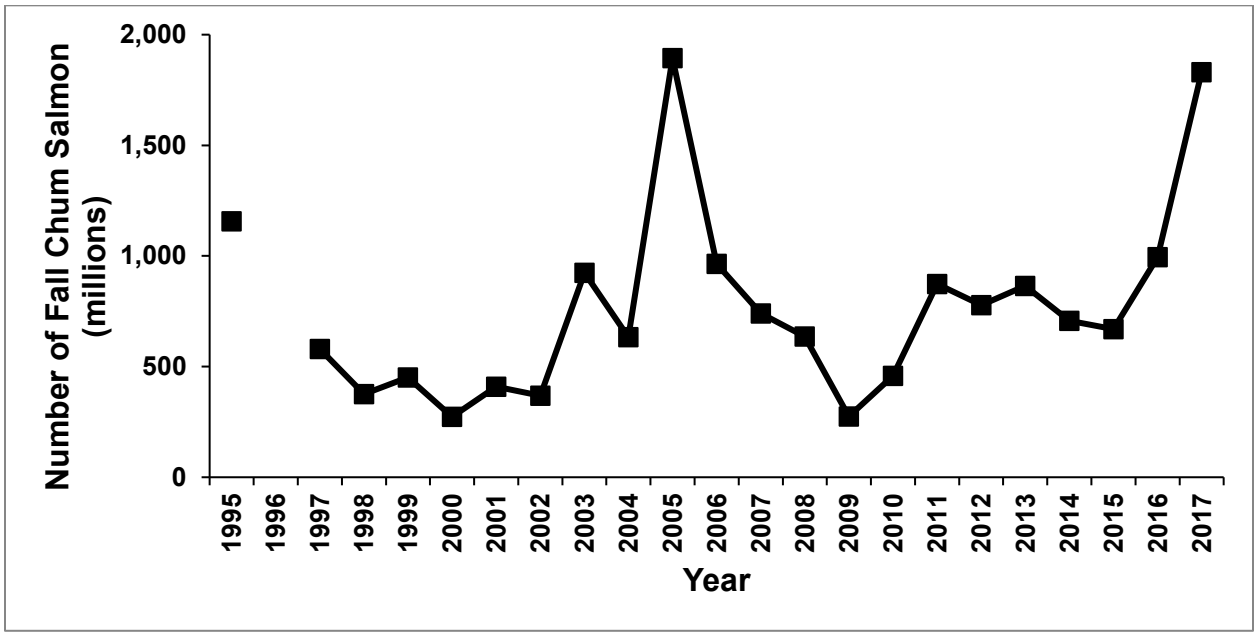

Figure 4. Fall Chum Salmon passage estimates based on the mainstem Yukon River sonar near Pilot Station, Yukon River drainage, 1995 and 1997-2017 (JTC 2018). Data from 2016 and 2017 are preliminary at this time.

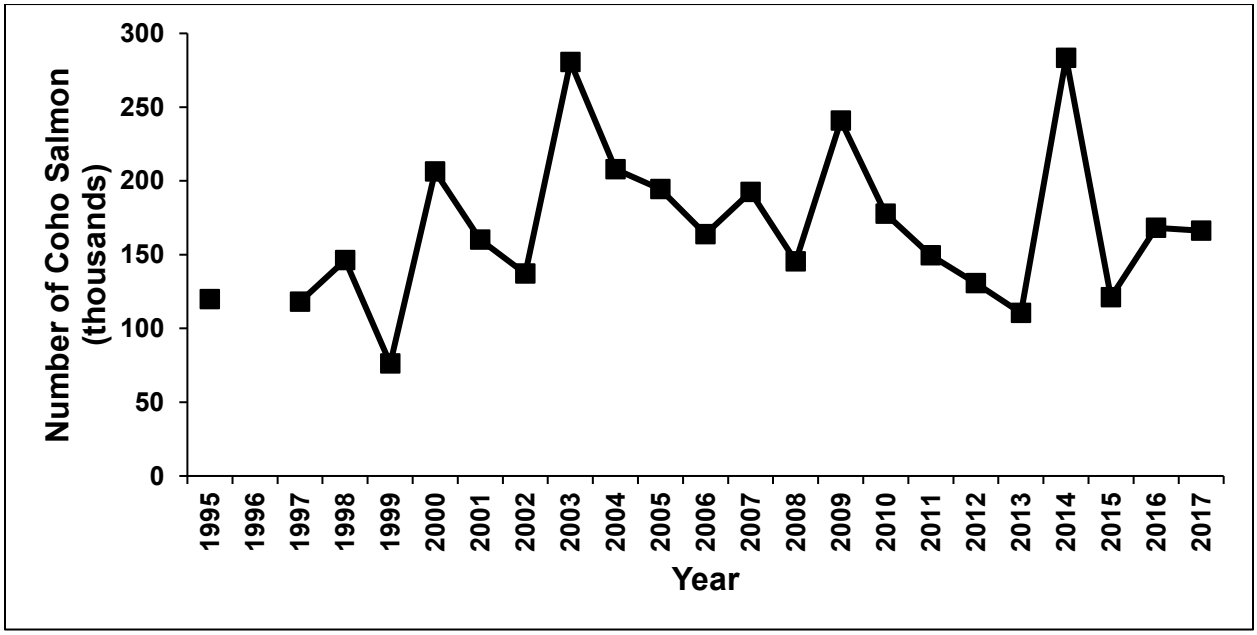

Figure 5. Coho Salmon passage estimates based on the mainstem Yukon River sonar near Pilot Station, Yukon River drainage, 1995 and 1997-2017 (JTC 2018). Data from 2016 and 2017 are preliminary at this time.

Harvest History

Chinook Salmon

Subsistence

Subsistence harvest of Chinook Salmon in the Alaska portion of the Yukon River averaged 34,791 fish from 1961-2015, with a high of 62,486 in 1993 and a low of 2,724 in 2014 (JTC 2017) (**Figure 6**). The 2014 Chinook Salmon subsistence harvest of 2,724 fish was the lowest on record for the Alaska portion of the Yukon River drainage. Harvest increased in 2015, 2016 and 2017 with 7,577, 21,627, and 36,992 fish harvested respectively. The 2017 harvest estimate, though preliminary, is larger than the 2007-2016 average (29,514) and over two times the number of the recent 5 year average of 15,088 (JTC 2018). The 2017 harvest is the largest since 2011.

The subsistence harvest in Yukon River Districts 1-3 averaged 16,755 from 2004- 2013, with a 2009-2013 average of 13,442 Chinook Salmon (Jallen et al 2017). The estimated 2014 subsistence harvest in these districts was 2,020 Chinook Salmon.

Commercial

Chinook Salmon have not been targeted in the commercial fishery for 10 years and the sale of incidentally caught Chinook Salmon was prohibited for the seventh consecutive year during the 2017 summer season. However, there was a small opportunity during the fall fishing seasons were fish were sold in Districts 1 and 2 in 2011 (82) and 2017 (168). The 1961-2016 average commercial harvest is 88,092 with a recent 10 year average of 9,714 (JTC 2018).

Sportfish

Sport fishing harvest of Chinook Salmon are generally low in the Yukon River drainage. The 2012-2016 average sport fishing harvest within the Alaska portion of the Yukon River was estimated to be 105 Chinook Salmon (JTC 2018). The majority of sport fishing effort in the drainage occurs in the Tanana River drainage (District 6). Outside of the Tanana River, the Andreafsky (in District 2) and Anvik (in District 4) rivers receive the bulk of the remaining effort. During 2017, sport fishing was allowed after June 20, and allowed for a bag limit of 1 Chinook Salmon 20-inches or greater (JTC 2018).

Summer Chum Salmon

Subsistence

Subsistence harvest of summer Chum Salmon in the Alaska portion of the Yukon River averaged 129,766 fish from 1970-2016, with a high of 227,829 in 1988 and a low of 72,155 in 2001 (JTC 2018) (Figure 7). The 2012-2016 average harvest is estimated to be 100,113 summer Chum Salmon, and the harvest estimate from 2014-2017 has remained relatively constant. The preliminary 2017 harvest is 87,252 summer Chum Salmon. Summer Chum Salmon are predominately harvested in Yukon area Districts 1-4, and 6. Few summer Chum Salmon migrate upstream of the Tanana River in the Yukon River mainstream.

Commercial

Commercial harvest of Chum Salmon in the Alaska portion of the Yukon River averaged 382,635 fish from 1970-2016, with a high of 1,148,650 in 1988 and a low of 0 in 2001 (JTC 2018). Since 2001, commercial catches of summer Chum Salmon has increased dramatically, with a 2012-2016 average of 444,094 fish. The preliminary 2017 harvest is 555,296 summer Chum salmon.

Sportfish

Sport fishing harvest of summer Chum Salmon is generally low in the Yukon River drainage. The 2012-2016 average sport fishing harvest within the Alaska portion of the Yukon River was estimated to be 264 summer Chum Salmon (JTC 2018). The majority of sport fishing effort in the drainage occurs in the Tanana River drainage (District 6). Outside of the Tanana River, the Andreafsky (in District 2) and Anvik (in District 4) rivers receive the bulk of the remaining effort.

Fall Chum Salmon

Subsistence

Subsistence harvest of fall Chum Salmon in the Alaska portion of the Yukon River averaged 105,167 fish from 1961-2016, with a high of 342,819 in 1987 and a low of 19,395 in 2000 (JTC 2018) (**Figure 8**). The 2012-2016 average harvest is estimated to be 95,294 fall Chum Salmon, and the harvest estimate from 2014-2017 has remained relatively constant. The preliminary 2017 harvest is 86,189 fall Chum Salmon.

Commercial

Commercial harvest of fall Chum Salmon in the Alaska portion of the Yukon River averaged 157,467 fish from 1961-2016, with a high of 466,451 in 1981 and a low of 0 in 1987, 1993, 2000, 2001, and 2002 when no commercial fishery was conducted (JTC 2018). Since 2002, commercial catches of fall Chum Salmon has varied dramatically, and the 2012-2016 average is 260,042 fish. The preliminary 2017 harvest is 489,702 fall Chum salmon.

Sportfish

Sport fishing harvest of fall Chum Salmon is generally low in the Yukon River drainage, with no data presented (JTC 2018).

Coho Salmon

Subsistence

Subsistence harvest of Coho Salmon in the Alaska portion of the Yukon River averaged 22,400 fish from 1961-2016, with a high of 82,371 in 1987 and a low of 3,966 in 1970 (JTC 2018) (**Figure 9**). The 2012-2016 average harvest is estimated to be 16,003 Coho Salmon, while the harvest estimate from 2016 and 2017 has decreased. The preliminary 2017 harvest is 7,645 Coho Salmon.

Commercial

Commercial harvest of Coho Salmon in the Alaska portion of the Yukon River averaged 38,031 fish from 1961-2016, with a high of 201,482 in 2016 and a low of 0 in 1987, 1993, 2000, 2001, and 2002 when no commercial fishery was conducted (JTC 2018). Since 2002, commercial catches of Coho Salmon has varied dramatically, and the 2012-2016 average is 115,372 fish. The 2017 harvest is 138,915 Coho salmon. All harvest data from 2016 and 2017 is preliminary.

Sportfish

Sport fishing harvest of Coho Salmon is generally low in the Yukon River drainage. The 2012-2016 average sport fishing harvest within the Alaska portion of the Yukon River was estimated to be 703 Coho Salmon (JTC 2018). The majority of sport fishing effort in the drainage occurs in the Tanana River drainage (District 6). Outside of the Tanana River, the Andreafsky (in District 2) and Anvik (in District 4) rivers receive the bulk of the remaining effort.

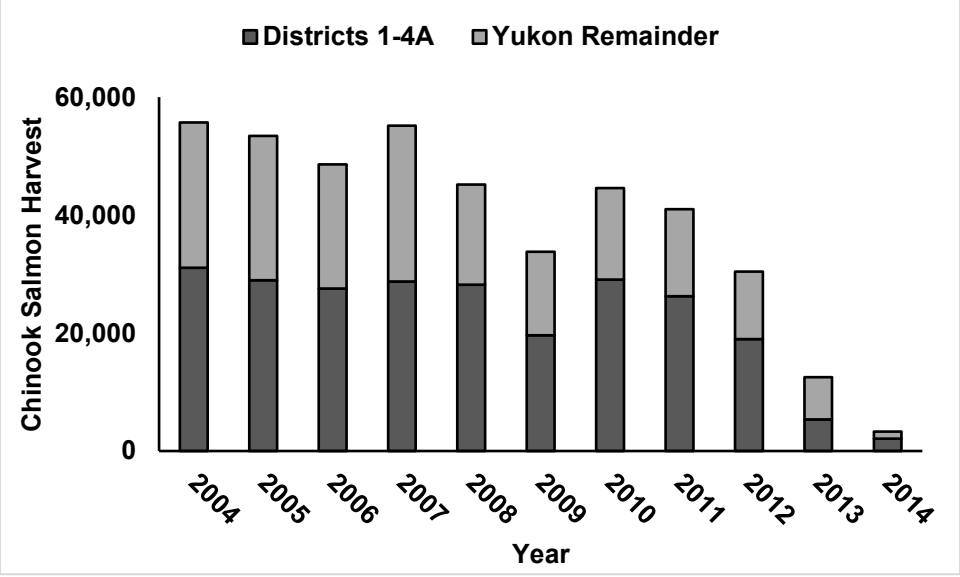

Figure 6. Comparison of Chinook Salmon subsistence harvest of communities from Districts 1- 4A and the remaining U.S. districts of the Yukon River from 2004 to 2014 (Jallen et al. 2017).

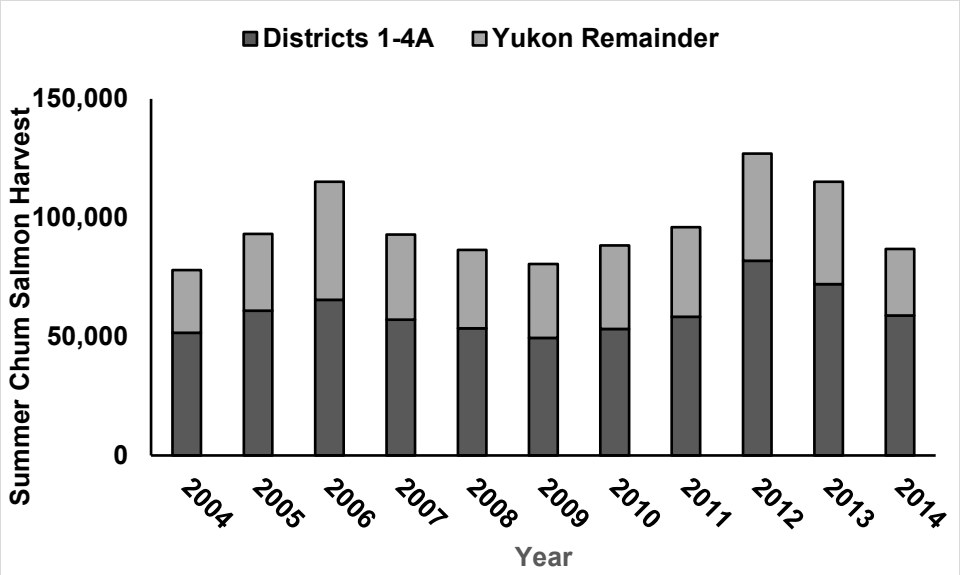

Figure 7. Comparison of Summer Chum Salmon subsistence harvest from communities in Districts 1- 4A and the remaining U.S. districts of the Yukon River from 2004 to 2014 (Jallen et al. 2017).

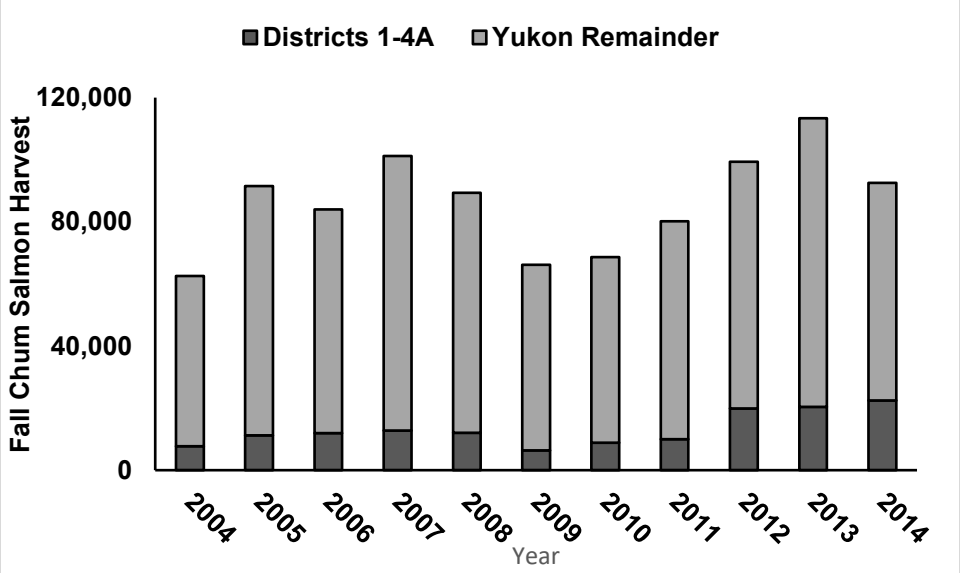

Figure 8. Comparison of Fall Chum Salmon subsistence harvest from communities in Districts 1- 4A and the remaining U.S. districts of the Yukon River from 2004 to 2014 (Jallen et al. 2017).

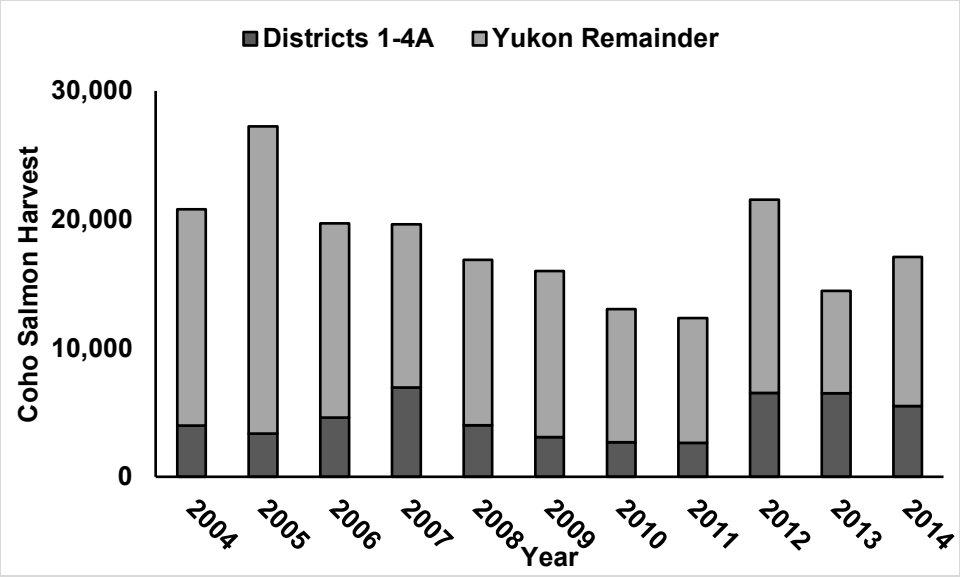

Figure 9. Comparison of Coho Salmon subsistence harvest from communities in Districts 1- 4A and the remaining U.S. districts of the Yukon River from 2004 to 2014 (Jallen et al. 2017).

Cultural Knowledge and Traditional Practices

The use and importance of salmon and other non-salmon species for Yukon River communities has been documented through oral histories and harvest surveys conducted in the area. Historically, many Yukon communities followed a semi-nomadic, subsistence lifestyle, spending time at seasonal camps, migrating with the resources and harvesting various species of fish, along with hunting and gathering subsistence resources. Humans have likely lived in the Yukon area for over 10,000 years (Rainey 1940) and fishing was a family and community activity, deeply ingrained in to the cultures of the people in this area. People traditionally used weirs and fish traps, and nets made of animal sinew and willow bark and more recently employed commercially made set nets along with hand made fish wheels for salmon at their fish camps. Multi-generational family groups would travel to seasonal camps to harvest fish and wildlife. Although fewer young people spend time at seasonal camps now due to employment, school, and other responsibilities, subsistence fishing continues to be important for communities up and down the river. According to surveys, many older people recalled whole families spending long hours at their fish camps, harvesting, processing, and preserving fish. Children learned about subsistence activities from their elders at fish camp (Brown et al. 2010; Brown et al. 2015).

Salmon is considered the most reliable and significant subsistence resource on the Lower Yukon River. Salmon has always been an important part of the culture, economically and socially, and the knowledge of how to catch, process, and preserve fish has been passed down from generation to generation. Before contact by outsiders dried fish was regularly traded between Yukon villages along with other commodities such as furs and sea mammal products (Wolfe 1981).

Yukon River residents are dependent on the harvest of salmon, especially Chinook Salmon, for both subsistence and commercial uses. Starting in the late 1990s, Chinook Salmon began to decline so people harvested more summer and Fall Chum Salmon along with other subsistence resources (Brown et al. 2015). In the 1960s, people started using gillnets to drift fish for salmon for personal and commercial use.

Today fishing still plays an important cultural role in the communities along the lower and middle Yukon River, and the knowledge of how and when to fish is passed down from generation to generation.

Customary trade of fish is an important part of continuing trade networks in rural areas of Alaska. Salmon fishing takes place in the summer and timing is based on the runs for various species. Local residents also use nets under the ice to fish for pike, whitefish, or sheefish in the spring before breakup. Communities have used various types of nets and fish wheels to harvest fish through the generations. Fish wheels are used less now than they were in the past when people were catching more fish to feed sled dogs, but are still used in some areas, mainly to catch fish for human consumption (Brown et al. 2010). Chum salmon, once primarily used for dog food, were caught using nets set from the shore but are now consumed by people in the United States and overseas. As more village runways were built, increasing air travel, and more snow machines were brought to the villages, the dependency on sled dogs was reduced, reducing the need for harvesting fish to feed dogs (Brown et al. 2015).

The use, harvest, and dependence of salmon resources can vary by community based on cultural practices, resource availability, economics and many other factors. Yukon River drainage residents exhibit these variations generally within the lower, middle, and upper stretches of the drainage. Communities present along the river and their populations over time, by fishing district, are represented in Appendix 1.

Effects of the Proposal

If this proposal were adopted, Federally qualified subsistence users would be allowed to continue subsistence fishing for salmon up to 6 hours, instead of up to 24 hours, before the start of the State commercial fishing season in Yukon Districts 1, 2, 3, and Subdistrict 4A (excluding Koyukuk and Innoko rivers).

Although this proposal may increase opportunities for subsistence harvest for Federally qualified users, there are some potential drawbacks that may occur. State and Federal regulations would no longer be the same, complicating enforcement of these regulations and creating confusions about where and when it is legal to fish. Districts 1 and 2 contain primarily Federal public waters, as well as most of District 3. However, once out of the Yukon Delta National Wildlife Refuge, land status becomes more varied and would require users to know the location of Federal public waters.

Fishery managers currently have the authority to set time and area. Therefore, it is not unusual for them to modify the amount of closure time leading into and out of a commercial fishing period. For example, subsistence fishing was closed for only 3 hours prior to and reopened 3 hours after a commercial opening on July 22, 2017 (ADF&G 2017).

If the proposal was not adopted, the subsistence fishery would remain closed for 24 hours prior to the start of the State commercial fishing season and subsistence management regulations would remain the same.

OSM PRELIMINARY CONCLUSION

Support Proposal FP19-02 **with modification** to provide the updated language only one time in the regulations to avoid redundancy.

The modified regulation should read:

§___.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.

§___.27 Subsistence taking of fish

(e)(3) Yukon-Northern Area.

* * * *

(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.

* * * *

*(vi) In Districts 1, 2, 3, and Subdistrict 4A, excluding the Koyukuk and Innoko River drainages, you may not take salmon for subsistence purposes during the ~~24~~**6** hours immediately before the opening of the State commercial salmon fishing season.*

Justification

Adoption of this proposal would result in additional opportunity for Federally qualified subsistence users in Districts 1-4A on the Yukon River. If adopted with FP19-03 as modified, Federally qualified subsistence users would have a uniform period of closure surrounding the commercial fishery throughout the fishing season reducing confusion in Federal regulations surrounding the closure time before and after a commercial fishing opportunity. The 6 hours between subsistence fishing and commercial fishing would still allow enough time for users to adjust for each as needed. Modification of the proposed language avoids redundancy in Federal regulations.

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Appendix 1. Population data for communities within the Yukon River drainage fishing districts, 1960-2010.

U.S. CENSUS POPULATION							
Community	**1960**	**1970**	**1980**	**1990**	**2000**	**2010**	**2010 number of households**
Stebbins city	158	231	331	400	547	556	134
Outside drainage subtotal	**158**	**231**	**331**	**400**	**547**	**556**	**134**
Alakanuk city	278	265	522	544	652	677	160
Nunam Iqua city	125	125	103	109	164	187	43
Emmonak city	358	439	567	642	767	762	185
Kotlik city	57	228	293	461	591	577	128
District 1 subtotal	**818**	**1,057**	**1,485**	**1,756**	**2,174**	**2,203**	**516**
Mountain Village city	300	419	583	674	755	813	184
Pitkas Point CDP	28	70	88	135	125	109	31
Saint Marys city	260	384	382	441	500	507	151
Pilot Station city	219	290	325	463	550	568	121
Marshall city	166	175	262	273	349	414	100
District 2 subtotal	**973**	**1,338**	**1,640**	**1,986**	**2,279**	**2,411**	**587**
Russian Mission city	102	146	169	246	296	312	73
Holy Cross city	256	199	241	277	227	178	64
Shageluk city	155	167	131	139	129	83	36
District 3 subtotal	**513**	**512**	**541**	**662**	**652**	**573**	**173**
Anvik city	120	83	114	82	104	85	33
Grayling city	0	139	209	208	194	194	55
Kaltag city	165	206	247	240	230	190	70
Nulato CDP	183	308	350	359	336	264	92
Koyukuk city	128	124	98	126	101	96	42
Huslia city	168	159	188	207	293	275	91
Hughes city	69	85	73	54	78	77	31
Allakaket city	115	174	163	170	97	105	44
Alatna CDP				31	35	37	12
Bettles city	77	57	49	36	43	12	9
Evansville CDP	77	57	45	33	28	15	12
Wiseman CDP	0	0	8	33	21	14	5
Coldfoot CDP					13	10	6
Galena city	261	302	765	833	675	470	190
Ruby city	179	145	197	170	188	166	62
District 4 subtotal	**1,542**	**1,839**	**2,506**	**2,582**	**2,436**	**2,010**	**754**
Tanana city	349	120	388	345	308	246	100
Rampart CDP	49	36	50	68	45	24	10
Stevens Village CDP	102	74	96	102	87	78	26
Beaver CDP	101	101	66	103	84	84	36
Fort Yukon city	701	448	619	580	595	583	246
Chalkyitsik CDP	57	130	100	90	83	69	24

Continued on next page

Appendix 1. *Continued from previous page*

U.S. CENSUS POPULATION							
Community	**1960**	**1970**	**1980**	**1990**	**2000**	**2010**	**2010 number of households**
Arctic Village CDP	110	85	111	96	152	152	65
Venetie CDP	107	112	132	182	202	166	61
Birch Creek CDP	32	45	32	42	28	33	17
Circle CDP	41	54	81	73	100	104	40
Chicken CDP	0	0	0	0	17	7	5
Central CDP	28	26	36	52	134	96	53
Eagle Village CDP	0	0	54	35	68	67	31
Eagle city	92	36	110	168	129	86	41
District 5 subtotal	**1,769**	**1,267**	**1,875**	**1,936**	**2,032**	**1,795**	**755**
Livengood CDP					29	13	7
Manley CDP	72	34	61	96	72	89	41
Minto CDP	161	168	153	218	258	210	65
Whitestone CDP						97	22
Nenana city	286	362	470	393	402	378	171
Four Mile Road CDP					38	49	14
Healy CDP	67	79	334	487	1,000	1,021	434
McKinley Park CDP	0	0	60	171	142	185	109
Anderson city	341	362	517	628	367	246	90
Ferry CDP				56	29	33	17
Lake Minchumina CDP	0	0	22	32	32	13	6
Cantwell CDP	85	62	89	147	222	219	104
Delta Junction city	0	703	945	652	840	958	377
Fort Greely CDP	0	1,820	1,635	1,299	461	539	236
Deltana CDP					1,570	2,251	784
Healy Lake CDP	0	0	33	47	37	13	7
Big Delta CDP	0	0	285	400	749	591	206
Dry Creek CDP	0	0	0	106	128	94	29
Dot Lake CDP	56	42	67	70	19	13	7
Dot Lake Village CDP					38	62	19
Tanacross CDP	102	84	117	106	140	136	53
Tetlin CDP	122	114	107	87	117	127	43
Tok CDP	129	214	589	935	1,393	1,258	532
Northway CDP	196	40	73	123	95	71	27
Northway Jct. CDP	0	0	0	88	72	54	20
Northway Village CDP						98	
Alcan border CDP	0	0	0	27	21	33	16
Nabesna CDP						5	3
District 6 subtotal	**1,617**	**4,084**	**5,557**	**6,168**	**8,271**	**8,856**	**3,439**
TOTAL	**7,390**	**10,328**	**13,935**	**15,490**	**18,391**	**18,404**	**6,358**

CDP=Census Designated Place. Black cell=information is not available. Source: ADCCED 2014.

FP19–03/19-04 Executive Summary	
General Description	Proposal FP19-03 requests the Federal Subsistence Board (Board) decrease the time the subsistence fishery is closed immediately before the State commercial fishing period in Yukon Districts 1, 2, and 3 from 18 hours to 6 hours, and immediately after from 12 hours to 6 hours. Proposal FP-04 requests the Board eliminate the closures to subsistence fishing immediately before, during and after commercial fishing periods in Yukon Districts 1, 2, and 3 *Both proposals submitted by: Alissa Rogers*.
Proposed Regulation	*See pages 252 to 255 of this book for proposed regulations.*
OSM Preliminary Conclusion	**Support** Proposal FP19-03 **with modification** to include district 4A and provide the updated language only one time in the regulations to avoid redundancy. **Oppose** Proposal FP19-04.
Yukon-Kuskokwim Delta Subsistence Regional Advisory Council Recommendation	
Western Interior Alaska Subsistence Regional Advisory Council Recommendation	
Seward Peninsula Subsistence Regional Advisory Council Recommendation	
Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	**None**

DRAFT STAFF ANALYSIS
FP19-03 AND 19-04

ISSUES

Proposal FP19-03, submitted by Alissa Rogers of Bethel requests the Federal Subsistence Board (Board) decrease the time the subsistence fishery is closed immediately before the State commercial fishing period in Yukon Districts 1, 2, and 3 from 18 hours to 6 hours, and immediately after from 12 hours to 6 hours.

Proposal FP-04, submitted by Alyssa Rogers of Bethel requests the Board eliminate the closures to subsistence fishing immediately before, during and after commercial fishing periods in Yukon Districts 1, 2, and 3.

DISCUSSION

The proponent states these closures do not prevent people from selling their harvest from the Federal subsistence fishery as commercially caught fish. The proponent states there are always going to be a few bad actors, that they are known and have been fined before but that the existing regulation has not stopped them. The proponent states that the existing regulation is burdensome on Federal subsistence fishermen without any benefit.

Existing Federal Regulation

§___.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.

§___.27 Subsistence taking of fish

(e)(3) Yukon-Northern Area.

* * * *

(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.

* * * *

(vii) In Districts 1, 2, and 3:

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

(B) After July 15, you may not take salmon for subsistence for 12 hours immediately before, during, and for 12 hours after each State commercial salmon fishing period.

Proposed Federal Regulation

Proposal FP19-03

§___.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.

§___.27 Subsistence taking of fish

(e)(3) Yukon-Northern Area.

* * * *

(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), ***except in Districts 1, 2, and 3 after the opening of the State commercial salmon fishing season through July 15, you may not take salmon for subsistence for 6 hours immediately before, during, and for 6 hours after each State commercial salmon fishing period and after July 15, you may take salmon for subsistence for 6 hours immediately before, during, and for 6 hours after each State commercial salmon fishing period,*** *unless superseded by a Federal Special Action.*

* * * *

(vii) In Districts 1, 2, and 3:

*(A) After the opening of the State commercial salmon fishing season through July 15, you may not take salmon for subsistence for ~~18~~**6** hours immediately before, during, and for ~~12~~**6** hours after each State commercial salmon fishing period;*

*(B) After July 15, you may not take salmon for subsistence for ~~12~~**6** hours immediately before, during, and for ~~12~~**6** hours after each State commercial salmon fishing period.*

Proposal FP19-04

§___.27 Subsistence taking of fish

(e)(3) Yukon-Northern Area.

* * * *

(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), ***except in Districts 1, 2, and 3 after the opening of the State commercial salmon fishing there are no closures to subsistence salmon fishing before, during, or after each State commercial fishing period,*** *unless superseded by a Federal Special Action.*

* * * *

(vii) In Districts 1, 2, and 3:

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

(B) After July 15, you may ~~not~~ take salmon for subsistence for 12 hours immediately before, during, and for 12 hours after each State commercial salmon fishing period.

Existing State Regulation

5 AAC 01.210. Fishing seasons and periods

(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;

(C) notwithstanding the provisions of (A) and (B) of this paragraph, if the commissioner determines it necessary to ensure that reasonable opportunity for subsistence uses is being provided, the commissioner may, by emergency order, open a subsistence fishing period that may occur during times that are before, during, and after a commercial salmon fishing period;

Extent of Federal Public Lands

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 Yukon Delta National Wildlife Refuge (NWR) within fishing Subdistricts 1-3 of the Yukon/Northern Federal Subsistence Fishery Management Area (**Figure 1**).

Customary and Traditional Use Determinations

Rural residents of the Yukon River drainage and the community of Stebbins have customary and traditional use determination for Salmon, other than Fall Chum Salmon in the Yukon River drainage.

Residents of the Yukon River drainage and the community of Chevak, Hooper Bay, Scammon Bay, and Stebbins have a customary and traditional use determination for Fall Chum Salmon in the Yukon River drainage.

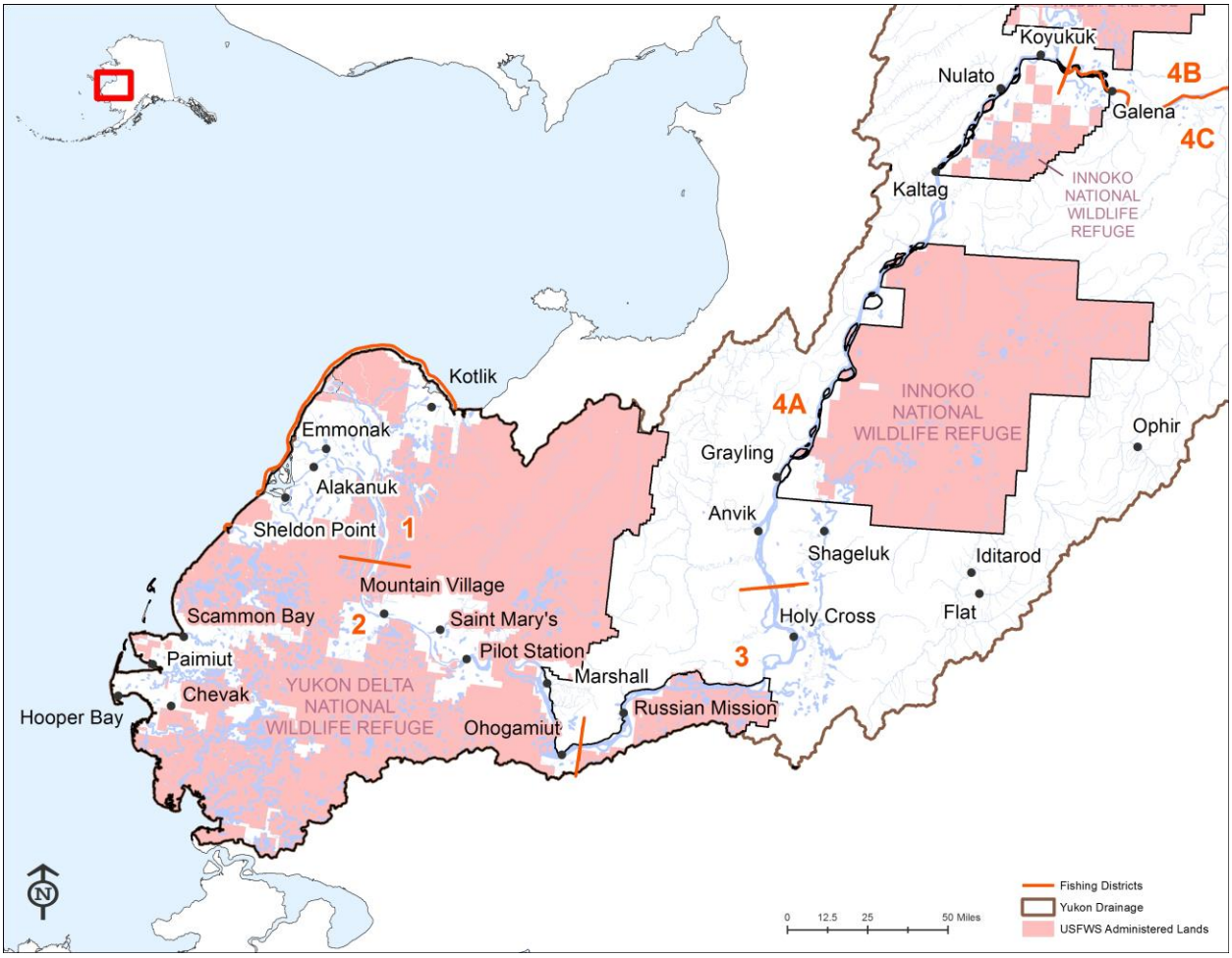

Figure 1. Yukon River Drainage fishing Districts 1, 2, 3, and 4A.

Regulatory History

State Regulatory History

The current 6 commercial fishing districts were established in 1974. The subsistence fishing schedules were also linked to the commercial fishing schedules in districts 1-6 in the same year, and concurrent subsistence and commercial fishing for 5 days per week was implemented in the Upper Yukon Area (Districts 4-6). Beginning in 1977 the lower Yukon area was reduced to commercial and subsistence fishing for 3 days per week during the commercial Chinook Salmon season, and 3.5 days per week during the Fall Chum Salmon season. The Fall Chum Salmon fishing season was again reduced in 1979, to 3 days per week. Beginning in 1981, ADF&G began announcing in-season lower Yukon area commercial fishing periods by emergency order, with Lower Yukon area subsistence periods announced in this manner beginning in 1984 (Jallen et al. 2015).

In December 1976, the BOF prohibited the use of drift gillnets for subsistence Chinook Salmon fishing in the middle and upper Yukon Areas (Districts 4-6). The Alaska Board of Fisheries discussions at that time indicated that the possible increase in the use of drift gillnets could seriously impact both the conservation and allocation of middle and upper Yukon River salmon stocks, which were being harvested at maximum

levels (ADF&G 2001). However, subsistence users in the upper Yukon areas were allowed to continue using drift gillnets throughout the Yukon River drainage until the 1977 season.

In 1981, the BOF adopted a proposal to allow drift gillnets for subsistence Chinook Salmon harvest in Subdistrict 4-A (ADF&G 1982).

Beginning in 1993, regulations separated commercial and subsistence fishing times in Districts 1-3 and Subdistrict 4A. The regulations stated that subsistence fishing in District 1-3 was open 7 days per week, 24 hours/day until the commercial fishing season began. Once commercial fishing had started, subsistence fishing was closed 18 hours prior, during, and 12 hours after each commercial fishing period. Also, marking of subsistence caught fish was required by removal of the dorsal fin. These regulations were made based on an enforcement action where subsistence-caught fish were being sold in the commercial fishery in 1992 (Bergstrom et al. 1995).

In 1994, the BOF questioned the need for drift gillnets to provide for adequate subsistence opportunity in the middle and upper Yukon Areas. State staff comments suggested that at that time, it did not appear necessary (ADF&G 2001). The Alaska BOF stated that 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. No BOF action was taken.

The Board added a fishing schedule for the subsistence salmon fisheries. The schedule will be implemented chronologically, consistent with migratory timing as the run progresses upstream. This schedule may be altered by emergency order if preseason or in-season indicators suggest it is necessary for conservation. Districts 1-3 windows allowed subsistence salmon fishing for two 36 hour periods per week. Districts 4, and Subdistricts 5-B and 5-C were open to subsistence fishing for two 48-hour periods per week. Subsistence fishing in Subdistrict 4-A was further defined during the commercial fishing season in 2004 with Chinook Salmon fishing only allowed during two 48 hour drift netting periods per week by emergency order.

In February 2007, the BOF adopted a proposal changing the marking requirement for subsistence-caught salmon in Districts 1–3 from removal of the dorsal fin to removal of both tips of the tail fin. The rationale cited in the subcommittee report was to foster better compliance because marking would be easier, to make the regulation consistent with other areas of the State, to clarify when subsistence marking requirements would be in place, to use a more sanitary mark, and to discourage subsistence caught fish from entering the State's commercial fisheries (ADF&G 2007).

Commercial fishing for Chum Salmon during times of Chinook Salmon conservation was permitted with fish wheels by emergency order in Subdistrict 4A, beginning in 2012. Fishermen are required to be present at the fish wheel, and immediately release all Chinook Salmon alive.

In March 2015, the BOF adopted a new regulation that allowed the use of drift gillnets to harvest Summer Chum Salmon for subsistence purposes during times of Chinook conservation from June 10 through August 2, by emergency order, in the upper portion of Subdistrict 4A (5 AAC 0l.220(e)(1)).

In January 2016, the BOF adopted the same regulations for the lower portion of the Subdistrict 4A (5 AAC 0l.220 (e) (2)).

Federal Regulatory History

Starting in October 1999, Federal subsistence management regulations for the Yukon-Northern Area stipulated that, unless otherwise restricted, rural residents may take salmon in the Yukon-Northern Area at any time by gillnet, beach seine, fish wheel, or rod and reel unless exceptions are noted.

In 2002, the Board delegated some of its authority to manage Yukon River drainage subsistence salmon fisheries to the Branch Chief for Subsistence Fisheries, U.S. Fish and Wildlife Service, in Fairbanks. The Federal Subsistence Board's delegation allows the Federal manager to open or close Federal subsistence fishing periods or areas provided under codified regulations, and to specify methods and means.

In 2017, through fisheries proposal FP17-03, the Board modified regulations in Subdistrict 4-A to allow the Federal In-season Manager to open fishing periods during which Chum Salmon may be taken by drift gillnets from June 10 through August 2 (FSB 2017). This regulation change was made to match existing ADF&G regulations that were modified in 2015 and 2016.

Current Events

The proponent for this regulatory proposal has also submitted this proposal to the BOF for its review during their Arctic/Yukon/Kuskokwim Finfish meeting that is scheduled for January 15-19, 2019. The proponent has also submitted FP19-02 which is a similar proposal that aims to reduce the required closure before the beginning of the commercial fishing season from 24 hours to 6 hours.

Biological Background

Chinook Salmon

Recent analyses indicate that Yukon River Chinook Salmon stocks appear to be in the third year of increasing productivity after the low returns of 2015. Historically, the stocks showed periods of above-average abundance (1982-1997) and periods of below-average abundance (1998 onwards), as well as periods of generally higher productivity (brood years 1993 and earlier) mixed with years of low productivity (brood years 1994-1996 and 2002-2005; Schindler et al. 2013).

The 2014 run was expected to be the smallest on record, with a projected size of 64,000-121,000 fish. Despite initial concerns, the cumulative passage estimate at the mainstem Yukon River sonar project in Pilot Station were approximately 138,000±17,000 (90% CI) fish (**Figure 2**). The passage estimate was still below the historical average of 143,000 fish and below the average of 195,800 fish for years with early run timing. As a result of severe management restrictions, all escapement goals that could be assessed were achieved, even with below average run sizes (JTC 2015).

The 2015 projected run size was 118,000-140,000 fish, which was once again below average yet higher than the previous year's projection. Cumulative passage estimates at the sonar station in Pilot Station were approximately 116,000±30,000 fish (90% CI) (**Figure 2**). As with the previous year, this number was still below the historical average. As a result of severe management restrictions, all escapement goals that could be assessed were achieved, even with below average run sizes (JTC 2016).

The 2016 run outlook was a below-average run of 130,000–176,000 fish (JTC 2017). Cumulative passage estimates at the sonar station in Pilot Station were approximately 176,898±18,466 fish (90% CI) (Liller, 2018 pers. comm.). This number was near the recent historical average of 178,300 fish (ADF&G 2018a), but is considered preliminary at this time. Conservative actions were relaxed slightly from previous years and all escapement goals were again met (JTC 2016).

The 2017 run outlook was slightly larger, but still below average: 140,000-194,000 fish (JTC 2017). Cumulative passage estimates at the Pilot Station sonar were approximately 263,000±29,000 fish (90% CI) (ADF&G 2018a), which was the largest since 2003 (JTC 2017), is also considered preliminary. Subsistence management restrictions were further relaxed that resulted in harvests approximately two thirds of average and most escapement goals were met despite the poor water conditions that existed throughout the drainage. The numbers reported at the Pilot Station sonar do not factor in any harvest that occurs downstream, which can be significant during some years.

The 2018 run outlook is larger than in recent years, with a run size of 173,000-251,000 fish (ADF&G 2018a). The upper end of the range could support an average average subsistence harvest, while the low end of the range would likely result in restrictions to subsistence fishing.

Summer Chum Salmon

Summer Chum Salmon runs in the Yukon River have provided a harvestable surplus in each of the last 15 years, 2003-2017. In 2017, the projected outlooks were for a run size of approximately 2 million fish, while the 2018 projection is expected to be similar or slightly lower than the 2017 run of approximately 3.6 million fish.

In 2016, approximately 1.92 million ±80,517 (90% CI) fish passed the Yukon River sonar project at Pilot Station, which was near the historical median for the project of 1.90 million fish. In 2017, the passage estimate at Pilot Station increased to 3.09 million ±138,259 (90% CI) (**Figure 3**). Most tributaries experienced average to above-average escapement in 2017 (JTC 2018). The Henshaw Creek weir counted a record number of Chum Salmon (360,687), which was just under the number counted at the Anvik River Sonar (415,139). The numbers reported at the Pilot Station sonar do not factor in any harvest that occurs downstream, which can be significant during some years.

Although all 2017 numbers are preliminary at this time, the 2018 run is anticipated to provide for escapement, normal subsistence harvest, and a surplus for commercial harvest (JTC 2018).

Fall Chum Salmon

Fall Chum Salmon runs in the Yukon River have provided a harvestable surplus in each of the last 8 years, 2010-2017. The 2018 projection of 1.6-1.8 million fish is lower than the 2017 run of approximately 2.3 million fish (JTC 2018).

In 2016, approximately 994,760 million ±64,434 (90% CI) Fall Chum Salmon passed the Yukon River sonar project at Pilot Station, which was above the 1995-2016 median for the project of 688,057 fish. In 2017, the passage estimate at Pilot Station increased to 1.83 million ±54,179 (90% CI) and was the second largest run in 43 years (**Figure 4**). Most tributaries experienced average to above-average escapement in 2017 (JTC 2018) although all 2017 numbers are preliminary at this time.

The 2018 run is anticipated to provide for escapement, normal subsistence harvest, and a surplus for commercial harvest (JTC 2018).

Coho Salmon

In 2016 approximately 168,297 ± 11,180 (90% CI) Coho Salmon passed the Yukon River sonar project at Pilot Station, which was slightly above the historical median of 160,272 fish. In 2017, the passage estimate at Pilot Station decreased to 166,330 ±20,300 (90% CI) which was also slightly above the historical median (**Figure 5**). All 2017 numbers are preliminary at this time. The Coho Salmon outlook is based upon parent year escapements assuming average survival. Since Coho Salmon predominately return as age 2.1 fish (4 year old fish), the major contributor to the 2018 returns are from the 2014 parent year. Therefore, the 2018 outlook is for average to above average returns in 2018.

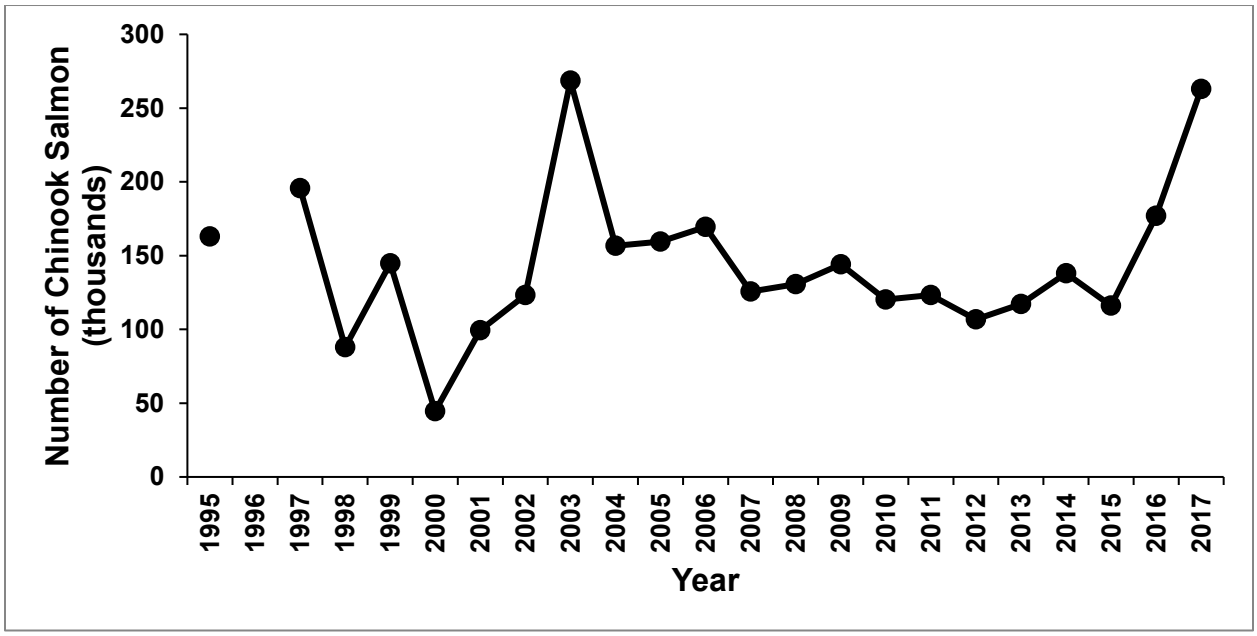

Figure 2. Chinook Salmon passage estimates based on the mainstem Yukon River sonar near Pilot Station, Yukon River drainage, 1995 and 1997-2017 (JTC 2018). Data from 2016 and 2017 are preliminary at this time.

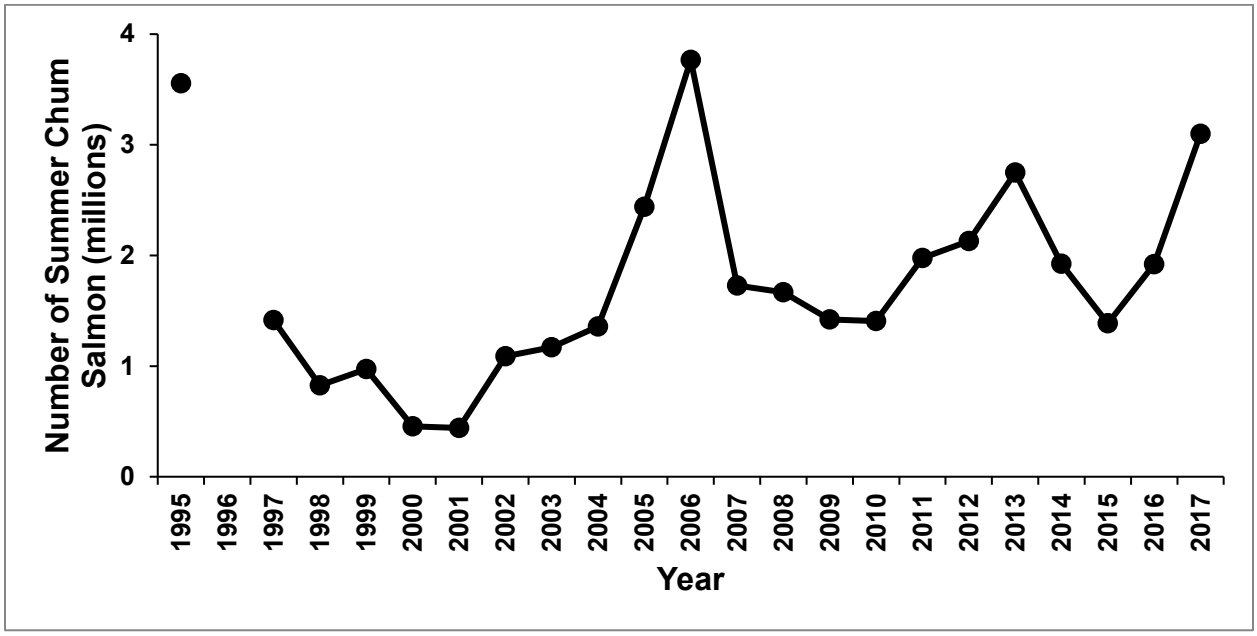

Figure 3. Summer Chum Salmon passage estimates based on the mainstem Yukon River sonar near Pilot Station, Yukon River drainage, 1995 and 1997-2017 (JTC 2018). Data from 2016 and 2017 are preliminary at this time.

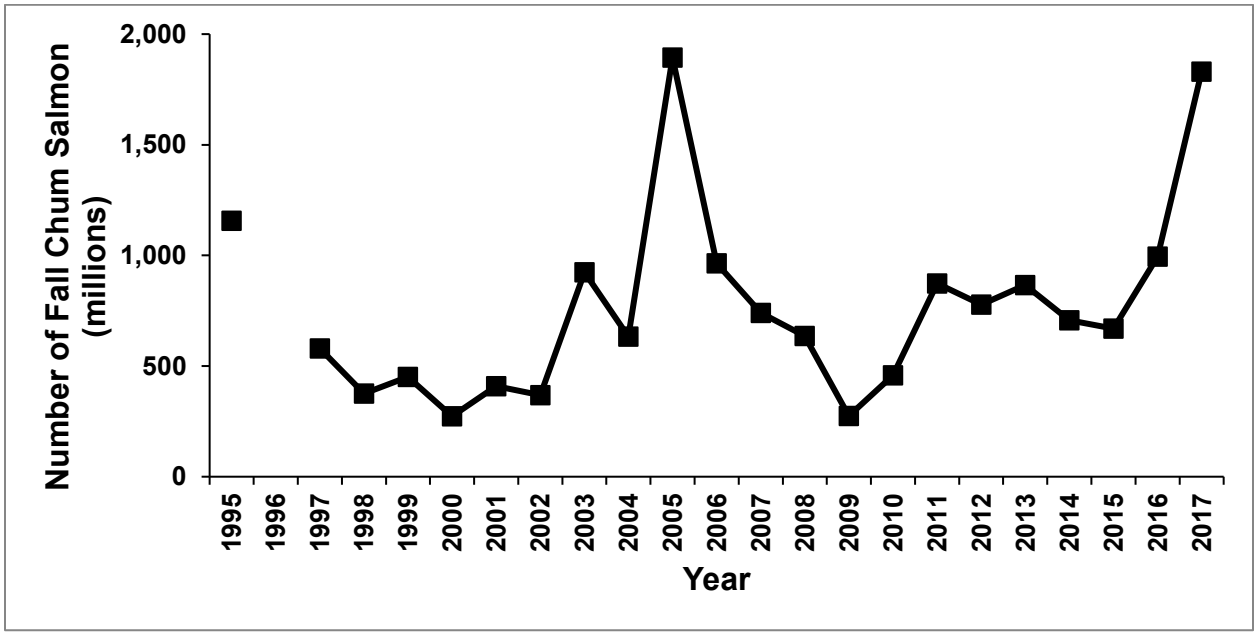

Figure 4. Fall Chum Salmon passage estimates based on the mainstem Yukon River sonar near Pilot Station, Yukon River drainage, 1995 and 1997-2017 (JTC 2018). Data from 2016 and 2017 are preliminary at this time.

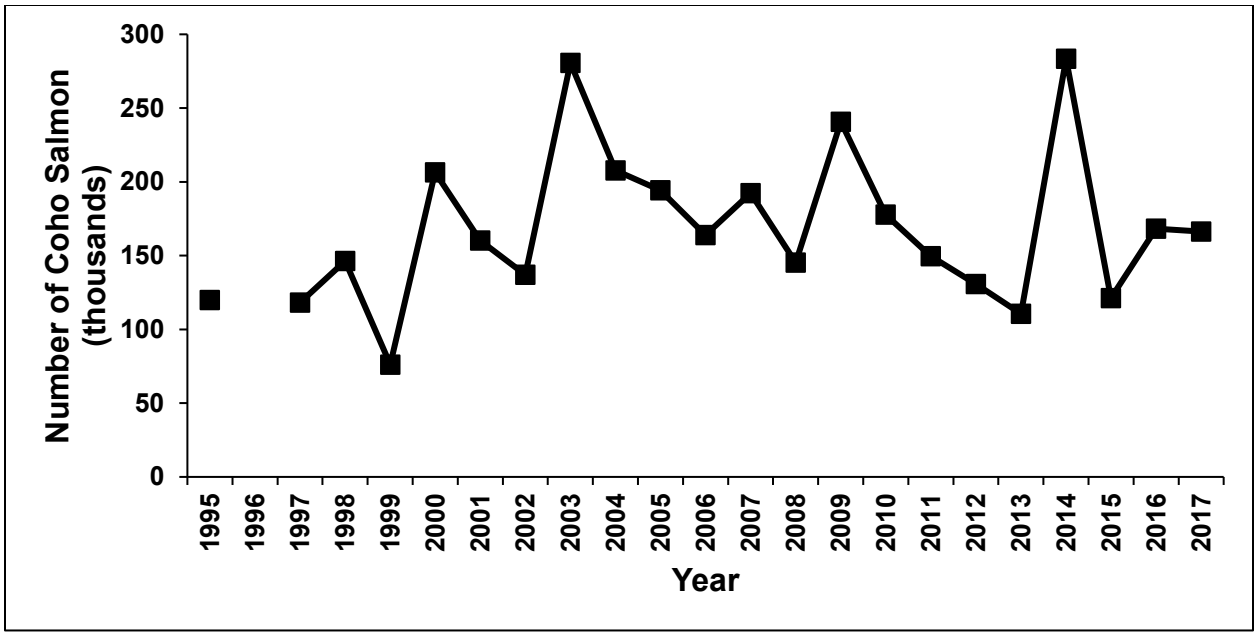

Figure 5. Coho Salmon passage estimates based on the mainstem Yukon River sonar near Pilot Station, Yukon River drainage, 1995 and 1997-2017 (JTC 2018). Data from 2016 and 2017 are preliminary at this time.

Harvest History

Chinook Salmon

Subsistence

Subsistence harvest of Chinook Salmon in the Alaska portion of the Yukon River averaged 34,791 fish from 1961-2015, with a high of 62,486 in 1993 and a low of 2,724 in 2014 (JTC 2017) (**Figure 6**). The 2014 Chinook Salmon subsistence harvest of 2,724 fish was the lowest on record for the Alaska portion of the Yukon River drainage. Harvest increased in 2015, 2016 and 2017 with 7,577, 21,627, and 36,992 fish harvested respectively. The 2017 harvest estimate, though preliminary, is larger than the 2007-2016 average (29,514) and over 2 times the number of the recent 5 year average of 15,088 (JTC 2018). The 2017 harvest was the largest since 2011.

The subsistence harvest in Yukon River Districts 1-3 averaged 16,755 from 2004- 2013, with a 2009-2013 average of 13,442 Chinook Salmon (Jallen et al. 2017). The estimated 2014 subsistence harvest in these districts was 2,020 Chinook Salmon.

Commercial

Chinook Salmon have not been targeted in the commercial fishery for 10 years and the sale of incidentally caught Chinook Salmon was prohibited for the seventh consecutive year during the 2017 summer season. However, there was a small opportunity during the fall fishing seasons were fish were sold in Districts 1 and 2 in 2011 (82) and 2017 (168). The 1961-2016 average commercial harvest is 88,092 with a recent 10 year average of 9,714 (JTC 2018).

Sportfish

Sport fishing harvest of Chinook Salmon are generally low in the Yukon River drainage. The 2012-2016 average sport fishing harvest within the Alaska portion of the Yukon River was estimated to be 105 Chinook Salmon (JTC 2018). The majority of sport fishing effort in the drainage occurs in the Tanana River drainage (District 6). Outside of the Tanana River, the Andreafsky (in District 2) and Anvik (in District 4) rivers receive the bulk of the remaining effort. During 2017, sport fishing was allowed after June 20, and allowed for a bag limit of 1 Chinook Salmon 20-inches or greater (JTC 2018).

Summer Chum Salmon

Subsistence

Subsistence harvest of Summer chum Salmon in the Alaska portion of the Yukon River averaged 129,766 fish from 1970-2016, with a high of 227,829 in 1988 and a low of 72,155 in 2001 (JTC 2018) (**Figure 7**). The estimated 2012-2016 average harvest was 100,113 Summer Chum Salmon, and the harvest estimate from 2014-2017 remained relatively constant. The preliminary 2017 harvest is 87,252 Summer Chum Salmon. Summer Chum Salmon are predominately harvested in Yukon area Districts 1-4, and 6. Few Summer Chum Salmon migrate upstream of the Tanana River in the Yukon River mainstream.

Commercial

Commercial harvest of Chum Salmon in the Alaska portion of the Yukon River averaged 382,635 fish from 1970-2016, with a high of 1,148,650 in 1988 and a low of 0 in 2001 (JTC 2018). Since 2001, commercial catches of Summer Chum Salmon has increased dramatically, with a 2012-2016 average of 444,094 fish. Preliminary data for the 2017 season shows a harvest of 555,296 Summer Chum Salmon.

Sportfish

Sport fishing harvest of Summer Chum Salmon is generally low in the Yukon River drainage. The 2012-2016 average sport fishing harvest within the Alaska portion of the Yukon River was estimated to be 264 Summer Chum Salmon (JTC 2018). The majority of sport fishing effort in the drainage occurs in the Tanana River drainage (District 6). Outside of the Tanana River, the Andreafsky (in District 2) and Anvik (in District 4) rivers receive the bulk of the remaining effort.

Fall Chum Salmon

Subsistence

Subsistence harvest of Fall Chum Salmon in the Alaska portion of the Yukon River averaged 105,167 fish from 1961-2016, with a high of 342,819 in 1987 and a low of 19,395 in 2000 (JTC 2018) (**Figure 8**). The 2012-2016 average harvest is estimated to be 95,294 Fall Chum Salmon, and the harvest estimate from 2014-2017 has remained relatively constant. The preliminary 2017 harvest is 86,189 Fall Chum Salmon.

Commercial

Commercial harvest of Fall Chum Salmon in the Alaska portion of the Yukon River averaged 157,467 fish from 1961-2016, with a high of 466,451 in 1981 and a low of 0 in 1987, 1993, 2000, 2001, and 2002 when no commercial fishery was conducted (JTC 2018). Since 2002, commercial catches of Fall Chum Salmon has varied dramatically, and the 2012-2016 average is 260,042 fish. Preliminary data for the 2017 season shows a harvest of 489,702 Fall Chum Salmon.

Sportfish

Sport fishing harvest of Fall Chum Salmon is generally low in the Yukon River drainage, with no data available (JTC 2018).

Coho Salmon

Subsistence

Subsistence harvest of Coho Salmon in the Alaska portion of the Yukon River averaged 22,400 fish from 1961-2016, with a high of 82,371 in 1987 and a low of 3,966 in 1970 (JTC 2018) (**Figure 9**). The 2012-2016 average harvest was estimated to be 16,003 Coho Salmon, while the harvest estimate from 2016 and 2017 has decreased. Preliminary data for the 2017 season show a harvest of 7,645 Coho Salmon.

Commercial

Commercial harvest of Coho Salmon in the Alaska portion of the Yukon River averaged 38,031 fish from 1961-2016, with a high of 201,482 in 2016 and a low of 0 in 1987, 1993, 2000, 2001, and 2002 when no commercial fishery was conducted (JTC 2018). Since 2002, commercial catches of Coho Salmon has varied dramatically, and the 2012-2016 average is 115,372 fish. The 2017 harvest was 138,915 Coho Salmon. All harvest data from 2016 and 2017 are preliminary.

Sportfish

Sport fishing harvest of Coho Salmon is generally low in the Yukon River drainage. The 2012-2016 average sport fishing harvest within the Alaska portion of the Yukon River was estimated to be 703 Coho Salmon (JTC 2018). The majority of sport fishing effort in the drainage occurs in the Tanana River drainage (District 6). Outside of the Tanana River, the Andreafsky (in District 2) and Anvik (in District 4) rivers receive the bulk of the remaining effort.

Comprehensive Household Harvest Surveys

ADF&G's Division of Subsistence occasionally undertakes comprehensive household surveys as time and resources allow. These document the use, harvest, and sharing of all wild foods harvested in a community in a given year and can thus provide insights on the importance of individual resources within the overall harvest and the cultural contexts of these harvests, including patterns of sharing. For the region represented by the proposal, available salmon harvest and use data collected by these surveys is represented in **Table 1**.

The Chinook Salmon and Chum Salmon harvests and use represented in **Table 1** include all gear types including commercial retention. A large percentage of households in these communities used Chinook Salmon in the study years. Patterns of Chum Salmon use was similar to Chinook Salmon for all communities except for Alakanuk, which had a higher percentage of Chinook Salmon compared to Chum Salmon. Coho Salmon use was much less than for the other two species for all communities except Shageluk which used more Coho Salmon than Chinook or Chum Salmon in 2013.

Sharing of salmon resources as represented by giving and receipt in **Table 1** was common for communities with available data. Sharing includes distribution within and outside of the community. For all communities except Marshall, a larger percentage of households reported receiving salmon resources than did those giving them away. Russian Mission household also gave away more Chum Salmon in 2011 than they received. Emmonak represented the greatest percentage of households sharing both Chinook Salmon and Chum Salmon, with 56.5% and 55.7% of households respectively.

The estimated amount of harvest for these salmon species varied by community and year, based largely on availability of the resource and the population of each community. To correct for population, lbs. harvested per capita is a better indicator of harvest and use than is the total estimated harvest. Within the available data, all communities except Marshall and Russian Mission harvested more pounds. per capita of Chum Salmon than Chinook Salmon. Marshall's per capita harvest of Chinook and Chum Salmon were similar while Russian Mission's per capita harvest of Chinook Salmon was greater than that of Chum Salmon in both 1985 and 2011. For all years and communities except Shageluk, the per capita harvest of Coho was lower than that of Chinook and Chum Salmon. While Shageluk's per capita harvest of Coho was lower in 1990, it exceeded that of Chinook Salmon in 2013.

Table 1. Chinook Salmon, Chum Salmon, and Coho Salmon harvest in communities located within Yukon River districts 1-3 as determined through available ADF&G household subsistence harvest surveys. (ADF&G 2018b).

Community, Year, Species	% Households Using	Est. Individuals Harvested	Lbs. Harvested per Capita	% Households Giving Away	% Households Receiving
Alakanuk					
1980 Chinook	-	13,693	72.5	-	-
1980 Chum	-	1,521	112.2	-	-
1980 Coho	-	2,717	12.5	-	-
Nunam Iqua					
1980 Chinook	-	1912	220.3	-	-
1980 Chum	-	11,487	406.2	-	-

Community, Year, Species	% Households Using	Est. Individuals Harvested	Lbs. Harvested per Capita	% Households Giving Away	% Households Receiving
1980 Coho	-	1,275	45.1	-	-
Emonnak					
1980 Chinook	-	2,256	79.7	-	-
1980 Chum	-	12,144	131.7	-	-
1980 Coho	-	1,350	14.6	-	-
2008 Chinook	89.0	3,042.7	39.3	34.9	65.1
2008 Chum	90.1	19,132.0	125.0	41.3	57.8
2008 Coho	55.0	3,265.3	21.2	20.2	32.1
Kotlik					
1980 Chinook	-	1,060	44.8	-	-
1980 Chum	-	6,884	89.4	-	-
1980 Coho	-	764	9.9	-	-
Mountain Village					
1980 Chinook	-	2,322	71.6	-	-
1980 Chum	-	17,382	164.4	-	-
1980 Coho	-	1,932	18.3	-	-
2010 Chinook	85.2	2,198.9	26.4	38.3	56.5
2010 Chum	82.6	11,447.5	74.1	38.3	55.7
2010 Coho	39.1	1,134.9	7.6	16.5	22.6
Marshall					
2010 Chinook	89.1	3,303.9	91.2	50.0	39.1
2010 Chum	89.1	5,981.4	89.0	41.3	37.0
2010 Coho	34.8	844.5	13.1	23.9	17.4
Russian Mission					
1985 Chinook	-	1,938	134.7	-	-
1985 Chum	-	3,087	73.2	-	-
1985 Coho	-	740	17.6	-	-
2011 Chinook	84.8	3,176.5	73.5	28.3	37.0
2011 Chum	80.4	2,375.0	29.7	32.6	15.2
2011 Coho	47.8	479.2	6.1	13.0	21.7
Holy Cross					
1990 Chinook	-	1,649	82.9	-	-
1990 Chum	-	1,218	21.1	-	-
1990 Coho	-	944	17.2	-	-
Shageluk					
1990 Chinook	-	189	21.1	-	-
1990 Chum	-	3,680	136.8	-	-
1990 Coho	-	0	0	-	-

Community, Year, Species	% Households Using	Est. Individuals Harvested	Lbs. Harvested per Capita	% Households Giving Away	% Households Receiving
2013 Chinook	46.2	83.7	9.5	15.4	26.9
2013 Chum	46.2	2,881.6	34.0	19.2	23.1
2013 Coho	65.4	425	23.0	19.2	46.2

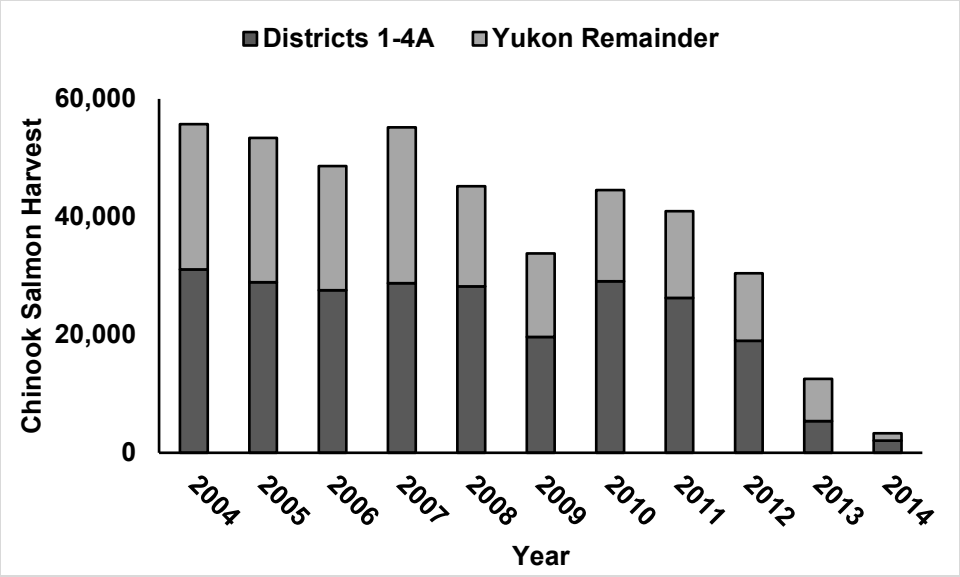

Figure 6. Comparison of Chinook Salmon subsistence harvest of communities from Districts 1- 4A and the Yukon River from 2004 to 2014 (Jallen et al. 2017).

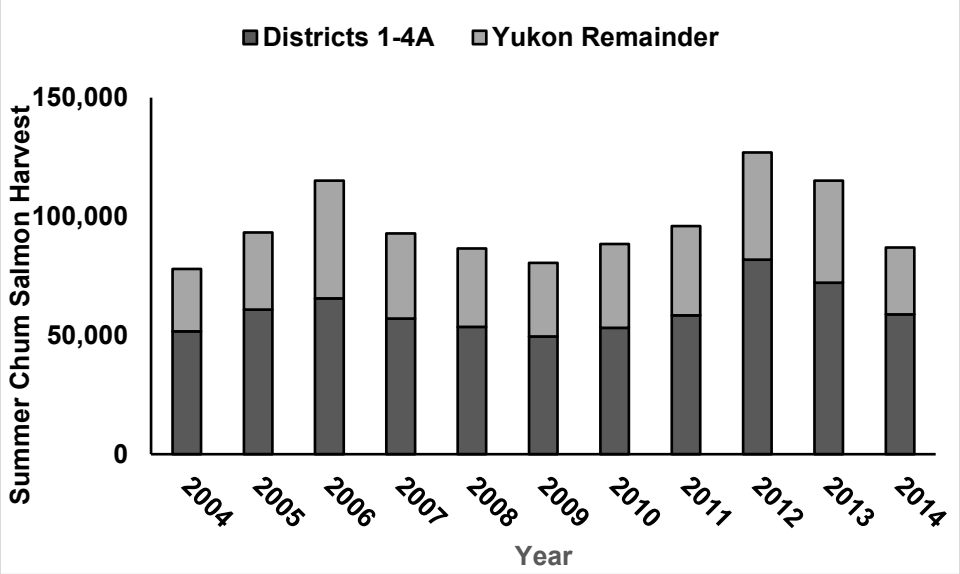

Figure 7. Comparison of Summer Chum Salmon subsistence harvest from communities in Districts 1- 4A and the Yukon River from 2004 to 2014 (Jallen et al. 2017).

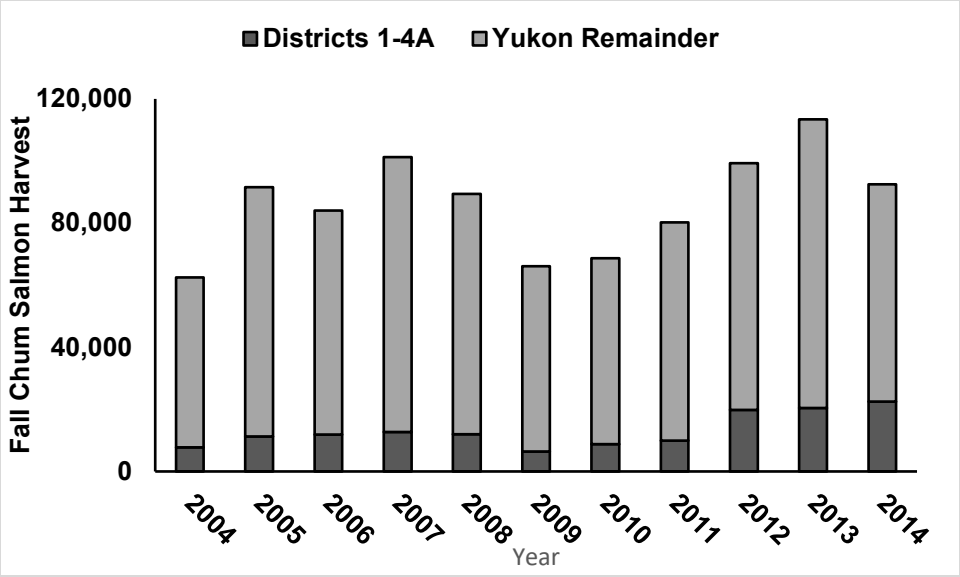

Figure 8. Comparison of Fall Chum Salmon subsistence harvest from communities in Districts 1- 4A and the Yukon River from 2004 to 2014 (Jallen et al. 2017).

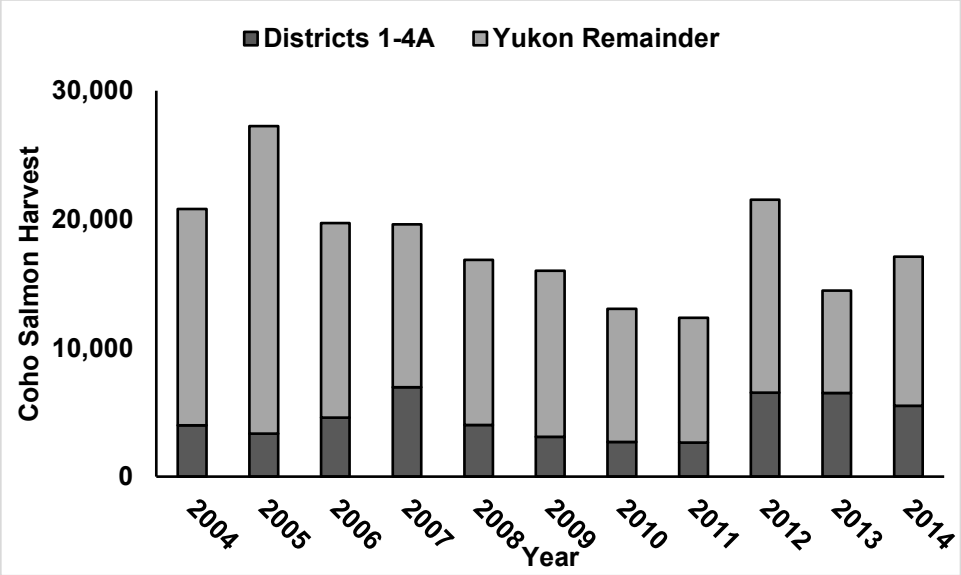

Figure 9. Comparison of Coho Salmon subsistence harvest from communities in Districts 1- 4A and the Yukon River from 2004 to 2014 (Jallen et al. 2017).

Cultural Knowledge and Traditional Practices

The use and importance of salmon and other non-salmon species for Yukon River communities has been documented through oral histories and harvest surveys conducted in the area. Historically, many Yukon communities followed a semi-nomadic, subsistence lifestyle, spending time at seasonal camps, migrating with the resources and harvesting various species of fish, along with hunting and gathering subsistence resources. Humans have likely lived in the Yukon area for over 10,000 years (Rainey 1940) and fishing was a family and community activity, deeply ingrained in to the cultures of the people in this area. People

traditionally used weirs and fish traps, and nets made of animal sinew and willow bark and more recently employed commercially made set nets along with hand made fish wheels for salmon at their fish camps. Multi-generational family groups would travel to seasonal camps to harvest fish and wildlife. Although fewer young people spend time at seasonal camps now due to employment, school, and other responsibilities, subsistence fishing continues to be important for communities up and down the river. According to surveys, many older people recalled whole families spending long hours at their fish camps, harvesting, processing, and preserving fish. Children learned about subsistence activities from their elders at fish camp (Brown et al. 2010; Brown et al. 2015).

Salmon is considered the most reliable and significant subsistence resource on the Lower Yukon River. Salmon has always been an important part of the culture, economically and socially, and the knowledge of how to catch, process, and preserve fish has been passed down from generation to generation. Before contact by outsiders, dried fish was regularly traded between Yukon villages along with other commodities such as furs and sea mammal products (Wolfe 1981).

Yukon River residents are dependent on the harvest of salmon, especially Chinook Salmon, for both subsistence and commercial uses. Starting in the late 1990s, Chinook Salmon began to decline so people harvested more summer and Fall Chum Salmon along with other subsistence resources (Brown and et al. 2015). In the 1960s, people started using gillnets to drift fish for salmon for personal and commercial use. Today fishing still plays an important cultural role in the communities along the lower and middle Yukon River, and the knowledge of how and when to fish is still passed down from generation to generation.

Customary trade of fish is an important part of continuing trade networks in rural areas of Alaska. Salmon fishing takes place in the summer and timing is based on the runs for various species. Local residents also use nets under the ice to fish for pike, whitefish, or sheefish in the spring before breakup. Communities have used various types of nets and fish wheels to harvest fish through the generations. Fish wheels are used less now than they were in the past when people were catching more fish to feed sled dogs, but are still used in some areas, mainly to catch fish for human consumption (Brown et al. 2010). Chum salmon, once primarily used for dog food, were caught using nets set from the shore but are now consumed by people in the United States and overseas. As more village runways were built, increasing air travel, and more snow machines were brought to the villages, the dependency on sled dogs was reduced, reducing the need for harvesting fish to feed dogs (Brown et al. 2015).

In the 1960s, people started using gillnets to drift fish for salmon for personal and commercial use. Today fishing still plays an important cultural role in the communities along the lower and middle Yukon River, and the knowledge of how and when to fish is still passed down from generation to generation.

The use, harvest, and dependence of salmon resources can vary by community based on cultural practices, resource availability, economics and many other factors. Yukon River drainage residents exhibit these variations generally within the lower, middle, and upper stretches of the drainage. **Table 2** shows the populations over time (1960-2010) for the communities within or in proximity to Yukon River Districts. 1-3.

Table 2. U.S. Census Bureau population estimates for communities within or in proximity to Yukon River Districts 1-3, 1960-2010 (ADCCED 2018).

Community	1960	1970	1980	1990	2000	2010	2010 No. Households
District 1							
Alakanuk city	278	265	522	544	652	677	160
Nunam Iqua city	125	125	103	109	164	187	43
Emmonak city	358	439	567	642	767	762	185
Kotlik city	57	228	293	461	591	577	128
District 2							
Mountain Village city	300	419	583	674	755	813	184
Pitkas Point CDP	28	70	88	135	125	109	31
Saint Marys city	260	384	382	441	500	507	151
Pilot Station city	219	290	325	463	550	568	121
Marshall city	166	175	262	273	349	414	100
District 3							
Russian Mission city	102	146	169	246	296	312	73
Holy Cross city	256	199	241	277	227	178	64
Shageluk city	155	167	131	139	129	83	36

Effects of the Proposal

If either proposal were adopted as submitted, there will be more subsistence fishing opportunity for Federally qualified subsistence users on Federal public lands in Districts 1-3. Effects on the salmon stocks are likely negligible as subsistence users typically do not harvest more than what is needed.

If proposal FP19-03 were adopted there would be a decrease in duration of the closure to subsistence fishing before and after State commercial opening periods. However, the fishery would remain closed for six hours before, six hours after, and during the entire length of the State commercial fishing periods.

If proposal FP19-04 were adopted it would eliminate the closures to subsistence fishing immediately before, during, and immediately following State commercial fishing periods.

Subdistrict 4A has similar restrictions prior to, during and after a commercial fishing period. While there has been relatively few commercial fishing periods recently due to the lack of buyers during some years, the number of commercial fishing periods could increase in the future. Subdistrict 4A would benefit having similar regulations as districts 1, 2, and 3 on the lower Yukon River.

Although these proposals may increase opportunities for subsistence harvest for Federally qualified users, there are some potential drawbacks that could occur. State and Federal regulations would no longer be the same, complicating enforcement of these regulations and creating confusions about where and when it is legal for Federally qualified users to subsistence fish during commercial openings. Districts 1 and 2 contain primarily waters under Federal subsistence fisheries jurisdiction, as well as most of District 3. However,

once out of the Yukon Delta National Wildlife Refuge land status becomes more varied and would require users to know the Federal public waters boundaries.

Commercial and subsistence fishers fishing at the same time increases enforcement complexity and may increase user conflict. Commercial fishers will be competing with subsistence fishers for prime fishing locations. Also, since Districts 1-3 are regulated to two 36-hour subsistence fishing periods per week, this proposed regulation may force some fishers to choose between catching fish for food purposes and catching fish to be sold. Additionally, this proposal may make it easier to illegally sell subsistence-caught fish in the commercial fishery, which could hinder upstream subsistence fishing opportunity and reduce escapement into spawning tributaries.

One potential effect that could come from adopting either of these proposals is an increase in commercial fishing time. If the Yukon Area managers are allowing two 18-hour subsistence fishing opportunities per week, then there is potential for commercial fishing to occur during, or up to 6 hours prior, and again 6 hours after the subsistence fishing opportunity. This may affect the quality of fishing during the subsistence fishing period.

Fishery managers currently have the authority to set time and area. Therefore, it is not unusual for them to modify the amount of closure time leading into and out of a commercial fishing period. For example, subsistence fishing was closed for only 3 hours prior to and reopened 3 hours after a commercial opening on July 22, 2017 (ADF&G 2017).

If both proposals were not adopted, then the subsistence fishery will remain closed for 12 hours prior to, during, and after a State commercial fishing openings and Federal and State subsistence management regulations will remain the same.

OSM PRELIMINARY CONCLUSION

Oppose Proposal FP19-04.

Support Proposal FP19-03 **with modification** to include district 4A and provide the updated language only one time in the regulations to avoid redundancy.

The modified regulation should read:

§___.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.

§___.27 Subsistence taking of fish

(e)(3) Yukon-Northern Area.

* * * *

(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.

* * * *

(vii) In Districts 1, 2, and 3:

*(A) After the opening of the State commercial salmon fishing season through July 15, you may not take salmon for subsistence for ~~18~~**6** hours immediately before, during, and for ~~12~~**6** hours after each State commercial salmon fishing period;*

*(B) After July 15, you may not take salmon for subsistence for ~~12~~**6** hours immediately before, during, and for ~~12~~**6** hours after each State commercial salmon fishing period.*

*(viii) In Subdistrict 4A after the opening of the State commercial salmon fishing season, you may not take salmon for subsistence for ~~12~~**6** hours immediately before, during, and for ~~12~~**6** hours after each State commercial salmon fishing period; however, you may take Chinook salmon during the State commercial fishing season, with drift gillnet gear only, from 6:00 p.m. Sunday until 6:00 p.m. Tuesday and from 6:00 p.m. Wednesday until 6:00 p.m. Friday.*

Justification

Adoption of this proposal as modified may result in additional opportunity for Federally qualified subsistence users in Districts 1, 2, 3 and 4-A on the Yukon River, while avoiding issues that may come with having concurrent subsistence and commercial fishing periods. This proposal as modified will also remove some of the confusion associated with restrictions prior to commercial fisheries by standardizing the amount of time subsistence fishing is closed prior to and after the commercial openings. Modification of the proposed language avoids redundancy in Federal regulations.

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FP19–05 Executive Summary	
General Description	Proposal FP19–05 requests the Federal Subsistence Board (Board) remove the requirement of fin clipping subsistence-caught Chinook Salmon in the Lower Yukon River Districts 1, 2, and 3. *Submitted by: Alissa Rogers*
Proposed Regulation	***§___.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.* ***§___.27 Subsistence taking of fish*** *(e)(3) Yukon-Northern Area.* * * * * *(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)* ***except in Districts 1, 2, and 3 from June 1 through July 15 you may possess Chinook salmon taken for subsistence purposes with out both tips (lobes) of the tail fin removed****, unless superseded by a Federal Special Action.* * * * * *(xx)) In Districts 1, 2, and 3, from June 1 through July 15, you may ~~not~~ possess Chinook salmon taken for subsistence purposes ~~unless~~* ***without*** *both tips (lobes) of the tail fin ~~have been~~ removed ~~before the person conceals the salmon from plain view or transfers the salmon from the fishing site~~.*

FP19–05 Executive Summary	
OSM Preliminary Conclusion	**Support** Proposal FP19-05 **with modification** to allow Federally qualified subsistence users to harvest Chinook Salmon without clipping the tails during times that the commercial sale of Chinook Salmon is not allowed and provide the updated language only one time in the regulations to avoid redundancy.
Yukon-Kuskokwim Delta Subsistence Regional Advisory Council Recommendation	
Western Interior Alaska Subsistence Regional Advisory Council Recommendation	
Seward Peninsula Subsistence Regional Advisory Council Recommendation	
Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	**None**

DRAFT STAFF ANALYSIS
FP19-05

ISSUES

Proposal FP19-05, submitted by Alissa Rogers of Bethel, requests the Federal Subsistence Board (Board) remove the requirement of fin clipping subsistence-caught Chinook Salmon in the Lower Yukon River Districts 1, 2, and 3.

DISCUSSION

The proponent states that fin clipping does not prevent people from selling subsistence-caught Chinook Salmon into the commercial fishery because only a few Yukon subsistence fishermen do this. The proponent states there are always going to be a few bad actors, that they are known and have been fined before but that the existing regulation has not stopped them. The proponent states that the existing regulation is burdensome on subsistence fishermen without any benefit.

Existing Federal Regulation

> ***§___.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.*
>
> ***§___.27 Subsistence taking of fish***
>
> *(e)(3) Yukon-Northern Area.*
>
> * * * *
>
> *(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.*
>
> * * * *
>
> *(xx) In Districts 1, 2, and 3, from June 1 through July 15, you may not possess Chinook salmon taken for subsistence purposes unless both tips (lobes) of the tail fin have been*

removed before the person conceals the salmon from plain view or transfers the salmon from the fishing site.

Proposed Federal Regulation

§___.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.

§___.27 Subsistence taking of fish

(e)(3) Yukon-Northern Area.

* * * *

(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) ***except in Districts 1, 2, and 3 from June 1 through July 15 you may possess Chinook salmon taken for subsistence purposes with out both tips (lobes) of the tail fin removed****, unless superseded by a Federal Special Action.*

* * * *

(xx) In Districts 1, 2, and 3, from June 1 through July 15, you may ~~not~~ possess Chinook salmon taken for subsistence purposes ~~unless~~ ***without*** *both tips (lobes) of the tail fin ~~have been~~ removed ~~before the person conceals the salmon from plain view or transfers the salmon from the fishing site~~.*

Existing State Regulation

5 AAC 01.240. Marking and use of subsistence-taken salmon

(c) In Districts 1 - 3, from June 1 through July 15, a person may not possess king salmon taken for subsistence uses unless both tips (lobes) of the tail fin have been removed before the person conceals the salmon from plain view or transfers the salmon from the fishing site. A person may not sell or purchase salmon from which both tips (lobes) of the tail fin have been removed.

Extent of Federal Public Lands

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 Yukon Delta National Wildlife Refuge (NWR) and fishing Subdistricts 1-3 of the Yukon/Northern Federal Subsistence Fishery Management Area (**Figure 1**).

Customary and Traditional Use Determinations

Rural residents of the Yukon River drainage and the community of Stebbins have customary and traditional use determination for Salmon, other than fall chum salmon in the Yukon River drainage.

Residents of the Yukon River drainage and the community of Chevak, Hooper Bay, Scammon Bay, and Stebbins have a customary and traditional use determination for Fall chum salmon in the Yukon River drainage.

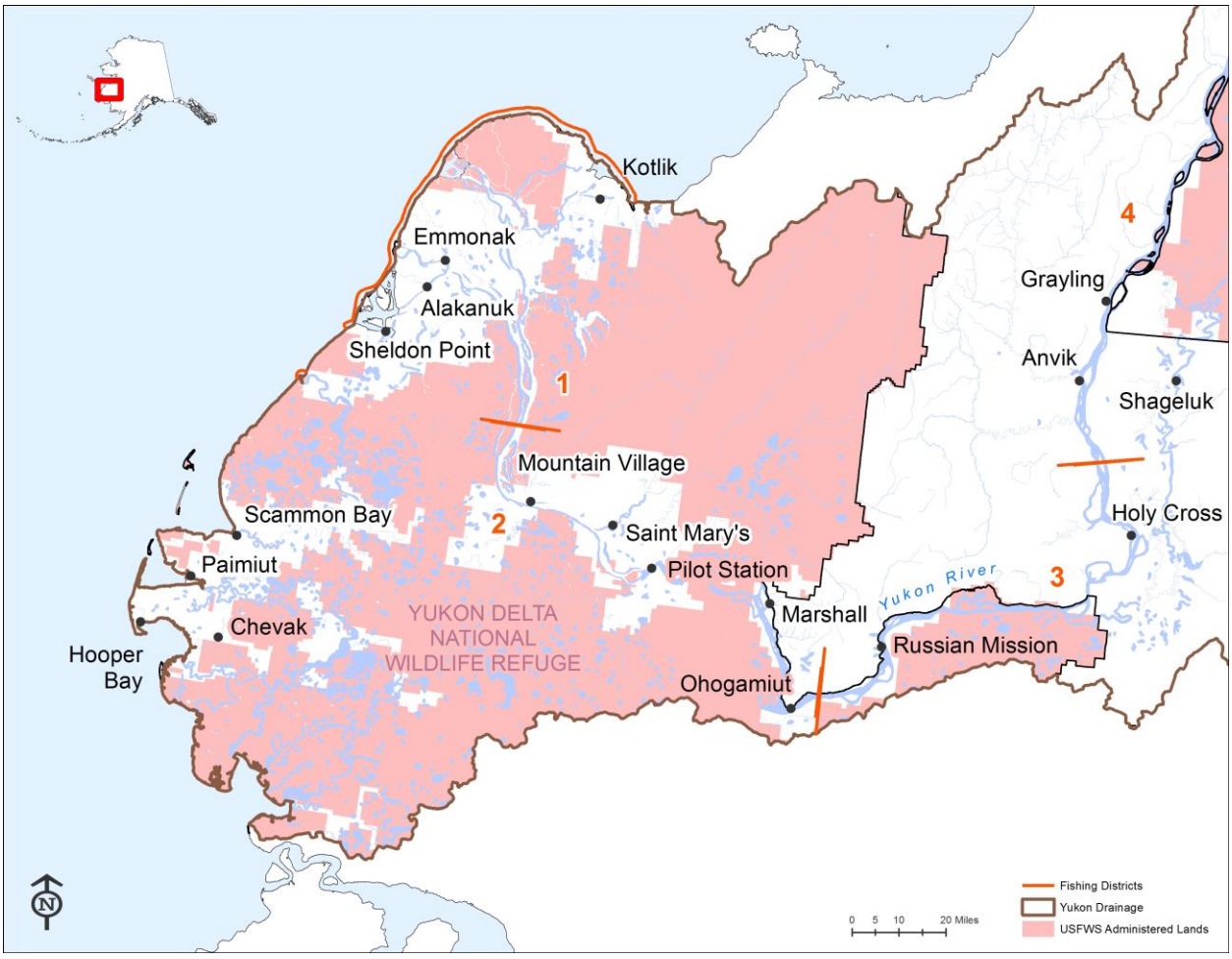

Figure 1. Lower Yukon River Districts 1, 2, and 3.

Regulatory History

State Regulatory History

The current 6 commercial fishing districts were established in 1974. The subsistence fishing schedules were also linked to the commercial fishing schedules in districts 1-6 in the same year, and concurrent subsistence and commercial fishing for 5 days per week was implemented in the Upper Yukon Area (Districts 4-6). Beginning in 1977 the lower Yukon area was reduced to commercial and subsistence fishing for 3 days per week during the commercial Chinook Salmon season, and 3.5 days per week during the fall Chum Salmon season. The fall Chum Salmon fishing season was again reduced in 1979, to 3 days per week. Beginning in 1981, ADF&G began announcing in-season Lower Yukon area commercial fishing periods by emergency order, with Lower Yukon area subsistence periods announced in this manner beginning in 1984 (Jallen et al. 2015).

Beginning in 1993, regulations were put into effect that separated commercial and subsistence fishing times in Districts 1-3 and Sub-district 4-A. The regulations stated that subsistence fishing in District 1-3 was open 7 days per week, 24 hours/day until the commercial fishing season began. Once commercial fishing had started, subsistence fishing was closed 18 hours prior, during, and 12 hours after each commercial fishing period. Also, marking of subsistence-caught fish was required by removal of the dorsal fin. These regulations were made based on an enforcement action where subsistence-caught fish were being sold in the commercial fishery in 1992 (Bergstrom et al 1995).

The Board added a fishing schedule for the subsistence salmon fisheries. The schedule will be implemented chronologically, consistent with migratory timing as the run progresses upstream. This schedule may be altered by emergency order if preseason or inseason indicators suggest it is necessary for conservation. Districts 1-3 windows allowed subsistence salmon fishing for two 36 hour periods per week. Districts 4, and Sub-districts 5-B and 5-C were open to subsistence fishing for two 48-hour periods per week. Subsistence fishing in Sub-district 4-A was further defined during the commercial season in 2004 with Chinook Salmon fishing only allowed during two 48 hour drift netting periods per week by emergency order.

In February 2007, the BOF adopted a proposal changing the marking requirement for subsistence-caught salmon in Districts 1–3 from removal of the dorsal fin to removal of both tips of the tail fin. The rationale cited in the subcommittee report was to foster better compliance because marking would be easier, to make the regulation consistent with other areas of the state, to clarify when subsistence marking requirements would be in place, to use a more sanitary mark, and to discourage subsistence-caught fish from entering the State's commercial fisheries (ADF&G 2007).

Commercial fishing for Chum Salmon during times of Chinook Salmon conservation was permitted with fish wheels by emergency order in Sub-district 4A, beginning in 2012. Fishermen are required to be present at the fish wheel, and immediately release all Chinook Salmon alive.

Federal Regulatory History

Fin clipping regulations were adopted by the (Board) from State subsistence regulations in the fall of 1998.

Starting in October 1999, Federal subsistence management regulations for the Yukon-Northern Area stipulated that, unless otherwise restricted, rural residents may take salmon in the Yukon-Northern Area at any time by gillnet, beach seine, fish wheel, or rod and reel unless exceptions are noted.

In 2002, the Board delegated some of its authority to manage Yukon River drainage subsistence salmon fisheries to the Branch Chief for Subsistence Fisheries, U.S. Fish and Wildlife Service, in Fairbanks. The Federal Subsistence Board's delegation allows the Federal manager to open or close Federal subsistence fishing periods or areas provided under codified regulations, and to specify methods and means.

The Board adopted FP13-02 in 2013 to align State and Federal marking requirements providing a modest reduction in regulatory complexity. This change in marking requirements made it mandatory to remove both tips of the tail fin on all Chinook Salmon before the person conceals the salmon from plain view or transfers the salmon from the fishing site.

Current Events

During the 2019-2021 Regulatory cycle, three proposals (FP18-02, FP18-03, and FP18-04) were submitted to alter or remove restrictions on subsistence fishing by Federally qualified subsistence users in Federal waters.

The proponent submitted a similar proposal to the Alaska Board of Fisheries to take up at its Arctic/Yukon/Kuskokwim Finfish meeting on January 15-19, 2019.

Biological Background

Chinook Salmon

Recent analyses indicate that Yukon River Chinook Salmon stocks appear to be in the third year of increasing productivity after the low returns of 2015. Historically, the stocks showed periods of above-average abundance (1982-1997) and periods of below-average abundance (1998 onwards), as well as periods of generally higher productivity (brood years 1993 and earlier) mixed with years of low productivity (brood years 1994-1996 and 2002-2005; Schindler et al. 2013).

The 2014 run was expected to be the smallest on record, with a projected size of 64,000-121,000 fish. Despite initial concerns, the cumulative passage estimate at the mainstem Yukon River sonar project in Pilot Station was approximately 138,000±17,000 (90% CI) fish (Figure 1). The passage estimate was still below the historical average of 143,000 fish and below the average of 195,800 fish for years with early run timing. As a result of severe management restrictions, all escapement goals that could be assessed were achieved, even with below average run sizes (JTC 2015).

The 2015 projected run size was 118,000-140,000 fish, which was once again below average yet higher than the previous year's projection. Cumulative passage estimates at the sonar station in Pilot Station were approximately 116,000±30,000 fish (90% CI) (Figure 1). As with the previous year, this number

was still below the historical average. As a result of severe management restrictions, all escapement goals that could be assessed were achieved, even with below average run sizes (JTC 2016).

The 2016 run outlook was a below-average run of 130,000–176,000 fish (JTC 2017). Cumulative passage estimates at the sonar station in Pilot Station were approximately 176,898±18,466 fish (90% CI) (Liller, 2018 pers. comm). This number was near the recent historical average of 178,300 fish (ADFG 2018a), but is considered preliminary at this time. Conservative actions were relaxed slightly from previous years and all escapement goals were again met (JTC 2016).

The 2017 run outlook was slightly larger, but still below average: 140,000-194,000 fish (JTC 2017). Cumulative passage estimates at the Pilot Station sonar were approximately 263,000±29,000 fish (90% CI) (ADF&G 2018a), which was the largest since 2003 (JTC 2017), is also considered preliminary. Subsistence management restrictions were further relaxed which resulted in harvests approximately two thirds of average and most escapement goals were met despite the poor water conditions that existed throughout the drainage. The numbers reported at the Pilot Station sonar do not factor in any harvest that occurs downstream, which can be significant during some years.

The 2018 run outlook is larger than in recent years, with a run size of 173,000-251,000 fish (ADF&G 2018a). The upper end of the range could support an average subsistence harvest, while the low end of the range would likely result in restrictions to subsistence fisheries.

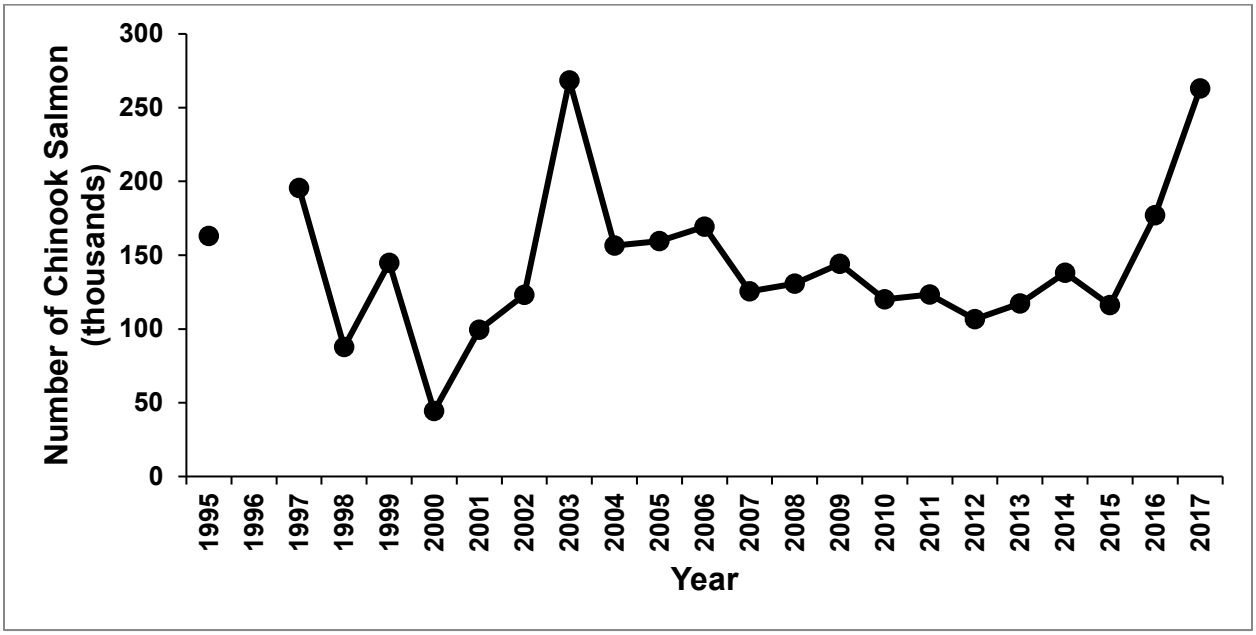

Figure 2. Chinook Salmon passage estimates based on the mainstem Yukon River sonar near Pilot Station, Yukon River drainage, 1995 and 1997-2017 (JTC 2018). Data from 2016 and 2017 are preliminary at this time.

Harvest History

Chinook Salmon

Subsistence

Subsistence harvest of Chinook Salmon in the Alaska portion of the Yukon River averaged 34,791 fish from 1961-2015, with a high of 62,486 in 1993 and a low of 2,724 in 2014 (JTC 2017) (**Figure 5**). The 2014 Chinook Salmon subsistence harvest of 2,724 fish was the lowest on record for the Alaska portion of the Yukon River drainage. Harvest increased in 2015, 2016 and 2017 with 7,577, 21,627, and 36,992 fish harvested respectively. The 2017 harvest estimate, though preliminary, is larger than the 2007-2016 average (29,514) and over two times the number of the recent 5 year average of 15,088 (JTC 2018). The 2017 harvest was the largest since 2011.

The subsistence harvest in Yukon River Districts 1-3 averaged 16,755 from 2004- 2013, with a 2009-2013 average of 13,442 Chinook Salmon (Jallen et al 2017). The estimated 2014 subsistence harvest in these districts was 2,020 Chinook Salmon.

Commercial

Chinook Salmon have not been targeted in the commercial fishery for 10 years and the sale of incidentally caught Chinook Salmon was prohibited for the seventh consecutive year during the 2017 summer season. However, there was a small opportunity during the fall fishing seasons were fish were sold in Districts 1 and 2 in 2011 (82) and 2017 (168). The 1961-2016 average commercial harvest was 88,092 with a recent 10 year average of 9,714 (JTC 2018).

Sportfish

Sport fishing harvest of Chinook Salmon are generally low in the Yukon River drainage. The 2012-2016 average sport fishing harvest within the Alaska portion of the Yukon River was estimated to be 105 Chinook Salmon (JTC 2018). The majority of sport fishing effort in the drainage occurs in the Tanana River drainage (District 6). Outside of the Tanana River, the Andreafsky (in District 2) and Anvik (in District 4) rivers receive the bulk of the remaining effort. During 2017, sport fishing was allowed after June 20, and allowed for a bag limit of 1 Chinook Salmon 20-inches or greater (JTC 2018).

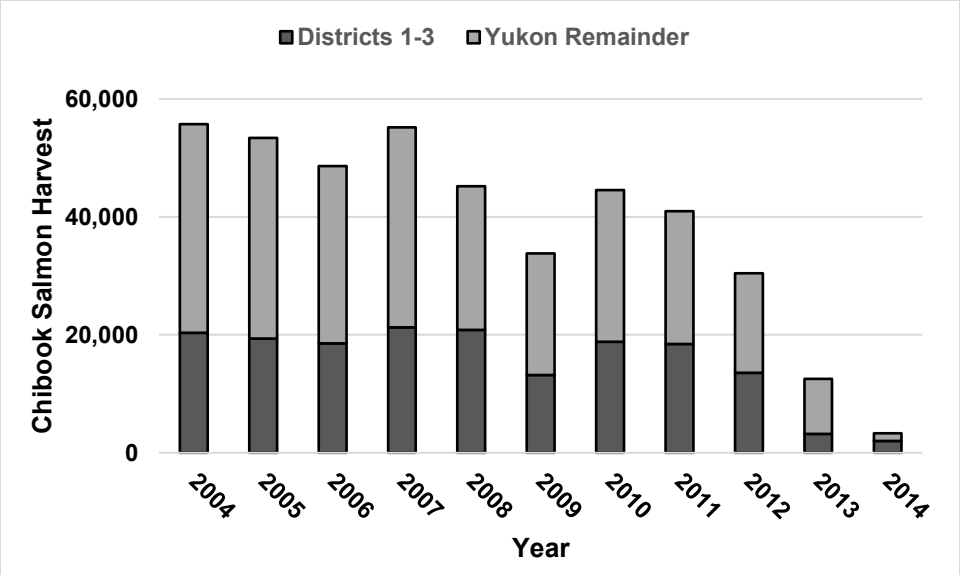

Figure 3. Comparison of Chinook Salmon subsistence harvest of communities from Districts 1-3 and the Yukon River from 2004 to 2014 (Jallen et al. 2017).

Comprehensive Household Harvest Surveys

ADF&G's Division of Subsistence occasionally undertakes comprehensive household surveys as time and resources allow. These document the use, harvest, and sharing of all wild foods harvested in a community in a given year and can thus provide insights on the importance of individual resources within the overall harvest and the cultural contexts of these harvests, including patterns of sharing. For the region represented by this proposal, household surveys that include Chinook, Chum and Coho Salmon harvest were conducted in several years for several communities (**Table 1**).

The Chinook Salmon and Chum Salmon harvests and use represented in **Table 1** include all gear types including commercial retention. A large percentage of households in these communities used Chinook Salmon in the study years. Chum Salmon use was similar to Chinook Salmon for all communities with available data. Coho Salmon use was much less than for the other two species for all communities except Shageluk which used more Coho Salmon than Chinook or Chum Salmon in 2013.

Sharing of salmon resources as represented by giving and receipt in **Table 1** was common for communities with available data. Sharing includes distribution within and outside of the community. For all communities except Marshall, a larger percentage of households reported receiving salmon resources than did those giving them away. Russian Mission household also gave away more Chum Salmon in 2011 than they received. Emmonak represented the greatest percentage of households sharing both Chinook Salmon and Chum Salmon, with 56.5% and 55.7% of households respectively.

The estimated amount of harvest for these salmon species varied by community and year, based largely on availability of the resource and the population of each community. To correct for population, lbs. harvested per capita is a better indicator of harvest and use than is the total estimated harvest. Within the available data, all communities except Marshall and Russian Mission harvested more pounds per capita of

Chum Salmon than Chinook Salmon. Marshall's per capita harvest of Chinook and Chum Salmon were similar while Russian Mission's per capita harvest of Chinook Salmon was greater than that of Chum Salmon in both 1985 and 2011. For all years and communities except Shageluk, the per capita harvest of Coho was lower than that of Chinook and Chum Salmon. While Shageluk's per capita harvest of Coho Salmon was lower in 1990, it exceeded that of Chinook Salmon in 2013.

Table 1. Chinook Salmon, Chum Salmon, and Coho Salmon harvest in communities located within Yukon River districts 1-3 as determined through available ADF&G household subsistence harvest surveys (ADF&G 2018b).

Community, Year, Species	% Households Using	Est. Individuals Harvested	Lbs. Harvested per Capita	% Households Giving Away	% Households Receiving
Alakanuk					
1980 Chinook	-	13,693	72.5	-	-
1980 Chum	-	1,521	112.2	-	-
1980 Coho	-	2,717	12.5	-	-
Nunam Iqua					
1980 Chinook	-	1,912	220.3	-	-
1980 Chum	-	11,487	406.2	-	-
1980 Coho	-	1,275	45.1	-	-
Emonnak					
1980 Chinook	-	2,256	79.7	-	-
1980 Chum	-	12,144	131.7	-	-
1980 Coho	-	1,350	14.6	-	-
2008 Chinook	89.0	3042.7	39.3	34.9	65.1
2008 Chum	90.1	19,132.0	125.0	41.3	57.8
2008 Coho	55.0	3,265.3	21.2	20.2	32.1
Kotlik					
1980 Chinook	-	1,060	44.8	-	-
1980 Chum	-	6,884	89.4	-	-
1980 Coho	-	764	9.9	-	-
Mountain Village					
1980 Chinook	-	2,322	71.6	-	-
1980 Chum	-	17,382	164.4	-	-
1980 Coho	-	1,932	18.3	-	-
2010 Chinook	85.2	2,198.9	26.4	38.3	56.5
2010 Chum	82.6	11,447.5	74.1	38.3	55.7
2010 Coho	39.1	1,134.9	7.6	16.5	22.6
Marshall					
2010 Chinook	89.1	3,303.9	91.2	50.0	39.1

Community, Year, Species	% Households Using	Est. Individuals Harvested	Lbs. Harvested per Capita	% Households Giving Away	% Households Receiving
2010 Chum	89.1	5,981.4	89.0	41.3	37.0
2010 Coho	34.8	844.5	13.1	23.9	17.4
Russian Mission					
1985 Chinook	-	1,938	134.7	-	-
1985 Chum	-	3,087	73.2	-	-
1985 Coho	-	740	17.6	-	-
2011 Chinook	84.8	3,176.5	73.5	28.3	37.0
2011 Chum	80.4	2,375.0	29.7	32.6	15.2
2011 Coho	47.8	479.2	6.1	13.0	21.7
Holy Cross					
1990 Chinook	-	1,649	82.9	-	-
1990 Chum	-	1,218	21.1	-	-
1990 Coho	-	944	17.2	-	-
Shageluk					
1990 Chinook	-	189	21.1	-	-
1990 Chum	-	3,680	136.8	-	-
1990 Coho	-	0	0	-	-
2013 Chinook	46.2	83.7	9.5	15.4	26.9
2013 Chum	46.2	2,881.6	34.0	19.2	23.1
2013 Coho	65.4	425	23.0	19.2	46.2

Cultural Knowledge and Traditional Practices

The use and importance of salmon and other non-salmon species for Yukon River communities has been documented through oral histories and harvest surveys conducted in the area. Historically, many Yukon communities followed a semi-nomadic, subsistence lifestyle, spending time at seasonal camps, migrating with the resources and harvesting various species of fish, along with hunting and gathering subsistence resources. Humans have likely lived in the Yukon area for over 10,000 years (Rainey 1940) and fishing was a family and community activity, deeply ingrained in to the cultures of the people in this area. People traditionally used weirs and fish traps, and nets made of animal sinew and willow bark and more recently employed set nets along with fish wheels for salmon at their fish camps. Multi-generational family groups would travel to seasonal camps to harvest fish and wildlife. Although fewer young people spend time at seasonal camps now due to employment, school, and other responsibilities, subsistence fishing continues to be important for communities up and down the river. According to surveys, many older people recalled whole families spending long hours at their fish camps, harvesting, processing, and preserving fish. Children learned about subsistence activities from their elders at fish camp (Brown et al. 2010; Brown et al. 2015).

Salmon is considered the most reliable and significant subsistence resource on the Lower Yukon River. Salmon has always been an important part of the culture, economically and socially, and the knowledge of how to catch, process, and preserve fish has been passed down from generation to generation. Before contact by outsiders dried fish was regularly traded between Yukon villages along with other commodities such as furs and sea mammal products (Wolfe 1981).

Yukon River residents are dependent on the harvest of salmon, especially Chinook Salmon, for both subsistence and commercial uses. Starting in the late 1990s, Chinook Salmon began to decline so people harvested more summer and fall Chum Salmon along with other subsistence resources (Brown et al. 2015). In the 1960s, people started using gillnets to drift fish for salmon for personal and commercial use. Today fishing still plays an important cultural role in the communities along the lower and middle Yukon River, and the knowledge of how and when to fish is still passed down from generation to generation.

Customary trade of fish is an important part of continuing trade networks in rural areas of Alaska. Salmon fishing takes place in the summer and timing is based on the runs for various species. Local residents also use nets under the ice to fish for pike, whitefish, or sheefish in the spring before breakup. Communities have used various types of nets and fish wheels to harvest fish through the generations. Fish wheels are used less now than they were in the past when people were catching more fish to feed sled dogs, but are still used in some areas, mainly to catch fish for human consumption (Brown et al. 2010). Chum Salmon, once primarily used for dog food, were caught using nets set from the shore but are now consumed by people in the United States and overseas. As more village runways were built, increasing air travel, and more snow machines were brought to the villages, the dependency on sled dogs was reduced, reducing the need for harvesting fish to feed dogs (Brown et al. 2015).

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harvested more summer and fall Chum Salmon along with other subsistence resources (Brown and et al. 2015). In the 1960s, people started using gillnets to drift fish for salmon for personal and commercial use. Today fishing still plays an important cultural role in the communities along the lower and middle Yukon River, and the knowledge of how and when to fish is still passed down from generation to generation.

The use, harvest, and dependence of salmon resources can vary by community based on cultural practices, resource availability, economics and many other factors. Yukon River drainage residents exhibit these variations generally within the lower, middle, and upper stretches of the drainage. **Table 2** shows the populations over time (1960-2010) for the communities within or in proximity to Yukon River Districts 1-3.

Fin marking requirements for Yukon River Chinook Salmon harvested in the Federal subsistence fishery were adopted from the State regulations by the Board in 1998. While transcripts of Board meetings lack mention of public or Council comment on the matter, a proposal to eliminate marking requirements in Southeast Alaska (13-16) was submitted to the Board in 2013. The analysis indicated that fin clipping was not a traditional practice and that some residents feel that it is disrespectful to cultural ways of life (FSB 2013a, FSB 2013b). Also in 2013 the Board adopted a proposal, FP13-02, to change the marking requirements from clipping the dorsal fin to clipping the tips of the tail of subsistence Chinook salmon harvested in Districts 1, 2, and 3 of the Yukon River. All four effected Councils supported the change (FSB 2013b).

Table 2. U.S. Census Bureau population estimates for communities within or in proximity to Yukon River Districts 1-3, 1960-2010 (ADCCED 2018).

Community	1960	1970	1980	1990	2000	2010	2010 No. Households
District 1							
Alakanuk city	278	265	522	544	652	677	160
Nunam Iqua city	125	125	103	109	164	187	43
Emmonak city	358	439	567	642	767	762	185
Kotlik city	57	228	293	461	591	577	128
District 2							
Mountain Village city	300	419	583	674	755	813	184
Pitkas Point CDP	28	70	88	135	125	109	31
Saint Marys city	260	384	382	441	500	507	151
Pilot Station city	219	290	325	463	550	568	121
Marshall city	166	175	262	273	349	414	100
District 3							
Russian Mission city	102	146	169	246	296	312	73
Holy Cross city	256	199	241	277	227	178	64
Shageluk city	155	167	131	139	129	83	36

Effects of the Proposal

If the proposal were adopted, there would be a reduction of requirements on Federally qualified subsistence users on Federal public lands in Districts 1-3, saving them time, the possibility of being cited, and potentially ameliorating ethical and cultural concerns regarding unnecessary mutilation of the carcass. Effects on the salmon stocks are likely negligible as subsistence users are not likely to harvest more Chinook Salmon due to the removal of fin clipping.

Although this proposal would reduce the requirements for subsistence harvest for Federally qualified users, there are some potential drawbacks that may occur. State and Federal regulations would no longer be the same, complicating enforcement of these regulations and creating confusions about where and when it is legal for Federally qualified users to harvest Chinook Salmon without clipping fins. Districts 1 and 2 contain primarily Federal waters, as well as most of District 3. However, once out of the Yukon Delta National Wildlife Refuge land status becomes more varied and would require users to know the Federal public waters boundaries. Additionally, this proposal may make it easier for subsistence-caught fish to end up being illegally sold in the commercial fishery.

If the proposal was not adopted, the subsistence fishery in Districts 1-3 will continue to clip fins on subsistence-caught Chinook Salmon under State regulations. Federal and State subsistence management regulations would not remain the same.

OSM PRELIMINARY CONCLUSION

Support Proposal FP19-05 **with modification** to allow Federally qualified subsistence users to harvest Chinook Salmon without clipping the tails during times that the commercial sale of Chinook Salmon is not allowed and provide the updated language only one time in the regulations to avoid redundancy.

The modified regulation should read:

(e)(3) Yukon-Northern Area.

* * * *

(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.

* * * *

(xx) In Districts 1, 2, and 3, from June 1 through July 15.

(A) ***If the State of Alaska has announced that Chinook Salmon can be sold in the commercial fisheries, then*** *you may not possess Chinook salmon taken for subsistence purposes unless both tips (lobes) of the tail fin have been removed before the person conceals the salmon from plain view or transfers the salmon from the fishing site.*

Justification

Fin clipping is not a traditional practice and in some regions of Alaska, marking requirements have been described as burdensome and disrespectful to cultural ways of life (FSB 2013a). There have not been targeted Chinook Salmon commercial fisheries in the Yukon River for many years and there may not be any in the near future. The incidental harvest and sale of Chinook Salmon has been permitted by the State only occasionally in the recent past. Given the limited opportunity for commercial sale of subsistence-caught Chinook salmon, there is no need to burden subsistence users with marking requirements meant to prevent illegal sale of Chinook salmon. The modification to require fin clipping once the commercial sale of Yukon River Chinook salmon is announced, removes an unnecessary burden on subsistence users, but, leaves in place a requirement to clip fins as a deterrent to illegal sales of subsistence-caught fish.

Requiring fin clipping once the commercial sale of Yukon River Chinook Salmon is announced is necessary for law enforcement to affectively track and differentiate salmon harvested under Federal subsistence fisheries and State commercial fisheries. Given the proximity of these two fisheries in both space and time, the opportunity for illegal sale of Chinook Salmon may be elevated in times that sale of the species is allowed. Curbing such illegal sales is essential to prevent overharvest as a means for some rural residents to earn cash from an illegal activity. While fish marking requirements are warranted during these specific and recently limited times, they are not warranted at all times. Thus, providing balance between the two concerns ensures continued subsistence opportunity while reducing burden on Federally qualified subsistence users and being sensitive to their cultural concerns when possible. Modification of the proposed language avoids redundancy in Federal regulations.

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FP19–06 Executive Summary	
General Description	Proposal FP19–06 requests that a new regulation be added for conservation protections to the first pulse of Yukon River Chinook Salmon in Federal public waters in Districts 1 through 5, submitted by Don Woodruff of Eagle.
Proposed Regulation	***§___.27(e)(3) Yukon-Northern Area* – Salmon** *(i) Unless otherwise restricted in this section, you may take fish in the Yukon-Northern Area at any time. In those locations where subsistence fishing permits are required, only one subsistence fishing permit will be issued to each household per year. You may subsistence fish for salmon with rod and reel in the Yukon River drainage 24 hours per day, 7 days per week, unless rod and reel are specifically otherwise restricted in paragraph (e)(3) of this section.* * * * * *(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.* * * * * ***(A) The first pulse of Chinook Salmon in Districts 1 through 5 will be protected in Federal public waters through systematic closures coordinated with the first pulse movement upstream as announced by the Federal in-season manager.***
OSM Preliminary Conclusion	**Oppose**
Yukon-Kuskokwim Delta Subsistence Regional Advisory Council Recommendation	
Western Interior Alaska Subsistence Regional Advisory Council Recommendation	
Seward Peninsula Subsistence Regional Advisory Council Recommendation	

FP19–06 Executive Summary	
Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	**None**

DRAFT STAFF ANALYSIS
FP19-06

ISSUES

Proposal FP19-06, submitted by Don Woodruff of Eagle, requests the Federal Subsistence Board (Board) revise Federal subsistence management regulations section §___.27(e)(3)(ii) by establishing a new regulation to add conservation protections to the first pulse of Yukon River Chinook Salmon in Federal public waters Districts 1 through 5.

DISCUSSION

The proponent notes that these fish are primarily Canadian bound stocks, and that it is the Boards responsibility to ensure food security throughout the Yukon River. The proponent states that one or two years of fair runs of fish does not mean that the fishery has recovered. In addition to this, the proponent raises concerns over recent actions by the Alaska Board of Fisheries (BOF) to open first pulse access (Proposal 231 – RC46) in Districts 1 and 2, which he believes to be counterproductive to recovery efforts.

The proponent suggests that the first pulse of Yukon River Chinook Salmon entering the river, be protected with systematic fishing closures as they travel up river starting with District 1 first pulse and continuing along the entire Yukon River to District 5 to ensure conservation and food security for future generations.

Existing Federal Regulation

§___.27(e)(3) Yukon-Northern Area

(i) Unless otherwise restricted in this section, you may take fish in the Yukon-Northern Area at any time. In those locations where subsistence fishing permits are required, only one subsistence fishing permit will be issued to each household per year. You may subsistence fish for salmon with rod and reel in the Yukon River drainage 24 hours per day, 7 days per week, unless rod and reel are specifically otherwise restricted in paragraph (e)(3) of this section.

(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 Regulation

§___.27(e)(3) Yukon-Northern Area

(i) Unless otherwise restricted in this section, you may take fish in the Yukon-Northern Area at

any time. In those locations where subsistence fishing permits are required, only one subsistence fishing permit will be issued to each household per year. You may subsistence fish for salmon with rod and reel in the Yukon River drainage 24 hours per day, 7 days per week, unless rod and reel are specifically otherwise restricted in paragraph (e)(3) of this section.

(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.

(A) The first pulse of Chinook Salmon in Districts 1 through 5 will be protected in Federal public waters through systematic closures coordinated with the first pulse movement upstream as announced by the Federal in-season manager.

Existing State Regulation

5 AAC 01.210. Fishing seasons and periods – Yukon Area

(a) Unless restricted in this section, or in 5 AAC 01.220 – 5 ACC 01.249, salmon may be taken in the Yukon 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 in-season 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 follow:

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

(c) Notwithstanding the provisions of (A) and (B) of this paragraph, if the commissioner determines it is necessary to ensure that reasonable opportunity for subsistence uses is being provided, the commissioner may, by emergency order, open a subsistence fishing period that may occur during times that are before, during, and after a commercial salmon fishing period.

5 AAC 05.360. Yukon River King Salmon Management Plan – Yukon Area

(1) In Districts 1 and 2, to account for the uncertainty in the preseason king salmon run projection, if the preseason king salmon forecast indicates insufficient abundance to meet escapement goal objectives and subsistence harvest needs, the department shall manage the king salmon subsistence fishery conservatively and not open any salmon subsistence fishing periods during the first pulse of king salmon entering the Districts.

Extent of Federal Public Lands

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 under Federal subsistence fisheries jurisdiction addressed by this proposal are those portions of the Yukon River located within, or adjacent to, Arctic National Wildlife Refuge, National Wildlife Refuge, Koyukuk National Wildlife Refuge, Kanuti National Wildlife Refuge, Nowitna National Wildlife Refuge, Denali National Park and Preserve, White Mountains National Recreation Area, Steese National Conservation Area, Yukon-Charley Rivers National Preserve, Beaver Creek National Wild Rivers, Birch Creek National Wild and Scenic River, Delta National Wild & Scenic River, Fortymile National Wild & Scenic River, Tetlin National Wildlife Refuge, Yukon Flats National Wildlife Refuge, and Wrangell-St. Elias National Park and Preserve (**Figure 1**).

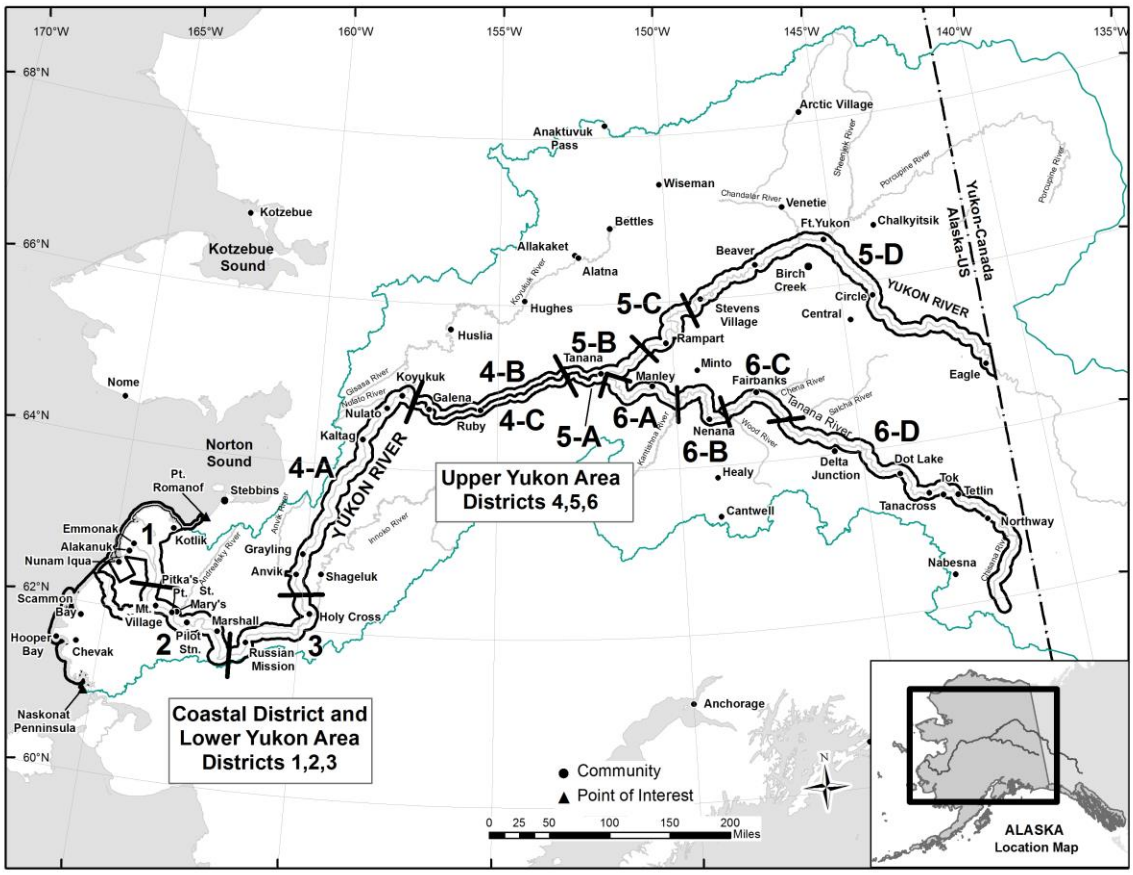

Figure 1. Yukon River Districts located within the U.S. portion of the drainage (ADF&G 2018).

Customary and Traditional Use Determinations

Rural residents of the Yukon River drainage and the community of Stebbins have a customary and traditional user determination for Chinook Salmon in the Yukon Northern Area.

Regulatory History

State Regulatory History

Since 2001, the Yukon River Chinook Salmon stock has been categorized as a "stock of yield concern" by the BOF in accordance with the State's *Policy for the management of sustainable salmon fisheries* (5 AAC 39.222). This designation identifies a chronic inability to maintain expected yields or harvestable surpluses above a stock's escapement needs despite restrictive management actions. Directed commercial fishing for Yukon River Chinook Salmon has been discontinued since 2007 and subsistence fishing opportunities have become increasingly more restrictive in an effort to conserve Chinook Salmon.

During 2001, subsistence fishing windows were established during times of conservation and were implemented throughout the entire Yukon River area when commercial fishing is closed. Districts 1-3 windows allowed subsistence salmon fishing for two 36 hour periods per week. Districts 4 and Subdistrics 5-B and 5-C were open to subsistence fishing for two 48-hour periods per week. Commercial fishing in Subdistrict 4-A was further regulated in 2004 with Chinook Salmon fishing only allowed during two 48 hour drift netting periods per week by emergency order.

Commercial fishing for Chum Salmon during times of Chinook Salmon conservation is permitted with fish wheels by emergency order in Subdistrict 4-A beginning in 2012. Fishermen are required to be present at the fish wheel, and immediately release all Chinook Salmon alive.

In March 2015, the BOF adopted a new regulation that allowed the use of drift gillnets to harvest summer Chum Salmon for subsistence purposes during times of Chinook conservation from June 10 through August 2, by emergency order, in the upper portion of Subdistrict 4A.

In January 2016, the BOF adopted the same regulations for the lower portion of Subdistrict 4A.

In March of 2018, the BOF adopted a new regulation. If inseason run assessment information indicates insufficient abundance of Chinook Salmon to meet escapement objectives on specific components of the run and subsistence harvest needs, the Department will not open any subsistence fishing periods during the first pulse implemented chronologically in the applicable district, consistent with migratory timing as the Chinook Salmon run progresses upstream; If inseason run assessment information indicates sufficient abundance of king salmon to meet escapement objectives on specific components of the run and subsistence harvests needs, subsistence fishing will revert to back to standard fishing periods.

Federal Regulatory History

Since October 1999, Federal subsistence management regulations for the Yukon-Northern Area stipulated that, unless otherwise restricted, rural residents may take salmon in the Yukon-Northern Area at any time by gillnet, beach seine, fish wheel, or rod and reel unless exceptions are noted.

In 2002, the Board delegated some of its authority to manage Yukon River drainage subsistence salmon fisheries to the Branch Chief for Subsistence Fisheries, U.S. Fish and Wildlife Service, in Fairbanks, Alaska. The Federal Subsistence Board's delegation allows the Federal manager to open or close Federal subsistence fishing periods or areas provided under codified regulations, and to specify methods and means.

In 2017, the Board modified regulations in Subdisctrict 4-A to allow the Federal In-season Manager to open fishing periods during which Chum Salmon may be taken by drift gillnets from June 10 through August 2. This regulation change was made to match existing ADF&G regulations that were modified in 2015 and 2016. The Board also added an additional regulation in Subdisctrict 5-D to allow salmon to be harvested for subsistence use once the mid-range of the Canadian Interim Management Escapement Goal (IMEG) and the total allowable catch goal are projected to be achieved.

Management Perspectives

For management purposes, the summer season refers to the fishing associated with Chinook and summer Chum Salmon migrations and the fall season refers to the fishing associated with the fall Chum and Coho Salmon migrations. During the fishing season, management is based on preseason projections and the in-season run assessments. Since 1995 the main river sonar project at Pilot Station has provided in-season estimates of salmon passage for fisheries management. The level of commercial, subsistence, and personal use harvests can be adjusted through the use of State emergency orders and Federal special actions to manage time, gear, and area of openings and closures. Since 2001, an Arctic Yukon Kuskokwim Sustainable Salmon Research action plan has been developed through a public process that includes goals, objectives, and provisions necessary to research and help rebuild Chinook Salmon runs (Munro and Tide 2014).

Currently the Canadian Interim Management Escapement Goal (IMEG) is set at 42,500-55,000 Chinook Salmon. Each year the Yukon River Joint Technical Committee (JTC 2018) reevaluates the need to modify the Chinook Salmon IMEG, however this range has been acceptable since 2010. Subsistence fishing on the Yukon River in Districts 1 through 5 is open seven days a week, 24 hours/day using rod and reel with no harvest limit for salmon, unless closed by the in-season managers for conservation purposes. Additionally, Districts 1, 2, and 3 have special provisions for harvest before July 15, and after the opening of the State commercial salmon fishing season, subsistence salmon fishing is closed for 18 hours immediately before, during, and for 12 hours after each State commercial salmon fishing period. After July 15, subsistence salmon fishing is closed for 12 hours immediately before, during, and for the 12 hours after each State commercial salmon fishing period. In Subdistrict 4A, after the State commercial salmon

fishing season opens, you may not subsistence fish for salmon for 12 hours immediately before, during, and for 12 hours after each State commercial salmon fishing period. However, you may subsistence fish (using drift gillnets only) for Chinook Salmon during the State commercial fishing season from 6:00 p.m. Sunday until 6:00 p.m. Tuesday; and from 6:00 p.m. Wednesday until 6:00 p.m. Friday.

Current Events

In 2015 the Yukon River was reevaluated to determine if the Yukon River Chinook Stock should be removed from the Stock of yield concern designation; however it was determined that the stock has yet to return to historical levels and will remain a stock of yield concern as it has been for the last 18 years. Recently during the March 2018 Alaska Board of Fisheries meeting, Proposal 231 was adopted with additional language (RC46) to repeal the current closures on first pulse fishing in Districts 1 and 2. However, managers would still retain the authority to close or restrict the fishery if the preseason forecast was insufficient to meet escapement goals and/or harvest levels.

During the commercial Chum fishery in 2017, subsistence fisherman had the opportunity to sell incidentally caught Chinook Salmon. There may be a similar opportunity in 2018 if fisheries managers deem it appropriate.

Preliminary management objectives for 2018 as stated in the 2018 Yukon River Salmon Fisheries Outlook include allowing 7.5-inch or smaller mesh gillnets 24 hours per day, 7 days per week prior to the first pulse arriving. As the Chinook Salmon enter each District, subsistence salmon fishing will be provided on a reduced regulatory schedule with 7.5-inch or smaller mesh gillnets during the early part of the run. If the confidence is high that the Chinook Salmon run is adequate and escapement goals are likely to be met, the use of 7.5-inch gillnets on a full regulatory schedule will be considered. If in-season assessment indicates a poorer than anticipated run, subsistence fishing time may be reduced or gear may be limited to selective gear types with no retention of Chinook Salmon allowed.

Biological Background

Chinook Salmon

Recent analyses indicate that Yukon River Chinook Salmon stocks appear to be in the third year of increasing productivity after the low returns of 2015. Historically, the stocks show periods of above-average abundance (1982-1997) and periods of below-average abundance (1998 onwards), as well as periods of generally higher productivity (brood years 1993 and earlier) mixed with years of low productivity (brood years 1994-1996 and 2002-2005; Schindler et al. 2013).

The 2014 run was expected to be the smallest on record, with a projected size of 64,000-121,000 fish. Despite initial concerns, the cumulative passage estimate at the mainstem Yukon River sonar project in Pilot Station was approximately 138,000±17,000 (90% CI) fish (**Figure 2**). The passage estimate was still below the historical average of 143,000 fish and below the average of 195,800 fish for years with early run

timing. Even with below average run sizes, all escapement goals that could be assessed were achieved (JTC 2015).

The 2015 projected run size was 118,000-140,000 fish, which was once again below average but higher than the previous year's projection. Cumulative passage estimates at the sonar station in Pilot Station were approximately 116,000±30,000 fish (90% CI) (**Figure 2**). As with the previous year, this number was still below the historical average. All escapement goals were again met (JTC 2016).

The 2016 run outlook was a below-average run of 130,000–176,000 fish (JTC 2017). Cumulative passage estimates at the sonar station in Pilot Station were approximately 176,898±18,466 fish (90% CI) (JTC 2018). This number was near the recent historical average of 178,300 fish (ADF&G 2018), but is considered preliminary at this time. All escapement goals were again met (JTC 2016).

The 2017 run outlook was slightly larger, but still for a below average run of 140,000-194,000 fish (JTC 2017). Cumulative passage estimates at the Pilot Station sonar were approximately 263,000±29,000 fish (90% CI) (ADF&G 2018), the largest since 2003 (JTC 2017). Most escapement goals were met except for 2007, 2008, 2010, 2012 and 2013 (JTC 2017).

The 2018 Yukon River Chinook Salmon fisheries outlook is for a run size of 173,000 to 251,000 fish (**Figure 2**, ADF&G 2018). The upper end of this range is less than the total estimated run observed in 2017 which was 263,000±29,000 fish. The 2018 Yukon River Salmon Fisheries Outlook states that the 2018 run may be large enough to provide for normal subsistence harvests;, however, a cautionary approach will be taken early in the season, and in-season management strategies will be based on run assessment information once fish begin entering the river. If assessment indicates the Chinook Salmon run size is near the upper end of the range, and goals are projected to be met, subsistence fishing restrictions would likely be relaxed. If that occurs, commercial Chum Salmon fishermen may be given the opportunity to sell Chinook Salmon incidentally-caught in the Chum Salmon fishery, but this would likely be at the tail end of the run, when the majority of the Chinook Salmon have passed upriver for escapement and subsistence harvest purposes.

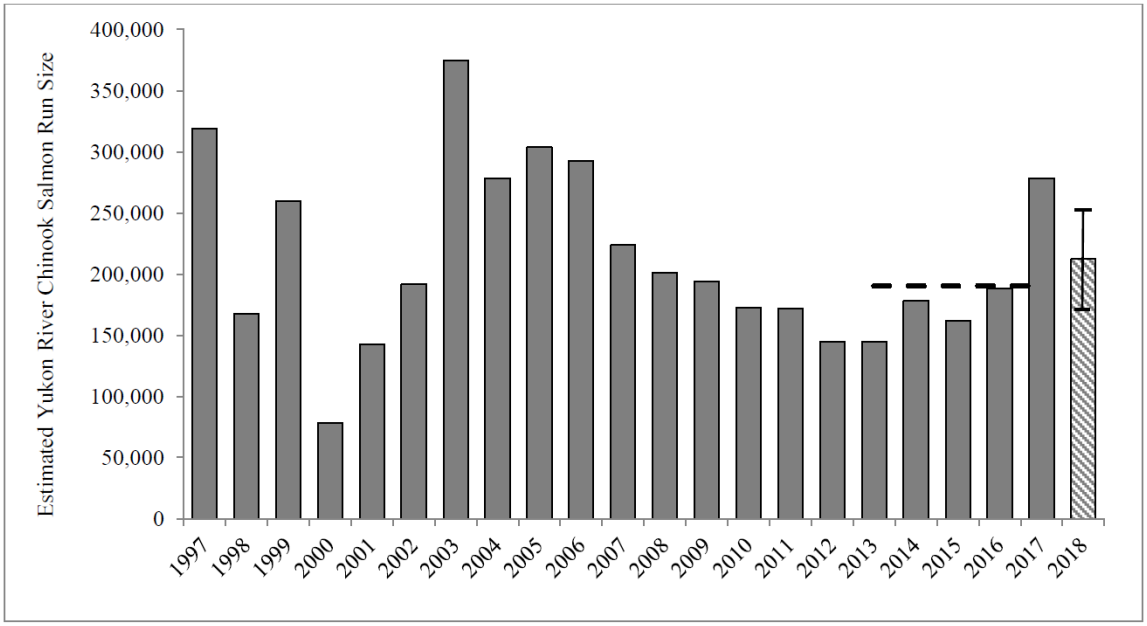

Figure 2. Historical (1997-2017) and forecasted 2018 estimated Yukon River Chinook Salmon total run size with respective 95% confidence interval. Dashed line indicates last five-year average near 200,000 Chinook Salmon (ADF&G 2018).

Harvest History

Subsistence

The entire Yukon River drainage has more than 50 communities, most of which participate in subsistence fisheries. Subsistence salmon fishing activities in the Yukon River drainage typically begin in late May and continue through early October. Currently the primary method for estimating the subsistence harvest is through an annual subsistence salmon harvest survey program that the Alaska Department of Fish & Game, Division of Commercial Fisheries administers, which conducts a survey of 33 communities (including the coastal communities of Scammon Bay and Hooper Bay) during the fall and after the fishing season (Jallen et al. 2017). In recent years, subsistence fishing has increasingly targeted other species of salmon and non-salmon fish. In order to allow continued subsistence opportunity throughout the season, subsistence fishing activity has been managed to avoid the take of Chinook Salmon while allowing for the harvest of other fish species.

Between 2006 and 2016, the ten year average Chinook Salmon subsistence harvest was approximately 41,200 fish annually in the Alaskan portion of the Yukon River. The five year average from 2011-2016 was 18,000 fish (**Figure 3**). Subsistence harvest levels of Chinook Salmon have declined since 1997 due to declining run abundance and resultant harvest restrictions (Schindler et al. 2013). Both survey and permit data for the 2017 subsistence salmon harvests in the Alaska portion of the Yukon River drainage was estimated to be 36,992 Chinook Salmon. The harvest levels during 2017 for Chinook Salmon were below levels defined by the BOF as Amounts Reasonably Necessary for Subsistence (ANS 45,500-66,704

Chinook; Jallen 2012). Additionally, 2017 was the fourth highest subsistence harvest level for the last ten years with 2008 being number one at 43,700 fish harvested.

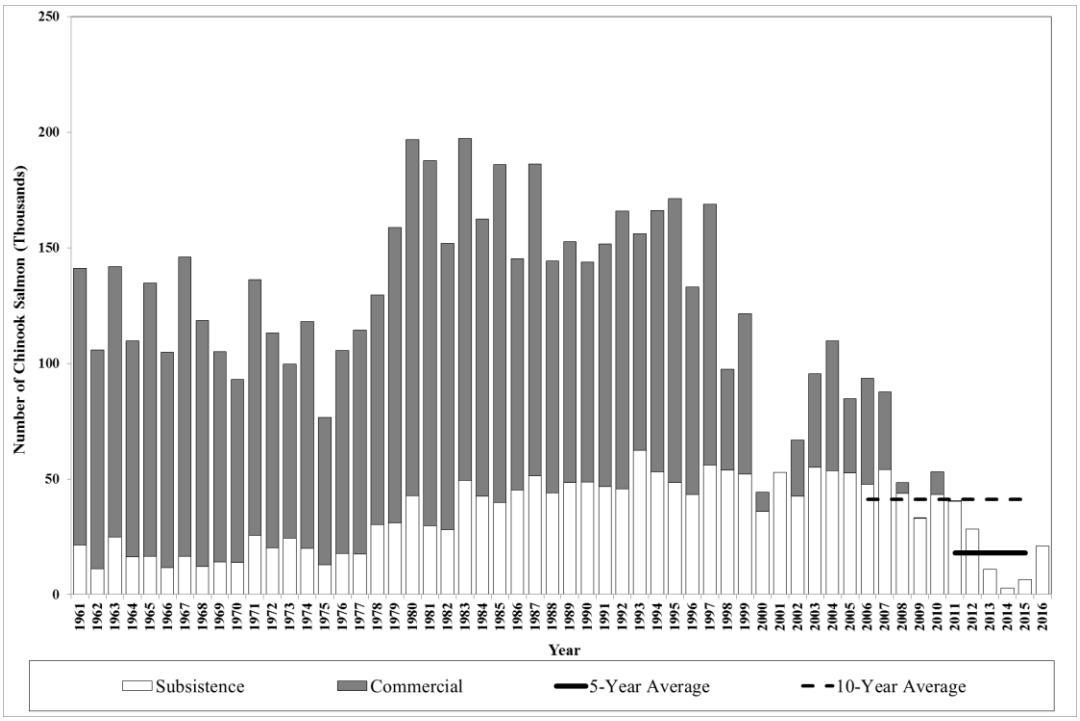

Figure 3. Historical subsistence (hollow bars) and commercial (grey bars) harvest of Chinook Salmon in the Yukon River from 1961 – 2016. Solid black line indicates last 5 year average and dashed black line indicates last 10 year average subsistence harvest (JTC 2017).

Commercial

A commercial fishery directed towards Chinook Salmon has taken place since 2008. Retention and sale of incidental caught Chinook Salmon was allowed during two opportunities since 2008. Directed commercial harvest for Chinook Salmon was prohibited for the seventh consecutive year during the 2017 summer season. During the fall fishing seasons of 2011 and 2017, 82 and 168 fish were sold commercially in Districts 1 and 2, respectively. The 1961-2005 average commercial harvest is 98,000 and the 2006-2016 average harvest of 15,700 (JTC 2018).

Sport

Sport fishing harvest of Chinook Salmon are generally low in the Yukon River drainage. The 2012-2016 average sport fishing harvest within the Alaska portion of the Yukon River was estimated to be 105 Chinook Salmon (JTC 2018). The majority of sport fishing effort in the drainage occurs in the Tanana River drainage (District 6). Outside of the Tanana River, the Andreafsky (in District 2) and Anvik (in

District 4) rivers receive the bulk of the remaining effort. During 2017, sport fishing was allowed after June 20, and allowed for a bag limit of 1 Chinook Salmon 20-inches or greater (JTC 2018).

Cultural Knowledge and Traditional Practices

The use and importance of salmon and other non-salmon species for Yukon River communities has been documented through oral histories and harvest surveys conducted in the area. Historically, many Yukon communities followed a semi-nomadic, subsistence lifestyle, spending time at seasonal camps, migrating with the resources and harvesting various species of fish, along with hunting and gathering subsistence resources. Humans have lived in the Yukon area for over 10,000 years (Rainey 1940, Cinq-Mars 1979) and fishing was a family and community activity, deeply ingrained in to the cultures of the people in this area. People traditionally used weirs and fish traps, and nets made of animal sinew and willow bark and more recently employed set nets along with fish wheels for salmon at their fish camps. Multi-generational family groups would travel to seasonal camps to harvest fish and wildlife. Although fewer young people spend time at seasonal camps now due to employment, school, and other responsibilities, subsistence fishing continues to be important for communities up and down the river. According to surveys, many older people recalled whole families spending long hours at their fish camps, harvesting, processing, and preserving fish. Children learned about subsistence activities from their elders at fish camp (Brown et al. 2010; Brown et al. 2015).

Salmon is considered the most reliable and significant subsistence resource on the Lower Yukon River. Salmon has always been an important part of the culture, economically and socially, and the knowledge of how to catch, process, and preserve fish has been passed down from generation to generation. Before contact by outsiders dried fish was regularly traded between Yukon villages along with other commodities such as furs and sea mammal products (Wolfe 1981).

Yukon River residents are dependent on the harvest of salmon, especially Chinook Salmon, for both subsistence and commercial uses. Starting in the late 1990s, Chinook Salmon began to decline so people harvested more summer and fall Chum Salmon along with other subsistence resources (Brown et al. 2015). In the 1960s, people started using gillnets to drift fish for salmon for personal and commercial use. Today fishing still plays an important cultural role in the communities along the lower and middle Yukon River, and the knowledge of how and when to fish is still passed down from generation to generation.

Customary trade of fish is also an important part of continuing trade networks in rural areas of Alaska. Salmon fishing takes place in the summer and timing is based on the runs for various species. Local residents also use nets under the ice to fish for Northern Pike, whitefish, or Sheefish in the spring before breakup. Communities have used various types of nets and fish wheels to harvest fish through the generations. Fish wheels are used less now than they were in the past when people were catching more fish to feed sled dogs, but are still used in some areas, mainly to catch fish for human consumption (Brown et al. 2010). Chum Salmon, once primarily used for dog food, were caught using nets set from the shore but are now consumed by people in the United States and overseas. As more village runways were built, increasing air travel, and more snow machines were brought to the villages, the dependency on sled dogs was reduced, reducing the need for harvesting fish to feed dogs (Brown et al.2015).

The use, harvest, and dependence of salmon resources can vary by community based on cultural practices, resource availability, economics and many other factors. Yukon River drainage residents exhibit these variations generally within the lower, middle, and upper stretches of the drainage. Communities present along the river and their populations over time, by fishing district, are represented in **Appendix A**.

Other Alternative(s) Considered

The proponent of this proposal raises both conservation and future subsistence use concerns due to the opening of Districts 1 and 2 to harvest first pulse Chinook Salmon. The proposal could employ an alternative approach during the first pulse by reducing the level of harvest though gear or fishing time restrictions. This practice is already standard for the in-season managers when run size forecasts look to be insufficient to meet escapement goals and subsistence needs. This option still allows for an opportunity to fish first pulse fish, when the in-season manager feels the preseason Chinook Salmon forecast indicates sufficient abundance to meet escapement goal objectives and subsistence harvest needs. The amended language (RC46) added in the BOF proposal 231 allows this flexibility for the in-season managers to still restrict the access of Districts 1 and 2 if the forecasts indicates insufficient abundance to meet escapement goal objectives and subsistence harvest needs. This alternative approach to managing the first pulse of Chinook Salmon is, however, more restrictive on Federally qualified subsistence users than State regulations. However the State regulations do allow for flexibility in the inseason management decision to close or restrict harvest if the run seems to be insufficient to meet escapement and harvest goals.

Effects of the Proposal

If FP19-06 were adopted, Federally qualified subsistence users fishing under Federal Subsistence regulations in Federal public waters in all Yukon River Districts would have a complete closure to the harvest of first pulse Chinook Salmon. This proposal would directly contradict recent BOF proposal 231, allowing subsistence fishing opportunity for Districts 1 and 2 to fish first pulse Chinook Salmon, if the preseason Chinook Salmon forecast indicates sufficient abundance to meet escapement goal objectives and subsistence harvest needs. FP19-06 has the potential to limit subsistence harvest opportunities during times of higher abundance levels. If adopted, this proposal would also make Federal subsistence management regulations more restrictive than State fishing regulations. If adopted, there could be excessive harvest on later arriving females, since males are known to primarily make up the first pulse.

Federally qualified subsistence users prefer to put up fish earlier in the summer when the weather is better for drying fish and decreases chances of spoilage. This proposal has the potential to increase the focus of fishing effort later in the summer during times of poorer weather which could in return increase spoilage. Some or most of the fisherman are mobile enough that the benefit of a closure in Federal public waters could be offset by harvest in non-Federal public waters, rendering this proposal ineffective at achieving its stated intent.

If FP19-06 is not to be adopted, Districts 1 and 2 may be allowed conditional subsistence harvest opportunity to fish first pulse Chinook Salmon. However, if the preseason Chinook Salmon forecast indicates insufficient abundance to meet escapement goal objectives and subsistence harvest needs, the Federal and State in-season managers shall manage the Chinook Salmon subsistence fishery conservatively

and not open any salmon subsistence fishing periods during the first pulse of Chinook Salmon entering the Districts.

OSM PRELIMINARY CONCLUSION

Oppose Proposal FP19-06.

Justification

Adoption of this proposal will reduce opportunities for Federally qualified subsistence users during years when escapement goals and objectives are projected to be met or exceeded. In-season managers currently attempt to manage this fishery conservatively. During years where abundance of Chinook Salmon will not be able to meet escapement needs, harvest objectives or the Canadian Interim Management Escapement Goal objectives, the in-season managers still retains authority to limit harvest through gear or time restrictions, or completely close the fishery in a conservation effort. Therefore, this proposal will only add complexity to this fishery and remove some of the in-season management flexibility the fisheries managers currently have to allow subsistence harvest opportunities. The BOF proposal 231 with amended language from RC46, allows in-season managers to close Districts 1 and 2 subsistence harvest on first pulse Chinook Salmon if the forecast is too weak. Additionally, adoption of this proposal would also make Federal subsistence management regulations more restrictive than State subsistence fishing regulations, and thus fail to provide a meaningful rural subsistence priority.

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Appendix A. Population data for communities within the Yukon River drainage fishing Districts, 1960-2010.

U.S. CENSUS POPULATION							
Community	**1960**	**1970**	**1980**	**1990**	**2000**	**2010**	**2010 number of house-holds**
Stebbins city	158	231	331	400	547	556	134
Outside drainage subtotal	**158**	**231**	**331**	**400**	**547**	**556**	**134**
Alakanuk city	278	265	522	544	652	677	160
Nunam Iqua city	125	125	103	109	164	187	43
Emmonak city	358	439	567	642	767	762	185
Kotlik city	57	228	293	461	591	577	128
District 1 subtotal	**818**	**1,057**	**1,485**	**1,756**	**2,174**	**2,203**	**516**
Mountain Village city	300	419	583	674	755	813	184
Pitkas Point CDP	28	70	88	135	125	109	31
Saint Marys city	260	384	382	441	500	507	151
Pilot Station city	219	290	325	463	550	568	121
Marshall city	166	175	262	273	349	414	100
District 2 subtotal	**973**	**1,338**	**1,640**	**1,986**	**2,279**	**2,411**	**587**
Russian Mission city	102	146	169	246	296	312	73
Holy Cross city	256	199	241	277	227	178	64
Shageluk city	155	167	131	139	129	83	36
District 3 subtotal	**513**	**512**	**541**	**662**	**652**	**573**	**173**
Anvik city	120	83	114	82	104	85	33
Grayling city	0	139	209	208	194	194	55
Kaltag city	165	206	247	240	230	190	70
Nulato CDP	183	308	350	359	336	264	92
Koyukuk city	128	124	98	126	101	96	42
Huslia city	168	159	188	207	293	275	91
Hughes city	69	85	73	54	78	77	31
Allakaket city	115	174	163	170	97	105	44
Alatna CDP				31	35	37	12
Bettles city	77	57	49	36	43	12	9
Evansville CDP	77	57	45	33	28	15	12
Wiseman CDP	0	0	8	33	21	14	5
Coldfoot CDP					13	10	6
Galena city	261	302	765	833	675	470	190
Ruby city	179	145	197	170	188	166	62
District 4 subtotal	**1,542**	**1,839**	**2,506**	**2,582**	**2,436**	**2,010**	**754**
Tanana city	349	120	388	345	308	246	100
Rampart CDP	49	36	50	68	45	24	10
Stevens Village CDP	102	74	96	102	87	78	26
Beaver CDP	101	101	66	103	84	84	36
Fort Yukon city	701	448	619	580	595	583	246
Chalkyitsik CDP	57	130	100	90	83	69	24

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Appendix A. *Continued from previous page*

U.S. CENSUS POPULATION							
Community	**1960**	**1970**	**1980**	**1990**	**2000**	**2010**	**2010 number of house-holds**
Arctic Village CDP	110	85	111	96	152	152	65
Venetie CDP	107	112	132	182	202	166	61
Birch Creek CDP	32	45	32	42	28	33	17
Circle CDP	41	54	81	73	100	104	40
Chicken CDP	0	0	0	0	17	7	5
Central CDP	28	26	36	52	134	96	53
Eagle Village CDP	0	0	54	35	68	67	31
Eagle city	92	36	110	168	129	86	41
District 5 subtotal	**1,769**	**1,267**	**1,875**	**1,936**	**2,032**	**1,795**	**755**
Livengood CDP					29	13	7
Manley CDP	72	34	61	96	72	89	41
Minto CDP	161	168	153	218	258	210	65
Whitestone CDP						97	22
Nenana city	286	362	470	393	402	378	171
Four Mile Road CDP					38	49	14
Healy CDP	67	79	334	487	1,000	1,021	434
McKinley Park CDP	0	0	60	171	142	185	109
Anderson city	341	362	517	628	367	246	90
Ferry CDP				56	29	33	17
Lake MinChumina CDP	0	0	22	32	32	13	6
Cantwell CDP	85	62	89	147	222	219	104
Delta Junction city	0	703	945	652	840	958	377
Fort Greely CDP	0	1,820	1,635	1,299	461	539	236
Deltana CDP					1,570	2,251	784
Healy Lake CDP	0	0	33	47	37	13	7
Big Delta CDP	0	0	285	400	749	591	206
Dry Creek CDP	0	0	0	106	128	94	29
Dot Lake CDP	56	42	67	70	19	13	7
Dot Lake Village CDP					38	62	19
Tanacross CDP	102	84	117	106	140	136	53
Tetlin CDP	122	114	107	87	117	127	43
Tok CDP	129	214	589	935	1,393	1,258	532
Northway CDP	196	40	73	123	95	71	27
Northway Jct. CDP	0	0	0	88	72	54	20
Northway Village CDP						98	
Alcan border CDP	0	0	0	27	21	33	16
Nabesna CDP						5	3
District 6 subtotal	**1,617**	**4,084**	**5,557**	**6,168**	**8,271**	**8,856**	**3,439**
TOTAL	**7,390**	**10,328**	**13,935**	**15,490**	**18,391**	**18,404**	**6,358**

CDP=Census Designated Place. Black cell=information is not available. Source: ADCCED 2014.

FP19–07 Executive Summary	
General Description	Proposal FP19-07, requests the Federal Subsistence Board (Board) revise Federal subsistence management regulations section §___.27(e)(3)(xii) by adding dip nets to the gear types allowed for the subsistence harvest of salmon on the Yukon River. *Submitted by: Yukon-Kuskokwim Delta Subsistence Regional Advisory Council*.
Proposed Regulation	***§___.27 Subsistence taking of fish*** * * * * *(xiii) You may take salmon only by gillnet, beach seine, fish wheel, or rod and reel, subject to the restrictions in this section.* ***Salmon may be harvested by dip net at any time, except in times of conservation, Chinook Salmon are required to be released alive.***
OSM Preliminary Conclusion	**Support** Proposal FP19-07 **with modification** to allow the Federal in-season manager to additionally require the live release of Chinook, Chum, or Coho Salmon during times of low salmon abundance rather than only Chinook Salmon**.**
Yukon-Kuskokwim Delta Subsistence Regional Advisory Council Recommendation	
Western Interior Alaska Subsistence Regional Advisory Council Recommendation	
Seward Peninsula Subsistence Regional Advisory Council Recommendation	
Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	

FP19–07 Executive Summary	
Written Public Comments	**None**

DRAFT STAFF ANALYSIS
FP19-07

ISSUES

Proposal FP19-07, submitted by the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council (Council), requests the Federal Subsistence Board (Board) revise Federal subsistence management regulations section §___.27(e)(3)(xii) by adding dip nets to the gear types allowed for the subsistence harvest of salmon on the Yukon River.

DISCUSSION

According to the proponent, dip netting has been a traditional method of fish harvest for many communities on the Yukon River but is not currently a legal gear type for the harvest of salmon under Federal subsistence regulations. The Yukon Kuskokwim Delta Council has noted that it is allowed for commercial salmon harvest on the Yukon River by Alaska Department of Fish and Game (ADF&G) Emergency Order. Dip nets have proven to be an effective method of catching Chum Salmon with safe live release of Chinook Salmon.

Existing Federal Regulation

§___.27 Subsistence taking of fish

(e)(3) Yukon-Northern Area.

(i) Unless otherwise restricted in this section, you make take fish in the Yukon-Northern Area at any time. In those locations where subsistence fishing permits are required, only one subsistence permit will be issued to each household per year. You may subsistence fish for salmon with rod and reel in the Yukon River drainage 24 hours per day, 7 days per week, unless rod and reel are specifically otherwise restricted in paragraph (e)(3) of this section.

(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 the restrictions in this section.

* * * *

(xvi) Unless otherwise specified in this section, you may take fish other than salmon by set gillnet, drift gillnet, beach seine, fish wheel, long line, fyke net, dip net, jigging gear, spear, lead, or rod and reel, subject to the following restrictions, which also apply to subsistence salmon fishing:.

* * * *

Proposed Federal Regulation

§___.27 Subsistence taking of fish

* * * *

(xiii) You may take salmon only by gillnet, beach seine, fish wheel, or rod and reel, subject to the restrictions in this section. ***Salmon may be harvested by dip net at any time, except in times of conservation, Chinook Salmon are required to be released alive.***

* * * *

Existing State Regulation

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 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.

* * * *

(m) Notwithstanding the provisions of (d), (e)(2), and (f)(2) of this section, during times when the commissioner determines that it is necessary for the conservation of chum salmon, the commissioner may, by emergency order, close the fishing season in the Yukon Area and immediately reopen the season in that area during which one or more of the following gear limitations may be implemented

* * * *

(3) dip nets may be used; however, all chum salmon caught with a dip net must be released into the water alive;

(n) Notwithstanding the provisions of (d), (e)(2), and (f)(2) of this section, during times when the commissioner determines that it is necessary for the conservation of king salmon, the commissioner may, by emergency order, close the fishing season in the Yukon Area and immediately reopen the season in that area during which one or more of the following gear limitations may be implemented

* * * *

(3) dip nets may be used; however, all king salmon caught with a dip net must be released into the water alive;

Extent of Federal Public Lands

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. The Federal public waters addressed by this proposal are within the Yukon River Drainage within or adjacent to the Arctic National Wildlife Refuge, Gates of the Arctic National Park and Preserve, Innoko National Wildlife Refuge, Yukon Delta National Wildlife Refuge, Koyukuk National Wildlife Refuge, Kanuti National Wildlife Refuge, Nowitna National Wildlife Refuge, Denali National Park and Preserve, White Mountains National Recreation Area, Steese National Conservation Area, Yukon Charely Rivers National Preserve, Beaver Creek National Wild and Scenic River, Birch Creek National Wild and Scenic River, Delta Wild and Scenic River, Fortymile Wild and Scenic River, Tetlin National Wildlife Refuge, Yukon Flats National Wildlife Refuge, and Wrangell-St. Elias National Park and Preserve (Figure **1**).

Customary and Traditional Use Determinations

Rural residents of the Yukon River drainage and the community of Stebbins have customary and traditional use determination for Salmon, other than fall chum salmon in the Yukon River drainage.

Residents of the Yukon River drainage and the community of Chevak, Hooper Bay, Scammon Bay, and Stebbins have a customary and traditional use determination for Fall chum salmon in the Yukon River drainage.

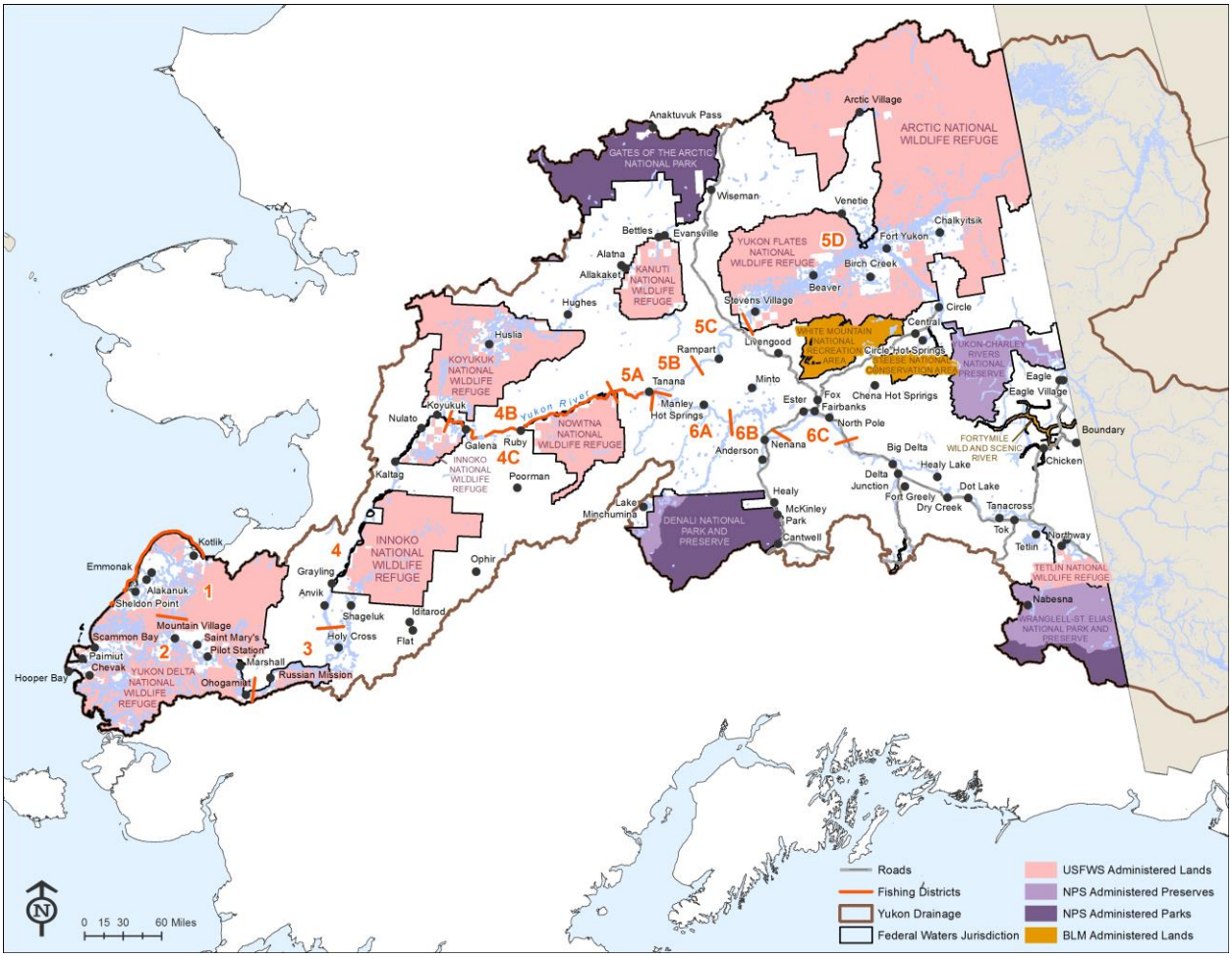

Figure 1. Yukon River with fishing Districts.

Regulatory History

State Regulatory History

In 2013, the Alaska Board of Fisheries adopted new commercial fishing regulations that allows the use of dip nets and beach seines to harvest salmon (Estensen et al. 2017). The rationale for adding these gear types was to allow fishing opportunity during times of low Chinook Salmon abundance.

Federal Regulatory History

Starting in October 1999, Federal subsistence management regulations for the Yukon-Northern Area stipulated that, unless otherwise restricted, rural residents may take salmon in the Yukon-Northern Area at any time by gillnet, beach seine, fish wheel, or rod and reel unless exceptions are noted. These methods were adopted from ADF&G methods for the Yukon Region at that time.

Biological Background

Chinook Salmon

Recent analyses indicate that Yukon River Chinook Salmon stocks appear to be in the third year of increasing productivity after the low returns of 2015. Historically, the stocks showed periods of above-average abundance (1982-1997) and periods of below-average abundance (1998 onwards), as well as periods of generally higher productivity (brood years 1993 and earlier) mixed with years of low productivity (brood years 1994-1996 and 2002-2005; Schindler et al. 2013).

The 2014 run was expected to be the smallest on record, with a projected size of 64,000-121,000 fish. Despite initial concerns, the cumulative passage estimate at the mainstem Yukon River sonar project in Pilot Station was approximately 138,000±17,000 (90% CI) fish (**Figure 2**). The passage estimate was still below the historical average of 143,000 fish and below the average of 195,800 fish for years with early run timing. As a result of severe management restrictions, all escapement goals that could be assessed were achieved, even with below average run sizes (JTC 2015).

The 2015 projected run size was 118,000-140,000 fish, which was once again below average yet higher than the previous year's projection. Cumulative passage estimates at the sonar station in Pilot Station were approximately 116,000±30,000 fish (90% CI) (**Figure 2**). As with the previous year, this number was still below the historical average. As a result of severe management restrictions, all escapement goals that could be assessed were achieved, even with below average run sizes (JTC 2016).

The 2016 run outlook was a below-average run of 130,000–176,000 fish (JTC 2017). Cumulative passage estimates at the sonar station in Pilot Station were approximately 176,898±18,466 fish (90% CI) (Liller, 2018 pers. comm). This number was near the recent historical average of 178,300 fish (ADF&G 2018), but is considered preliminary at this time. Conservative actions were relaxed slightly from previous years and all escapement goals were again met (JTC 2016).

The 2017 run outlook was slightly larger, but still below average: 140,000-194,000 fish (JTC 2017). Cumulative passage estimates at the Pilot Station sonar were approximately 263,000±29,000 fish (90% CI) (JTC 2018), which was the largest since 2003 (JTC 2017), is also considered preliminary. Subsistence management restrictions were further relaxed which resulted in harvests approximately two thirds of average and most escapement goals were met despite the poor water conditions that existed throughout the drainage. The numbers reported at the Pilot Station sonar do not factor in any harvest that occurs downstream, which can be significant during some years.

The 2018 run outlook is larger than in recent years, with a run size of 173,000-251,000 fish (ADF&G 2018). The upper end of the range could support an average subsistence harvest and while the low end of the range would likely result in restrictions to subsistence fisheries.

Summer Chum Salmon

Summer Chum Salmon runs in the Yukon River have provided a harvestable surplus in each of the last 15 years, 2003-2017. In 2017, the projected outlooks were for a run size of approximately 2 million fish, while the 2018 projection is expected to be similar or slightly lower than the 2017 run of approximately 3.6 million fish.

In 2016, approximately 1.92 million ±80,517 (90% CI) fish passed the Yukon River sonar project at Pilot Station, which was near the historical median for the project of 1.90 million fish. In 2017, the passage estimate at Pilot Station increased to 3.09 million ±138,259 (90% CI) (**Figure 3**). Most tributaries experienced average to above-average escapement in 2017 (JTC 2018). The Henshaw Creek weir counted a record number of Chum Salmon (360,687), which was only 13% smaller than the number counted at the Anvik River Sonar (415,139). The numbers reported at the Pilot Station sonar do not factor in any harvest that occurs downstream, which can be significant during some years.

Although all 2017 numbers are preliminary at this time, the 2018 run is anticipated to provide for escapements, normal subsistence harvest, and a surplus for commercial harvest (JTC 2018).

Fall Chum Salmon

Fall Chum Salmon runs in the Yukon River have provided a harvestable surplus in each of the last 8 years, 2010-2017. In 2017, the projected outlooks were for a run size of approximately 1.4-1.7 million fish, while the 2018 projection of 1.6-1.8 million fish is lower than the 2017 run of approximately 2.3 million fish (JTC 2018).

In 2016, approximately 994,760 million ±64,434 (90% CI) Fall Chum Salmon passed the Yukon River sonar project at Pilot Station, which was above the 1995-2016 median for the project of 688,057 fish. In 2017, the passage estimate at Pilot Station increased to 1.83 million ±54,179 (90% CI) and was the second largest run in 43 years (**Figure 4**). Most tributaries experienced average to above-average escapement in 2017 (JTC 2018) although all 2017 numbers are preliminary at this time. The numbers reported at the Pilot Station sonar do not factor in any harvest that occurs downstream, which can be significant during some years.

The 2018 run is anticipated to provide for escapements, normal subsistence harvest, and a surplus for commercial harvest (JTC 2018).

Coho Salmon

In 2016 approximately 168,297 ± 11,180 (90% CI) Coho Salmon passed the Yukon River sonar project at Pilot Station, which was slightly above the historical median of 160,272 fish. In 2017, the passage estimate at Pilot Station decreased to 166,330 ±20,300 (90% CI) which was also slightly above the historical median (**Figure 5**). All 2017 numbers are preliminary at this time. The Coho Salmon outlook is based upon parent year escapements assuming average survival. Since Coho Salmon predominately return as age 2.1 fish (4 year old fish), the major contributor to the 2018 returns are from the 2014 parent year. Therefore, the 2018

outlook is for average to above average returns in 2018. The numbers reported at the Pilot Station sonar do not factor in any harvest that occurs downstream, which can be significant during some years.

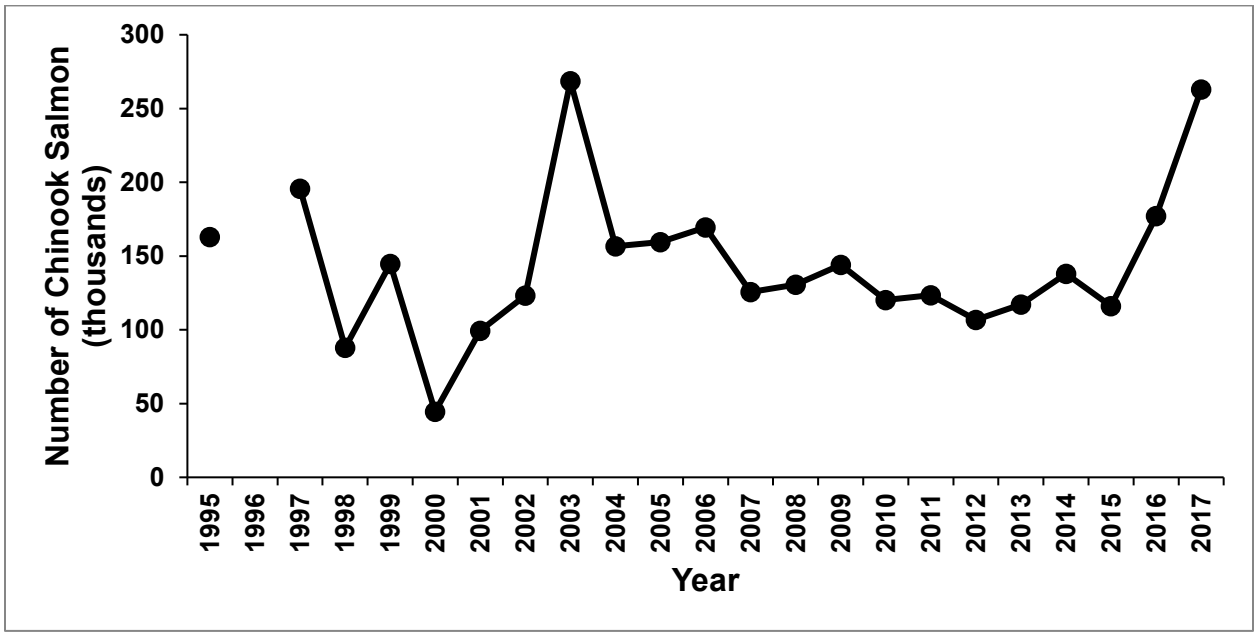

Figure 2. Chinook Salmon passage estimates based on the mainstem Yukon River sonar near Pilot Station, Yukon River drainage, 1995 and 1997-2017 (JTC 2018). Data from 2016 and 2017 are preliminary at this time.

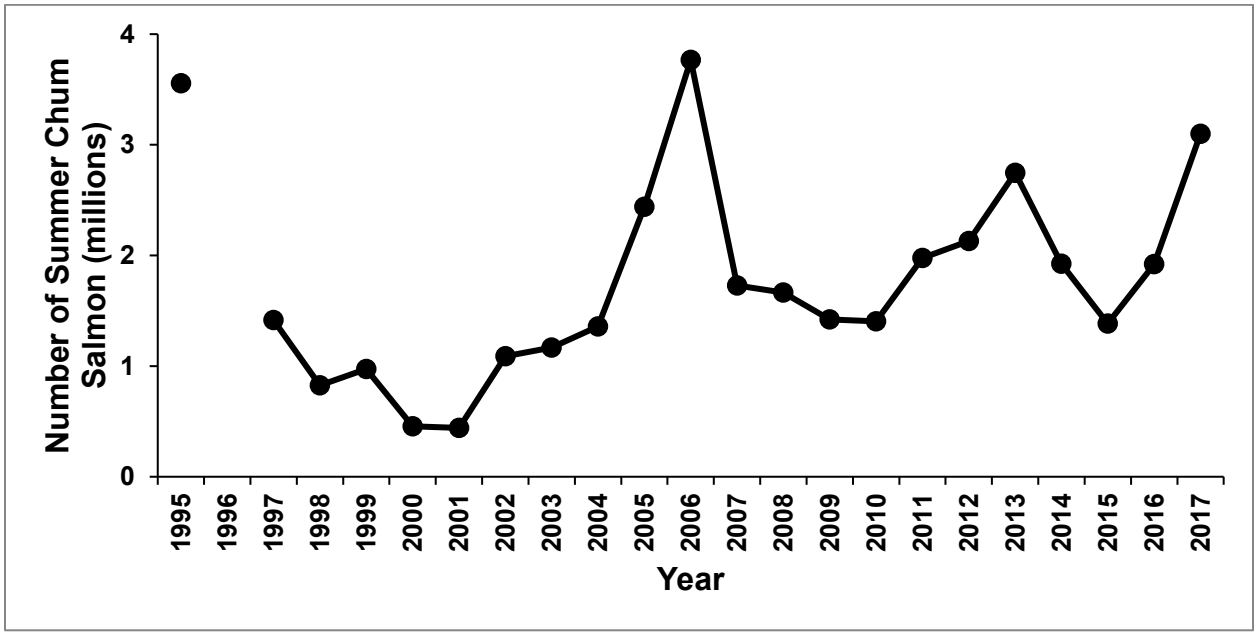

Figure 3. Summer Chum Salmon passage estimates based on the mainstem Yukon River sonar near Pilot Station, Yukon River drainage, 1995 and 1997-2017 (JTC 2018). Data from 2016 and 2017 are preliminary at this time.

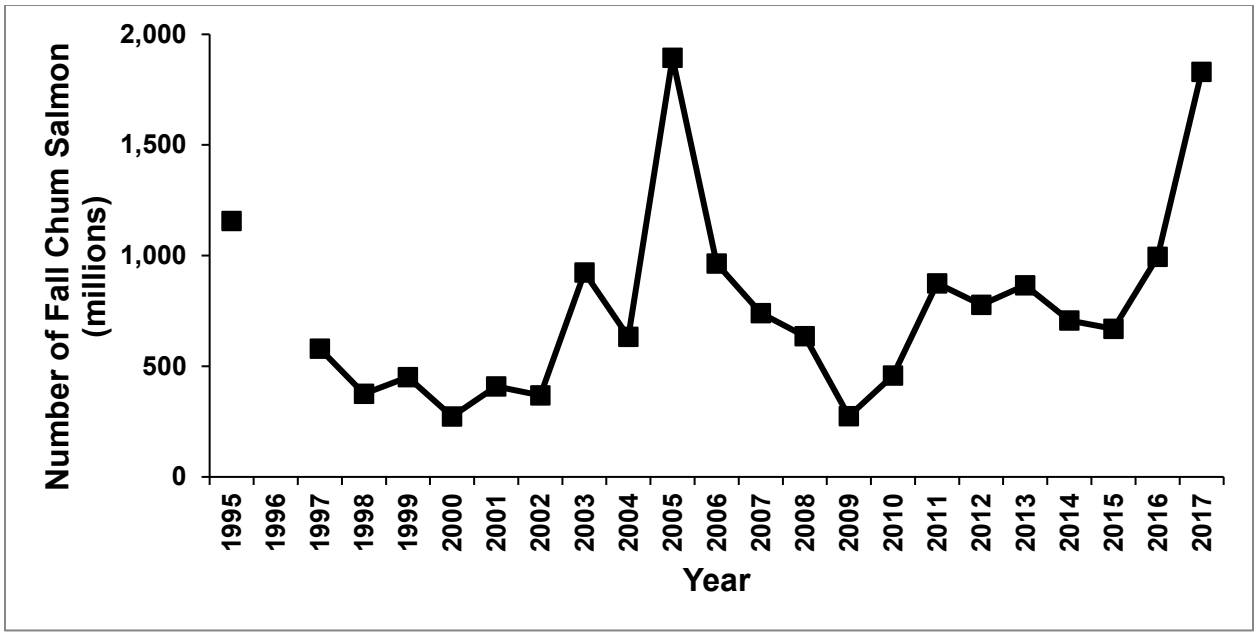

Figure 4. Fall Chum Salmon passage estimates based on the mainstem Yukon River sonar near Pilot Station, Yukon River drainage, 1995 and 1997-2017 (JTC 2018). Data from 2016 and 2017 are preliminary at this time.

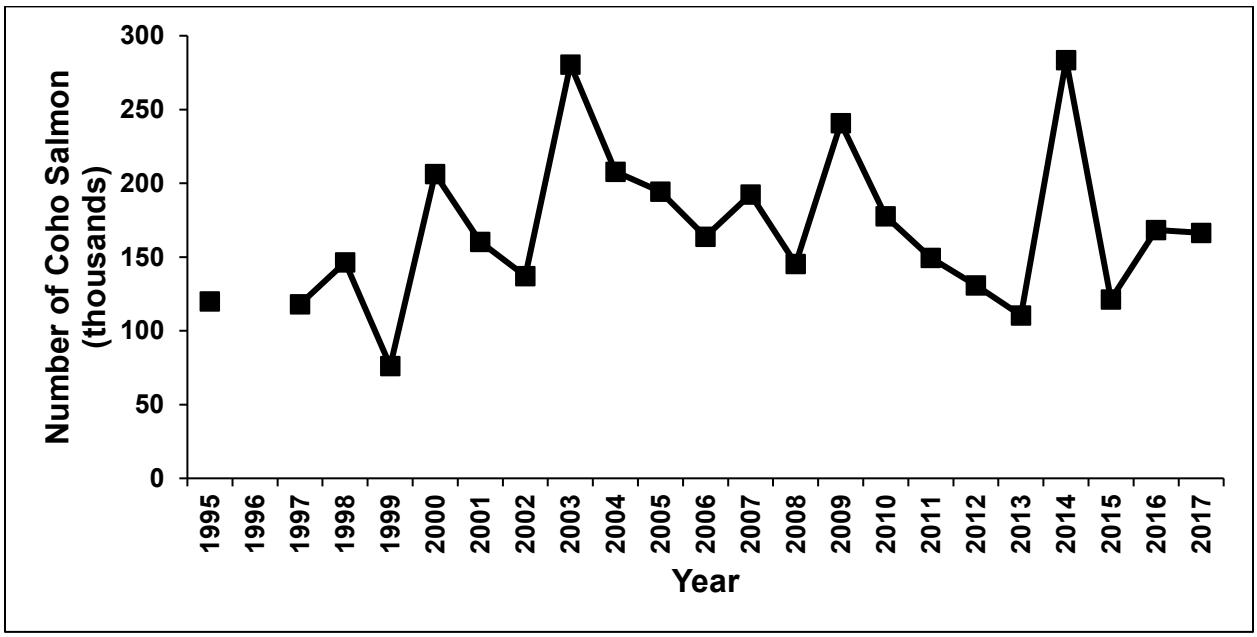

Figure 5. Coho Salmon passage estimates based on the mainstem Yukon River sonar near Pilot Station, Yukon River drainage, 1995 and 1997-2017 (JTC 2018). Data from 2016 and 2017 are preliminary at this time.

Harvest History

Distribution and availability of salmon varies throughout the Yukon River drainage. Summer Chum Salmon are uncommon in the Yukon River drainage above the Tanana River, while the fall Chum Salmon spawning grounds are mainly from the Tanana River upstream (Estensen et al, 2017). The lack of Summer

Chum Salmon in the upper portions of the drainage places a bigger reliance on Chinook Salmon in the early season for these communities. This information is reflected in the 2014 ADF&G subsistence salmon harvest estimates (Jallen et al. 2017). It is important to make the distinction on locations and timing when discussing possible changes to Federal subsistence fishing regulations, as not every village has the same fishing opportunities.

Chinook Salmon

Subsistence

Subsistence harvest of Chinook Salmon in the Alaska portion of the Yukon River averaged 34,791 fish from 1961-2015, with a high of 62,486 in 1993 and a low of 2,724 in 2014 (JTC 2017) (**Figure 6**). The 2014 Chinook Salmon subsistence harvest of 2,724 fish was the lowest on record for the Alaska portion of the Yukon River drainage. Harvest increased in 2015, 2016 and 2017 with 7,577, 21,627, and 36,992 fish harvested respectively. The 2017 harvest estimate, though preliminary, is larger than the 2007-2016 average (29,514) and over 2 times the number of the recent 5 year average of 15,088 (JTC 2018). The 2017 harvest is the largest since 2011.

Commercial

Chinook Salmon have not been targeted in the commercial fishery for 10 years and the sale of incidentally caught Chinook Salmon was prohibited for the seventh consecutive year during the 2017 summer season. However, there was a small opportunity during the fall fishing seasons were fish were sold in Districts 1 and 2 in 2011 (82) and 2017 (168). The 1961-2016 average commercial harvest is 88,092 with a recent 10 year average of 9,714 (JTC 2018).

Sportfish

Sport fishing harvest of Chinook Salmon are generally low in the Yukon River drainage. The 2012-2016 average sport fishing harvest within the Alaska portion of the Yukon River was estimated to be 105 Chinook Salmon (JTC 2018). The majority of sport fishing effort in the drainage occurs in the Tanana River drainage (District 6). Outside of the Tanana River, the Andreafsky (in District 2) and Anvik (in District 4) rivers receive the bulk of the remaining effort. During 2017, sport fishing was allowed after June 20, and allowed for a bag limit of 1 Chinook Salmon 20-inches or greater (JTC 2018).

Summer Chum Salmon

Subsistence

Subsistence harvest of Summer Chum Salmon in the Alaska portion of the Yukon River averaged 129,766 fish from 1970-2016, with a high of 227,829 in 1988 and a low of 72,155 in 2001 (JTC 2018) (**Figure 7**). The 2012-2016 average harvest is estimated to be 100,113 Summer Chum Salmon, and the harvest estimate from 2014-2017 has remained relatively constant. The preliminary 2017 harvest is 87,252 Summer Chum

Salmon. Summer Chum Salmon are predominately harvested in Yukon area Districts 1-4, and 6. Few Summer Chum Salmon migrate upstream of the Tanana River in the Yukon River mainstream.

Commercial

Commercial harvest of Chum Salmon in the Alaska portion of the Yukon River averaged 382,635 fish from 1970-2016, with a high of 1,148,650 in 1988 and a low of 0 in 2001 (JTC 2018). Since 2001, commercial catches of Summer Chum Salmon has increased dramatically, with a 2012-2016 average of 444,094 fish. The preliminary 2017 harvest is 555,296 Summer Chum salmon.

Sportfish

Sport fishing harvest of Summer Chum Salmon is generally low in the Yukon River drainage. The 2012-2016 average sport fishing harvest within the Alaska portion of the Yukon River was estimated to be 264 Summer Chum Salmon (JTC 2018). The majority of sport fishing effort in the drainage occurs in the Tanana River drainage (District 6). Outside of the Tanana River, the Andreafsky (in District 2) and Anvik (in District 4) rivers receive the bulk of the remaining effort.

Fall Chum Salmon

Subsistence

Subsistence harvest of fall Chum Salmon in the Alaska portion of the Yukon River averaged 105,167 fish from 1961-2016, with a high of 342,819 in 1987 and a low of 19,395 in 2000 (JTC 2018) (**Figure 8**). The 2012-2016 average harvest is estimated to be 95,294 fall Chum Salmon, and the harvest estimate from 2014-2017 has remained relatively constant. The preliminary 2017 harvest is 86,189 fall Chum Salmon.

Commercial

Commercial harvest of fall Chum Salmon in the Alaska portion of the Yukon River averaged 157,467 fish from 1961-2016, with a high of 466,451 in 1981 and a low of 0 in 1987, 1993, 2000, 2001, and 2002 when no commercial fishery was conducted (JTC 2018). Since 2002, commercial catches of fall Chum Salmon has varied dramatically, and the 2012-2016 average is 260,042 fish. The preliminary 2017 harvest is 489,702 fall Chum salmon.

Sportfish

Sport fishing harvest of fall Chum Salmon is generally low in the Yukon River drainage, with no data presented (JTC 2018).

Coho Salmon

Subsistence

Subsistence harvest of Coho Salmon in the Alaska portion of the Yukon River averaged 22,400 fish from 1961-2016, with a high of 82,371 in 1987 and a low of 3,966 in 1970 (JTC 2018) (**Figure 9**). The 2012-2016 average harvest is estimated to be 16,003 Coho Salmon, while the harvest estimate from 2016 and 2017 has decreased. The preliminary 2017 harvest is 7,645 Coho Salmon.

Commercial

Commercial harvest of Coho Salmon in the Alaska portion of the Yukon River averaged 38,031 fish from 1961-2016, with a high of 201,482 in 2016 and a low of 0 in 1987, 1993, 2000, 2001, and 2002 when no commercial fishery was conducted (JTC 2018). Since 2002, commercial catches of Coho Salmon has varied dramatically, and the 2012-2016 average is 115,372 fish. The 2017 harvest is 138,915 Coho salmon. All harvest data from 2016 and 2017 is preliminary.

Sportfish

Sport fishing harvest of Coho Salmon is generally low in the Yukon River drainage. The 2012-2016 average sport fishing harvest within the Alaska portion of the Yukon River was estimated to be 703 Coho Salmon (JTC 2018). The majority of sport fishing effort in the drainage occurs in the Tanana River drainage (District 6). Outside of the Tanana River, the Andreafsky (in District 2) and Anvik (in District 4) rivers receive the bulk of the remaining effort.

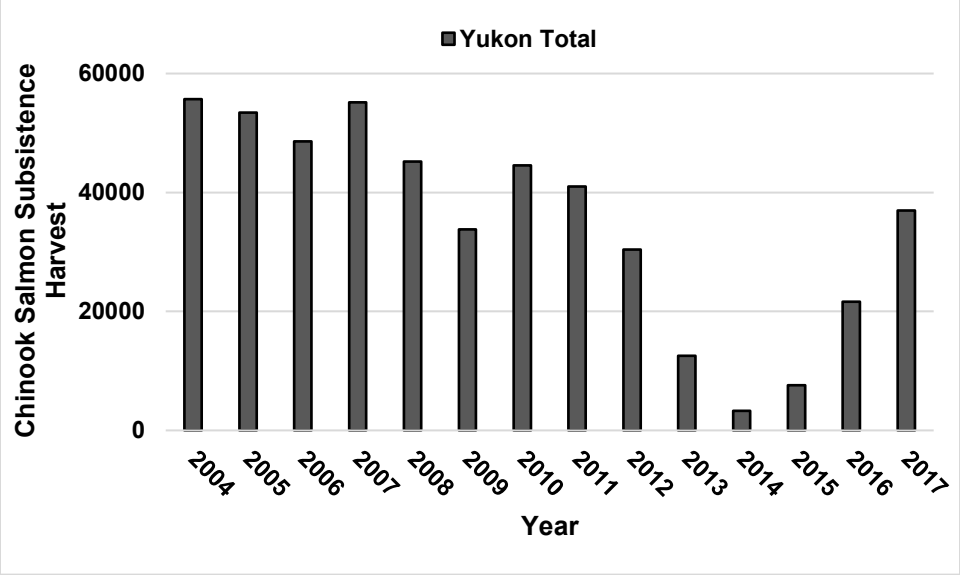

Figure 6. Chinook Salmon subsistence harvest in the Alaska portion of the Yukon River from 2004 to 2014 (Jallen et al. 2017).

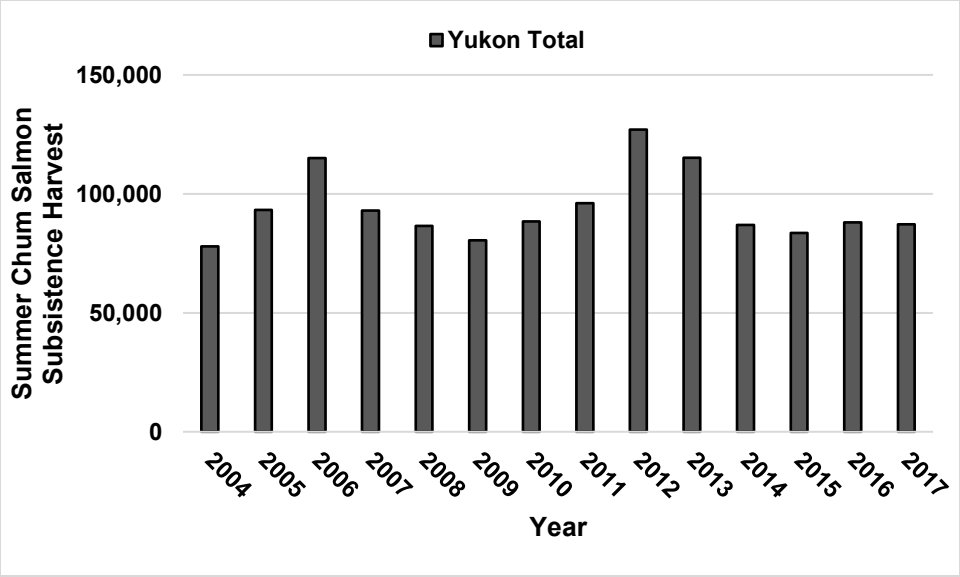

Figure 7. Summer Chum Salmon subsistence harvest in the Alaska portion of the Yukon River from 2004 to 2014 (Jallen et al. 2017).

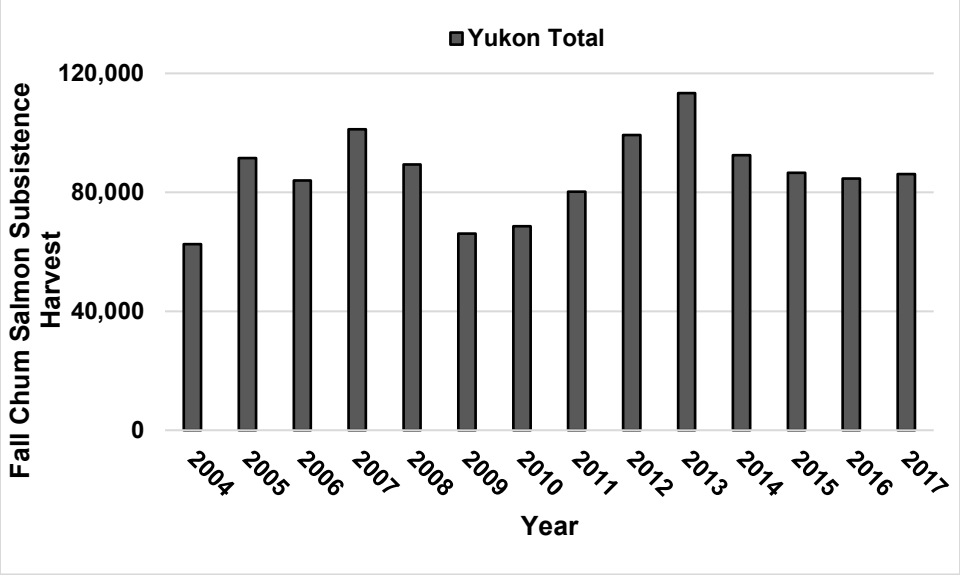

Figure 8. Fall Chum Salmon subsistence harvest in the Alaska portion of the Yukon River from 2004 to 2014 (Jallen et al. 2017).

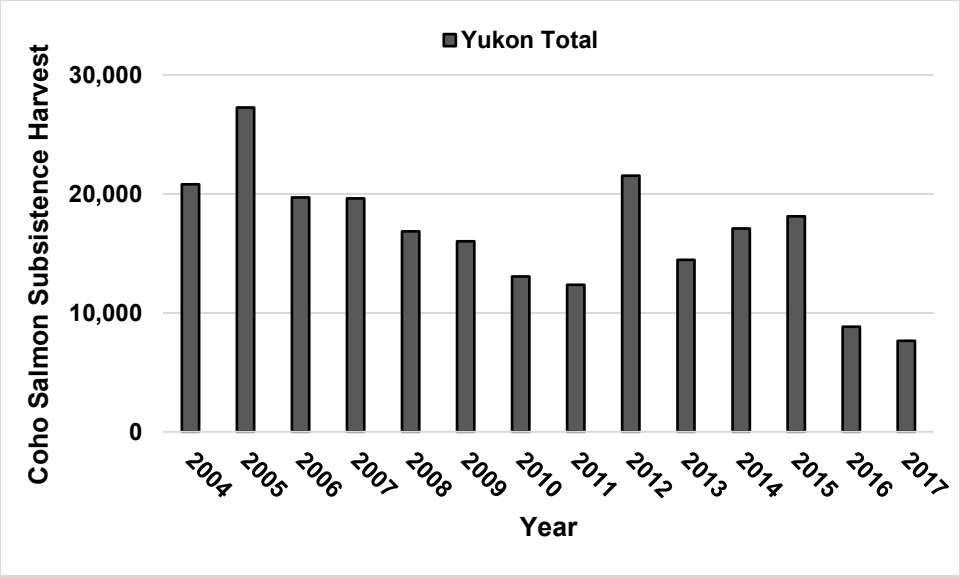

Figure 9. Coho Salmon subsistence harvest in the Alaska portion of the Yukon River from 2004 to 2014 (Jallen et al. 2017).

Cultural Knowledge and Traditional Practices

The use and importance of salmon and other non-salmon species for Yukon River communities has been documented through oral histories and harvest surveys conducted in the area. Historically, many Yukon communities followed a semi-nomadic, subsistence lifestyle, spending time at seasonal camps, migrating with the resources and harvesting various species of fish, along with hunting and gathering subsistence resources. Humans have lived in the Yukon area for over 10,000 years (Rainey 1940, Cinq-Mars 1979) and fishing was a family and community activity, deeply ingrained in to the cultures of the people in this area. People traditionally used weirs and fish traps, and nets made of animal sinew and willow bark and more recently employed commercially made set nets along with hand-made fish wheels for salmon at their fish camps. Multi-generational family groups would travel to seasonal camps to harvest fish and wildlife. Although fewer young people spend time at seasonal camps now due to employment, school, and other responsibilities, subsistence fishing continues to be important for communities up and down the river. According to surveys, many older people recalled whole families spending long hours at their fish camps, harvesting, processing, and preserving fish. Children learned about subsistence activities from their elders at fish camp (Brown et al. 2010; Brown et al. 2015).

Salmon is considered the most reliable and significant subsistence resource on the Lower Yukon River. Salmon has always been an important part of the culture, economically and socially, and the knowledge of how to catch, process, and preserve fish has been passed down from generation to generation. Before contact by outsiders dried fish was regularly traded between Yukon villages along with other commodities such as furs and sea mammal products (Wolfe 1981).

Yukon River residents are dependent on the harvest of salmon, especially Chinook Salmon, for both subsistence and commercial uses. Starting in the late 1990s, Chinook Salmon began to decline so people

harvested more summer and fall Chum Salmon along with other subsistence resources (Brown et al. 2015). In the 1960s, people started using gillnets to drift fish for salmon for personal and commercial use. Today fishing still plays an important cultural role in the communities along the lower and middle Yukon River, and the knowledge of how and when to fish is still passed down from generation to generation.

Customary trade of fish is also an important part of continuing trade networks in rural areas of Alaska. Salmon fishing takes place in the summer and timing is based on the runs for various species. Local residents also use nets under the ice to fish for Northern Pike, whitefish, or Sheefish in the spring before breakup. Communities have used various types of nets and fish wheels to harvest fish through the generations. Fish wheels are used less now than they were in the past when people were catching more fish to feed sled dogs, but are still used in some areas, mainly to catch fish for human consumption (Brown et al. 2010). Chum Salmon, once primarily used for dog food, were caught using nets set from the shore but are now consumed in large quantities by people in the US and overseas that attain the resource through the commercial fishing industry. As more village runways were built, increasing air travel, and more snow machines were brought to the villages, the dependency on sled dogs was reduced, reducing the need for harvesting fish to feed dogs (Brown et al. 2015).

Gear types and their use have changed over time in response to conservation and management actions to protect Chinook salmon (see Regulatory History). Management goals have been to provide adequate subsistence salmon fishing opportunity while conserving Chinook Salmon stocks. According to a Federal in-season manager in 2017, local people have been actively engaged in finding solutions and have been "willing to try dip nets and beach seines and gear" that are selective and that allow the live release of Chinook Salmon (FSB 2017; p. 63). During their winter 2018 meeting, members of the Yukon-Kuskokwim Delta Council reiterated that dip nets could be useful in times of conservation need, but also that they provide additional opportunity that could be important to some people (YKDRAC 2018). One member additionally indicated that this method is traditionally used (YKDRAC 2018; p 227):

> Because historically my grandmother and I would go sit, when we used to have a fish camp on Flat Island, and we'd sit there for a week straight catching fall chum with a dip net on the banks of where our fish camp was and so, I guess I don't know where else to go from there.

There is some local concern however that allowing the use of dip nets in the Federal subsistence salmon fishery could lead to future restrictions on the use of gillnets. In some areas of the Yukon the ability to use gillnets may not result in additional harvest opportunity because of topography and hydrological conditions that prevent adequate access. Residents of the Kuskokwim River have reported that while use of dip nets is an option for harvest in times of Chinook conservation since it allows live release of Chinook Salmon , in most areas of the Kuskowkim River it is an inefficient method of harvesting Chum and Sockeye Salmon in large enough numbers to fill smokehouses as they would using gill nets. The concern expressed was that while dipnets could be viewed as a management tool for providing subsistence fishing opportunity during times of Chinook conservation, the reality is that for many locations and communities it is not a viable method for adequate subsistence salmon harvest in lieu of use of gill nets.

The use, harvest, and dependence of salmon resources can vary by community based on cultural practices, resource availability, economics and many other factors. Yukon River drainage residents exhibit these variations generally within the lower, middle, and upper stretches of the drainage. Communities present along the river and their populations over time, by fishing district, are represented in **Appendix 1**.

Effects of the Proposal

Adoption of this proposal as submitted will allow for more subsistence fishing opportunity for Federally qualified subsistence users on Federal public lands in the Yukon River Drainage. Effects on the salmon stocks would likely be negligible. Adoption of dip net usage may be slow in some communities, as some have expressed interest in its use while others have not.

Although this proposal would increase opportunities for subsistence harvest for Federally qualified users, there are some potential drawbacks. State and Federal regulations would no longer be aligned, complicating enforcement of these regulations and creating confusions about where and when the gear is legal.

Dip nets can be fairly effective at harvesting fish in the Yukon River. During times of lower abundance, managers would need to be aware of fishing effort with this gear type and manage appropriately. However, the selectivity of this gear type can make it an excellent tool when there is a conservation concern on one or more species while executing a mixed stock fishery.

If no change is made, the Federal subsistence fishery will not allow dip nets to be used to harvest salmon. However, Federally qualified subsistence users will still be allowed to harvest salmon with dip nets by emergency order from ADF&G during times of Chinook or Chum Salmon conservation.

OSM PRELIMINARY CONCLUSION

Support Proposal FP19-07 **with modification** to allow the Federal in-season manager to additionally require the live release of Chinook, Chum or Coho Salmon during times of low salmon abundance rather than only Chinook Salmon.

The modified regulation should read:

§___.27 Subsistence taking of fish

* * * *

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

****

(C) Salmon may be harvested by dip net at any time, except during times of

conservation, the Federal in-season manager may announce restrictions on time, area, and species.

* * * *

Justification

Adoption of this proposal would result in additional opportunity for Federally qualified subsistence users in the Yukon River drainage. The selective nature of this gear would allow for the release of species that need protection during times of low abundance while still allowing the harvest of species that are returning in large enough numbers to provide a harvestable surplus. The impact to the salmon stocks would likely be minimal.

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Appendix 1. Population data for communities within the Yukon River drainage fishing districts, 1960-2010.

U.S. CENSUS POPULATION							
Community	**1960**	**1970**	**1980**	**1990**	**2000**	**2010**	**2010 number of households**
Stebbins city	158	231	331	400	547	556	134
Outside drainage subtotal	**158**	**231**	**331**	**400**	**547**	**556**	**134**
Alakanuk city	278	265	522	544	652	677	160
Nunam Iqua city	125	125	103	109	164	187	43
Emmonak city	358	439	567	642	767	762	185
Kotlik city	57	228	293	461	591	577	128
District 1 subtotal	**818**	**1,057**	**1,485**	**1,756**	**2,174**	**2,203**	**516**
Mountain Village city	300	419	583	674	755	813	184
Pitkas Point CDP	28	70	88	135	125	109	31
Saint Marys city	260	384	382	441	500	507	151
Pilot Station city	219	290	325	463	550	568	121
Marshall city	166	175	262	273	349	414	100
District 2 subtotal	**973**	**1,338**	**1,640**	**1,986**	**2,279**	**2,411**	**587**
Russian Mission city	102	146	169	246	296	312	73
Holy Cross city	256	199	241	277	227	178	64
Shageluk city	155	167	131	139	129	83	36
District 3 subtotal	**513**	**512**	**541**	**662**	**652**	**573**	**173**
Anvik city	120	83	114	82	104	85	33
Grayling city	0	139	209	208	194	194	55
Kaltag city	165	206	247	240	230	190	70
Nulato CDP	183	308	350	359	336	264	92
Koyukuk city	128	124	98	126	101	96	42
Huslia city	168	159	188	207	293	275	91
Hughes city	69	85	73	54	78	77	31
Allakaket city	115	174	163	170	97	105	44
Alatna CDP				31	35	37	12
Bettles city	77	57	49	36	43	12	9
Evansville CDP	77	57	45	33	28	15	12
Wiseman CDP	0	0	8	33	21	14	5
Coldfoot CDP					13	10	6
Galena city	261	302	765	833	675	470	190
Ruby city	179	145	197	170	188	166	62
District 4 subtotal	**1,542**	**1,839**	**2,506**	**2,582**	**2,436**	**2,010**	**754**
Tanana city	349	120	388	345	308	246	100
Rampart CDP	49	36	50	68	45	24	10
Stevens Village CDP	102	74	96	102	87	78	26
Beaver CDP	101	101	66	103	84	84	36
Fort Yukon city	701	448	619	580	595	583	246
Chalkyitsik CDP	57	130	100	90	83	69	24

Continued on next page

Appendix 1. *Continued from previous page*

U.S. CENSUS POPULATION							
Community	**1960**	**1970**	**1980**	**1990**	**2000**	**2010**	**2010 number of households**
Arctic Village CDP	110	85	111	96	152	152	65
Venetie CDP	107	112	132	182	202	166	61
Birch Creek CDP	32	45	32	42	28	33	17
Circle CDP	41	54	81	73	100	104	40
Chicken CDP	0	0	0	0	17	7	5
Central CDP	28	26	36	52	134	96	53
Eagle Village CDP	0	0	54	35	68	67	31
Eagle city	92	36	110	168	129	86	41
District 5 subtotal	**1,769**	**1,267**	**1,875**	**1,936**	**2,032**	**1,795**	**755**
Livengood CDP					29	13	7
Manley CDP	72	34	61	96	72	89	41
Minto CDP	161	168	153	218	258	210	65
Whitestone CDP						97	22
Nenana city	286	362	470	393	402	378	171
Four Mile Road CDP					38	49	14
Healy CDP	67	79	334	487	1,000	1,021	434
McKinley Park CDP	0	0	60	171	142	185	109
Anderson city	341	362	517	628	367	246	90
Ferry CDP				56	29	33	17
Lake MinChumina CDP	0	0	22	32	32	13	6
Cantwell CDP	85	62	89	147	222	219	104
Delta Junction city	0	703	945	652	840	958	377
Fort Greely CDP	0	1,820	1,635	1,299	461	539	236
Deltana CDP					1,570	2,251	784
Healy Lake CDP	0	0	33	47	37	13	7
Big Delta CDP	0	0	285	400	749	591	206
Dry Creek CDP	0	0	0	106	128	94	29
Dot Lake CDP	56	42	67	70	19	13	7
Dot Lake Village CDP					38	62	19
Tanacross CDP	102	84	117	106	140	136	53
Tetlin CDP	122	114	107	87	117	127	43
Tok CDP	129	214	589	935	1,393	1,258	532
Northway CDP	196	40	73	123	95	71	27
Northway Jct. CDP	0	0	0	88	72	54	20
Northway Village CDP						98	
Alcan border CDP	0	0	0	27	21	33	16
Nabesna CDP						5	3
District 6 subtotal	**1,617**	**4,084**	**5,557**	**6,168**	**8,271**	**8,856**	**3,439**
TOTAL	**7,390**	**10,328**	**13,935**	**15,490**	**18,391**	**18,404**	**6,358**

CDP=Census Designated Place. Black cell=information is not available. Source: ADCCED 2014.

ANNUAL REPORTS

Background

ANILCA established the Annual Reports as the way to bring regional subsistence uses and needs to the Secretaries' attention. The Secretaries delegated this responsibility to the Board. Section 805(c) deference includes matters brought forward in the Annual Report.

The Annual Report provides the Councils an opportunity to address the directors of each of the four Department of Interior agencies and the Department of Agriculture Forest Service in their capacity as members of the Federal Subsistence Board. The Board is required to discuss and reply to each issue in every Annual Report and to take action when within the Board's authority. In many cases, if the issue is outside of the Board's authority, the Board will provide information to the Council on how to contact personnel at the correct agency. As agency directors, the Board members have authority to implement most of the actions which would effect the changes recommended by the Councils, even those not covered in Section 805(c). The Councils are strongly encouraged to take advantage of this opportunity.

Report Content

Both Title VIII Section 805 and 50 CFR §100.11 (Subpart B of the regulations) describe what may be contained in an Annual Report from the councils to the Board. This description includes issues that are not generally addressed by the normal regulatory process:

- an identification of current and anticipated subsistence uses of fish and wildlife populations within the region;
- an evaluation of current and anticipated subsistence needs for fish and wildlife populations from the public lands within the region;
- a recommended strategy for the management of fish and wildlife populations within the region to accommodate such subsistence uses and needs related to the public lands; and
- recommendations concerning policies, standards, guidelines, and regulations to implement the strategy.

Please avoid filler or fluff language that does not specifically raise an issue of concern or information to the Board.

Report Clarity

In order for the Board to adequately respond to each Council's annual report, it is important for the annual report itself to state issues clearly.

- If addressing an existing Board policy, Councils should please state whether there is something unclear about the policy, if there is uncertainty about the reason for the policy, or if the Council needs information on how the policy is applied.
- Council members should discuss in detail at Council meetings the issues for the annual report and assist the Council Coordinator in understanding and stating the issues clearly.

- Council Coordinators and OSM staff should assist the Council members during the meeting in ensuring that the issue is stated clearly.

Thus, if the Councils can be clear about their issues of concern and ensure that the Council Coordinator is relaying them sufficiently, then the Board and OSM staff will endeavor to provide as concise and responsive of a reply as is possible.

Report Format

While no particular format is necessary for the Annual Reports, the report must clearly state the following for each item the Council wants the Board to address:

1. Numbering of the issues,
2. A description of each issue,
3. Whether the Council seeks Board action on the matter and, if so, what action the Council recommends, and
4. As much evidence or explanation as necessary to support the Council's request or statements relating to the item of interest.

Federal Subsistence Board

1011 East Tudor Road, MS121
Anchorage, Alaska 99503-6199

FISH and WILDLIFE SERVICE
BUREAU of LAND MANAGEMENT
NATIONAL PARK SERVICE
BUREAU of INDIAN AFFAIRS

FOREST SERVICE

AUG 2 4 2018

OSM 180065.KP

Louis Green, Chair
Seward Peninsula Subsistence
Regional Advisory Council
c/o Office of Subsistence Management
1101 East Tudor Road, MS 121
Anchorage, Alaska 99503

Dear Chairman Green:

This letter responds to the Seward Peninsula Subsistence Regional Advisory Council's (Council) fiscal year 2017 Annual Report. The Secretaries of the Interior and Agriculture have delegated to the Federal Subsistence Board (Board) the responsibility to respond to these reports. The Board appreciates your effort in developing the Annual Report. Annual Reports allow the Board to become aware of the issues outside of the regulatory process that affect subsistence users in your region. We value this opportunity to review the issues concerning your region.

1. **Alaska Department of Fish and Game Fisheries Staff at Council Meetings**

The Council continues to be frustrated with a lack of State fisheries representation at the Nome meetings. Subsistence users rely heavily on State waters for fish resources and it is essential to get feedback from biologists on fish populations and trends. The Council also believes that local State biologists should be in attendance at the meetings to provide updates and answer fishery questions that often come up regardless of whether or not there is an agenda item specifically related to fisheries. The Council is aware of numerous regional studies on fish resources occurring, including at the ADF&G local advisory committee meetings, but receives no information at or outside of its meetings. The Council believes that if there is going to be a working relationship with the State, they need to have representatives at the meeting. State wildlife biologists attend meetings regularly and the Council is extremely satisfied with their participation. The Council's requests for fisheries representation, however, have gone unanswered.

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Additionally there appears to be no meaningful coordination between State and Federal fisheries management programs. Given the lack of Federal public waters in the region, Federal funding research dollars are limited. That said, fish use Federal and State waters interchangeably and it is important to understand these migratory patterns and effects on subsistence fisheries. The Council feels that increased cooperation and communication between the State, Federal, and Tribal/corporation fisheries efforts would greatly contribute to a more effective and holistic approach to fisheries management on the Seward Peninsula.

Recommendation: *The Council will generate a letter to Jill Klein, Special Assistant to the Commissioner at the Alaska Department of Fish and Game to request state fishery representation at the meeting. In that letter, the Council will also express its interest in a State-sponsored migratory salmon study from Area M through the Kotzebue Sound. Information derived from the study will provide improved management information.*

Response:

The Board understands the Council's reoccurring concern that their meetings are not sufficiently attended by fisheries staff from the Alaska Department of Fish and Game (ADF&G), and that lack of such staff impairs its ability to make informed recommendations on primarily State managed commercial, subsistence, and personal use fisheries as well as other local subsistence fisheries issues.

As your annual report references, flowing waters under Federal subsistence fisheries jurisdiction are very limited within the Seward Peninsula Region, which includes the upper stretches of the Unalakleet River, waters within and adjacent to Bering Land Bridge National Preserve, and a number of streams and creeks south and south west of Stebbins. As a reminder, fisheries under Federal subsistence jurisdiction in the Council's region include non-flowing waters (i.e. lakes and ponds) owned by BLM within the Conservation System Unit boundaries and to flowing waters (i.e. anadromous streams). Few FRMP funds have been dedicated to the Seward Peninsula fisheries since the inception of the program for this reason but few if any projects have been submitted to study subsistence fish species that reside in lakes and ponds of the region.

In our 2017 response to the Council regarding this concern, the response letter summarized State of Alaska staff attendance to meetings during the previous two years and discussed significant budget cuts will further hamper ADF&G staff from attending in person. Currently, the State of Alaska is on the tail end of a substantial hiring freeze with no immediate plans to increase the size of their subsistence liaison team. All parties involved with the Federal Subsistence Management Program should not expect additional State staff to attend meetings in person. With a clear lack of funding available for the foreseeable future, all parties should expect the levels of in-person attendance to continue to decrease, creating a greater reliance on telephonic participation in future meetings. The era of the multitude of government staff physically

attending Council meetings has waned and future meetings will require a more efficient and streamlined approach from all sides.

We recommend the Council identify specific fisheries related issues and identify a portion of the Council meeting during which ADF&G fisheries staff presence would be beneficial to the process. During this identified window of time, ADF&G fisheries staff could make presentations and provide information in response to the identified concerns and questions provided by the Council Coordinator in advance of each meeting. Office of Subsistence Management (OSM) staff will work with ADF&G to ensure the appropriate experts are aware of how and when they can provide beneficial contributions to the Council process telephonically and in-person. During the winter 2018 Council meeting, the Council Coordinator arranged for this and the result was successful. Establishing a time period for ADF&G fisheries staff to attend the Council meeting during which specific and pertinent subject matter is identified well in advance of the meeting will much improve the efficient use of ADF&G staff time invested at the Council meetings.

One example that could address and inform the Council's interests includes learning more about what is known regarding Seward Peninsula bound salmon harvested in Area M. A request will be submitted to ADF&G for a presentation on what information is available. OSM will be directed to officially invite ADF&G subject matter experts on this issue for the upcoming Fall Seward Peninsula Council meeting.

Over the years the Seward Peninsula Council has requested that ADF&G fisheries staff attend and present at their meetings. Historically, ADF&G fisheries staff fully attended, presented, and fielded questions from the Council. During these meetings, little if any Federal subsistence fisheries issues were discussed because those fisheries are extremely limited as previously described. Many of the discussions revolved around the local and regional State managed commercial, sport, and subsistence fisheries that take place in waters distant from Federal public waters in this region. Although the formation of the Regional Advisory Council process included the intent as serving as a platform for subsistence issues to be voiced, the platform currently lacks the jurisdiction to modify State managed fisheries in waters under State of Alaska jurisdiction. However, that same forum for discussing subsistence issues could result in the Council submitting its own proposal to modify State fisheries regulations through the Alaska Board of Fisheries. Once that proposal is submitted, the Council can participate in the State regulatory process through its conclusion. The Board recommends the Council continue to build the record and continue discussing fisheries issues and concerns at their meetings and the written transcripts can be summarized at a later date and the list of fisheries concerns and observations will be summarized and submitted to ADF&G.

In conclusion, if the ADF&G is notified meaningfully in advance with subject matter and issue of interest, a more focused time frame could be established for ADF&G fisheries staff to attend

the meeting in person or telephonically. Keep in mind that while there may not be ADF&G fisheries staff in the room with you, they are likely participating on the phone.

2. <u>Paralytic Shellfish Poisoning (PSP) and Seabird Die-off</u>

During member reports, several Council members remarked on the alarming news of 39 dead intact walrus found washed ashore in Norton Sound. Initial reports suspected PSP, which was confirmed for at least two animals following additional testing. Paralytic Shellfish Poisoning was also present in a number of migratory birds along the Seward Peninsula that had died from starvation. Specialists told one Council member they do not want to test for PSP because it may cause a panic about the safety of local foods. Subsistence users, however, have a right to know what it is in their food.

Recommendation: *The Council is interested in having resource managers take the initiative and provide leadership for testing local marine mammals and birds for PSP and other toxins. Research should also be conducted on whether or not the presence of PSP is driven by climate change.*

Response:

Climate change, which includes loss of sea ice and warming ocean temperatures in arctic and subarctic Alaska, may create conditions favorable for harmful algal blooms in northern Alaska. The two primary biotoxins (domoic acid and saxitoxin), which can that can causes paralytic shellfish poisoning in humans and marine mammals, have been well documented in the shellfish in the Gulf of Alaska and the Aleutians but not in northern Alaska. Harmful algal blooms occur more frequently in the summer months but can occur anytime of the year (Long 2006). Pacific walrus are an important subsistence food resource for many communities along the coastline in southwestern, western and northern Alaska. A recent die off of 39 Pacific walruses, in good body condition, prompted concern about the cause of mortality. Samples from intestine and stomach contents from three dead walruses that washed ashore along the Seward Peninsula and one freshly harvested walrus were collected by the residents of Shishmaref and Little Diomede. Moderate levels of saxitoxin acid were found in the stomach and intestines and one walrus had levels above the 800mg per 100g of shellfish, which is the regulatory limit for human consumption. Due to the small sample size it is unknown if biotoxin levels were the proximal cause of death or were just a contributing factor to the mass die off (Sheffield 2017).
In a study conducted by the National Marine Fisheries Service on algal toxins of 905 marine mammals from 13 species in the arctic and subarctic, Pacific walrus had the highest concentrations of saxitoxin and domoic acid. The concentrations of domoic acid in Pacific Walrus (n=82) were similar to those previously detected in California Sea Lions exhibiting the signs of shellfish poisoning off the coast of California (Lefebvre et al. 2016).

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Given the presence of saxitoxin and domoic acid in the Bering Strait region, it is important to continue to monitor marine mammal strandings and collect samples when possible. Although the Alaska Department of Environmental Conservation (ADEC) has an active sampling program to monitor potential outbreaks of harmful biotoxins from algae blooms in shellfish, the primary focus is on the popular clamming beaches in southcentral Alaska. This is due primarily to the great expense of regular testing. The Board recommends the Council contact the Alaska Section of Epidemiology with ADEC to see if they can expand the monitoring area or sample harvested animals prior to human consumption following an algal outbreak or marine mammal die-off. Currently, the Southeast Tribal Ocean Research (SEATOR) group, operated by the Sitka Tribe, is available to test shellfish for dangerous biotoxins to improve Tribal and rural access to traditional foods. In the meantime caution should be taken when consuming clams or intestines from Pacific Walrus if unusual mortality events are detected.

The Board also recommends continued outreach to communities on the potential dangers of Paralytic Shellfish Poisoning (PSP) from harmful algal blooms. The Council could request a presentation on the subject and conduct special outreach to the public to encourage them to participate in the report and discussion. Communities need to be aware of the issue and who to contact if there is a suspected case of PSP poisoning. The newly formed (2017) Alaska Harmful Algal Bloom Network (AHAB) may also be a good resource as their goals are to provide a statewide approach to PSP biotoxin awareness, research, monitoring, and response in all of Alaska communities.[1]

[1] Literature cited: Lefebvre, K., L. Quakenbush, E. Frame, K.B. Huntington, G. Sheffield, R. Stimmelmayr, A. Bryan, P. Kendrick, H. Ziel, T. Goldstein, J.A. Snyder, T. Gelatt, F. Gulland, B. Dickerson, and V. Gill. 2016. Prevalence of algal toxins in Alaska marine mammals foraging in a changing arctic and subarctic environment. Harmful Algae 55:13-24.
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Sheffield, G. 2017. Bering Strait: Walruses and Saxitoxin – Late Summer/Fall 2017. Fact Sheet - Sea Grant Alaska, Nome, AK. 2 pp.

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In closing, I want to thank you and your Council for their continued involvement and diligence in matters regarding the Federal Subsistence Management Program. I speak for the entire Board in expressing our appreciation for your efforts and our confidence that the subsistence users of the Seward Peninsula Region are well represented through your work.

Sincerely,

Anthony Christianson
Chair

cc: Federal Subsistence Board
Seward Peninsula Subsistence Regional Advisory Council
Thomas Doolittle, Acting Assistant Regional Director, Office of Subsistence Management
Jennifer Hardin PhD., Subsistence Policy Coordinator, Office of Subsistence Management
Carl Johnson, Supervisory Program Analyst, Office of Subsistence Management
Karen Deatherage, Subsistence Council Coordinator, Office of Subsistence Management
Jill Klein, Special Assistant to the Commissioner, Alaska Department of Fish and Game
Interagency Staff Committee
Administrative Record

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

Federal Subsistence Board Informational Flyer

Forest Service

Contact: Policy Coordinator
(907) 786-3888 or (800) 478-1456
subsistence@fws.gov

How to submit a Special Action Request to the Federal Subsistence Board

The regulatory cycle for changes to fish/shellfish and wildlife regulations take place every two years. A call for proposals to change fishing regulations is issued in January of even numbered years and odd numbered years for wildlife. A Special Action Request is an out-of-cycle change in a season, harvest limit, or method of harvest. Special Actions are taken when unusual situations arise, such as a significant change in resource abundance that could not reasonably have been anticipated. The Federal Subsistence Board may take a Special Action to restrict, close, open, or reopen the taking of fish and wildlife on Federal public lands and waters. Such actions are taken to ensure the continued viability of a particular fish or wildlife population, to ensure continued subsistence use, or for reasons of public safety. These guidelines and requirements can be found in 36 CFR 242.19 and 50 CFR 100.19.

To submit a Special Action request, please provide the following information:

- Name
- Address
- Telephone number
- Fax number (if applicable)
- E-mail address
- Organization (if applicable)
- Describe the action you are requesting; reference the current regulations you wish to change
- List if there have been unusual or significant changes in resource abundance or unusual conditions affecting harvest opportunities that could not reasonably have been anticipated and that potentially could have significant adverse effects on the health of fish and wildlife populations or subsistence users
- State if requested action is to ensure the continued viability of a fish or wildlife population, to continue subsistence uses of fish or wildlife, or for public safety reasons
- State the extenuating circumstances that necessitate a regulatory change before the next regulatory review

How a Special Action request is processed:

1. A Special Action that is 60 days or less in duration is an emergency special action. A special action lasting 61 days or more is a temporary special action.

1011 East Tudor Road MS-121 • Anchorage, Alaska 99503-6119 • subsistence@fws.gov • (800) 478-1456 /(907) 786-3880
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2. Special Actions are assigned to an analyst who works with the requestor and field staff to develop a recommendation to the Federal Subsistence Board.
3. The analysis and recommendation is presented to the Interagency Staff Committee (ISC), the affected Regional Advisory Council (Council) chair(s), and the Alaska Department of Fish and Game (ADF&G).
4. If the request is a temporary special action, a public meeting is held in the affected area(s) to allow for public comment.
5. If the timing of a regularly scheduled Council meeting permits without incurring undue delay, the Board **may** seek Council recommendations on proposed Emergency Special Actions.
6. If timing of a regularly scheduled Council meeting permits without incurring undue delay, the Board **will** seek Council recommendations on proposed Temporary Special Actions.
7. Prior to taking any action the Board (or ISC) will consult with ADF&G and the chairs of the affected Councils.
8. If there is unanimous consent of the ISC, the Assistant Regional Director for the Office of Subsistence Management may approve the request.
9. If there is not unanimous consent of the ISC the analysis goes to the Board. The decision to adopt, adopt with modification or reject is then made by the Board.
10. Once a decision is made, a response letter, and a copy of the complete analysis and recommendations, is sent to the requesting proponent with a copy sent to the affected Council chair(s), State Federal Liaison Team Lead and Federal and State law enforcement.
11. If needed, the OSM subsistence outreach coordinator or the Federal agency requesting the Special Action will prepare a news release.

Submit your request by:

Mail:

Office of Subsistence Management
Attn: Subsistence Policy Coordinator
1011 East Tudor Road, Mail Stop 121
Anchorage, Alaska 99503

Fax: (907) 786-3898

E-mail: subsistence@fws.gov

The Federal Subsistence Management Program website link to information on submitted special actions is found here: https://www.doi.gov/subsistence/special_actions

Missing out on the latest Federal subsistence issues? If you'd like to receive emails and notifications on the Federal Subsistence Management Program you may subscribe for regular updates by emailing fws-fsb-subsistence-request@lists.fws.gov. Additional information on the Federal Subsistence Management Program may be found on the web at www.doi.gov/subsistence/index.cfm or by visiting www.facebook.com/subsistencealaska.

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Office of Subsistence Management

Fall 2018 Report to the
Federal Subsistence Regional Advisory Councils

Staffing Update

Departures

Gene Peltola, Jr. left his position as the Assistant Regional Director (ARD) to become the new Regional Director for the Bureau of Indian Affairs in Alaska. In that role, he will also serve as a member of the Federal Subsistence Board. No official action has been taken as of yet to commence recruitment for a replacement. In the meantime, Tom Doolittle has assumed the role of the Acting ARD.

New Arrivals

Greg Risdahl has started as the new Fisheries Division supervisor at the Office of Subsistence Management (OSM). He received his B.S. in wildlife biology with a minor in anthropology from the University of Montana, and a M.S. from Montana State University in Fish and Wildlife Management. Greg previously worked for OSM as a wildlife biologist. He has served as the Deputy Refuge Manager at Tetlin National Wildlife Refuge and most recently as the Izembek National Wildlife Refuge Manager. Over his career, he has worked in both wildlife and fisheries management.

Vacancies

The following is a summary of current vacant positions and the status in hiring personnel to fill these positions:

Anthropology Division Supervisor
Paperwork has been submitted to the Alaska Regional Director, U.S. Fish and Wildlife Service, for approval to recruit to fill this position.

Staff Anthropologist
The paperwork to hire the position has been approved and is with Human Resources for publication.

Fisheries Biologist
The position posted on USA Jobs and Tom Doolittle has received a list of qualified applicants to consider for hiring.

Administrative Assistant
The Office of Subsistence Management has not been authorized to fill this vacancy.

2018-2020 Federal Wildlife Regulations

The wildlife regulatory year began on July 1, 2018, but the changes to the regulations based on the Federal Subsistence Board's action in April have not yet been published in the Federal Register. Those changes are therefore not in effect until that publication.

This has two specific consequences for the Federal Subsistence Management Program. First, the modifications to regulations made at the April Board meeting did not take effect on July 1, and will not take effect until the Federal Register notice is published. For example, the new definition of "bear bait" adopted in WP18-51 does not yet exist, or the C&T for deer in Units 1-5 has not yet been expanded to all Southeast residents, as authorized in the adoption of WP18-02.

Second, any wildlife actions that resulted from Board approval of temporary wildlife special actions last regulatory year expired on June 30.

However, the Federal Subsistence Board has issued several temporary delegation of authority letters to authorize land managers in particular areas to enact certain wildlife regulatory actions adopted by the Board in April 2018 but not yet published in the Federal Register. These temporary delegation of authority letters were issued to the following in-season managers, and will expire when the new wildlife regulations are published:

- Craig District Ranger, Tongass National Forest –Unit 2 deer (to implement WP18-01, adopted as WP18-01A)
- Thorne Bay District Ranger, Tongass National Forest – Unit 2 deer (to implement WP18-01, adopted as WP18-01A)
- Yakutat District Ranger, Tongass National Forest – Unit 5A (except Nunatak Bench, east of the Dangerous River) moose (to implement WP18-10 as modified)
- Superintendent, Western Arctic Park Lands – Unit 23 caribou in the Noatak National Preserve (to implement partial closure adopted in WP 18-46 as modified)
- Anchorage Field Office Manager, Bureau of Land Management – Unit 23 caribou in the Squirrel River drainage (to implement partial closure adopted in WP 18-46 as modified)

Federal Subsistence Board

1011 East Tudor Road, MS 121
Anchorage, Alaska 99503 - 6199

FISH and WILDLIFE SERVICE
BUREAU of LAND MANAGEMENT
NATIONAL PARK SERVICE
BUREAU of INDIAN AFFAIRS

FOREST SERVICE

JUL 25 2018

OSM 180042.CJ

Mr. Louis Green, Jr., Chair
Seward Peninsula Subsistence Regional Advisory Council
c/o Office of Subsistence Management
1011 E. Tudor Road, MS 121
Anchorage, Alaska 99503-6199

Dear Mr. Green:

The Federal Subsistence Board met on April 10-13, 2018 regarding proposed changes to subsistence wildlife regulations and customary and traditional use determinations. This letter and the enclosed report identify action taken on proposals affecting residents of the Seward Peninsula Region.

Section 805(c) of the Alaska National Interest Lands Conservation Act (ANILCA) provides that the Board will accept the recommendations of a Regional Advisory Council regarding take unless (1) the recommendation is not supported by substantial evidence, (2) the recommendation violates recognized principles of fish and wildlife management, or (3) adopting the recommendation would be detrimental to the satisfaction of subsistence needs. When a Council's recommendation is not adopted, the Board is required by Secretarial regulations to set forth the factual basis and reasons for the decision. This letter and enclosure satisfy that requirement.

In total, the Board accepted the recommendations of the Subsistence Regional Advisory Councils, in whole or with modifications, for **46** out of the **52** proposals on the agenda. Details of these actions and the Board's deliberations are contained in the meeting transcripts. Copies of the transcripts may be obtained by calling our toll free number, 1-800-478-1456, and are available online at the Federal Subsistence Management Program website, http://www.doi.gov/subsistence.

The Board adopted the Seward Peninsula Subsistence Regional Advisory Council's (Council's) recommendation on the following proposals: **WP18-31,** shorten caribou season by 15 days in Unit 18 (*rejected*), **WP18-32** align caribou season dates on Federal public lands in Units 21D, 22, 23, 24, 25A-West, 26A and 26B (*rejected)*, **WP18-37,** rescind Federal lands closure for moose in Unit 22A (*adopted with OSM modification)*, **WP18-39,** increase brown bear harvest limit from 1 to 2 bears in Unit 22B (*adopted)*, **WP18-40**, extend brown bear hunting season from May 10-May 25 to April 1 – May 31 in Unit 22C (*adopted*), **WP18-45,** reduce caribou harvest limit from 5 to 3 per day

Mr. Green 2

in Unit 23 (*rejected)*, **WP18-46,** close Federal public lands in Unit 23 to caribou hunting except by Federally qualified subsistence users (*adopted with Council's modification*), **WP18-47** (close Federal public lands for 2 years in Unit 23 to caribou hunting except by Federally qualified users (*take no action),* **WP18-48/49** align Federal reporting requirements with State registration permit requirements for caribou in Units 22, 23, and 26A (*adopted WP18-48; take no action on WP18-49*, **WP18-51** (align bear baiting restrictions with State regulations, specifically the use of biodegradable materials (*adopted with modification*).

The Board's action differed from the Council's recommendation (*rejected)* on **WP18-38** to rescind the Federal public lands closure for moose harvest in the northern portion of Unit 22A (*adopted with modification*). The Board's justification is discussed in the enclosed report.

The Federal Subsistence Board appreciates the Seward Peninsula Subsistence Regional Advisory Council's active involvement in and diligence with the regulatory process. The 10 Regional Advisory Councils continue to be the foundation of the Federal Subsistence Management Program, and the stewardship shown by the Regional Advisory Council chairs and their representatives at the Board meeting was noteworthy.

If you have any questions regarding the summary of the Board's actions, please contact Karen Deatherage, Subsistence Council Coordinator, at 907-786-3564.

Sincerely,

Anthony Christianson
Chair

Enclosure

cc: Federal Subsistence Board
Seward Peninsula Subsistence Regional Advisory Council members
Eugene R. Peltola, Jr., Assistant Regional Director, Office of Subsistence Management
Thomas Doolittle, Deputy Assistant Regional Director, Office of Subsistence Management
Jennifer Hardin, PhD, Subsistence Policy Coordinator, Office of Subsistence Management
Carl Johnson, Supervisory Program Analyst, Office of Subsistence Management
Karen Deatherage, Subsistence Council Coordinator, Office of Subsistence Management
Interagency Staff Committee
Administrative Record

FEDERAL SUBSISTENCE BOARD 805(c) REPORT

SEWARD PENINSULA REGIONAL PROPOSALS

Proposal WP18-38

DESCRIPTION: Proposal WP18-38, submitted by Lance Kronberger, requests to rescind the Federal land closure for moose harvest in the portion of Unit 22A north of and including the Tagoomenik and Shaktoolik river drainage September 1-20 to coincide with the State's nonresident moose season.

COUNCIL RECOMMENDATIONS:
Seward Peninsula Subsistence Regional Advisory Council – **Oppose**

BOARD ACTION: **Adopted with modification**

JUSTIFICATION: The current regulation restricts moose hunting in Central Unit 22A to Federally qualified residents of Unit 22A only. The moose population estimate for Central Unit 22A is believed to be 840 and increasing. This is near the upper bound of the State's management objective of 600-800 moose in this area. The population is still at a relatively low density, however, at .35 moose per square mile. Further, the State recently liberalized non-resident hunting in this area, which may put additional pressure on subsistence users in the Unit. As a result, the Board initially opposed this proposal, consistent with the Council's recommendations.

A motion was then made to reconsider WP18-38, which was approved by the Board. A modification to replace "residents of Unit 22A only" with Federally qualified users in the whole of Unit 22 was proposed. The justification was that the Unit 22A moose population is growing but remains a low density population. Opening the Federal public lands in a manner that would primarily benefit non-resident hunters and guides prior to opening these lands to Federally-qualified subsistence users may be premature. This modification would expand the pool of eligible users by opening to Federally-qualified subsistence users and represent an incremental liberalization of this hunt. Thus, acting contrary to the Council's recommendation is justified due to the additional subsistence opportunity provided. This may be prudent, particularly given the recent extension of the State's non-resident season, and will provide time to assess this extension prior to opening up Federal lands to non-local users.

Winter 2019 Regional Advisory Council Meeting Calendar

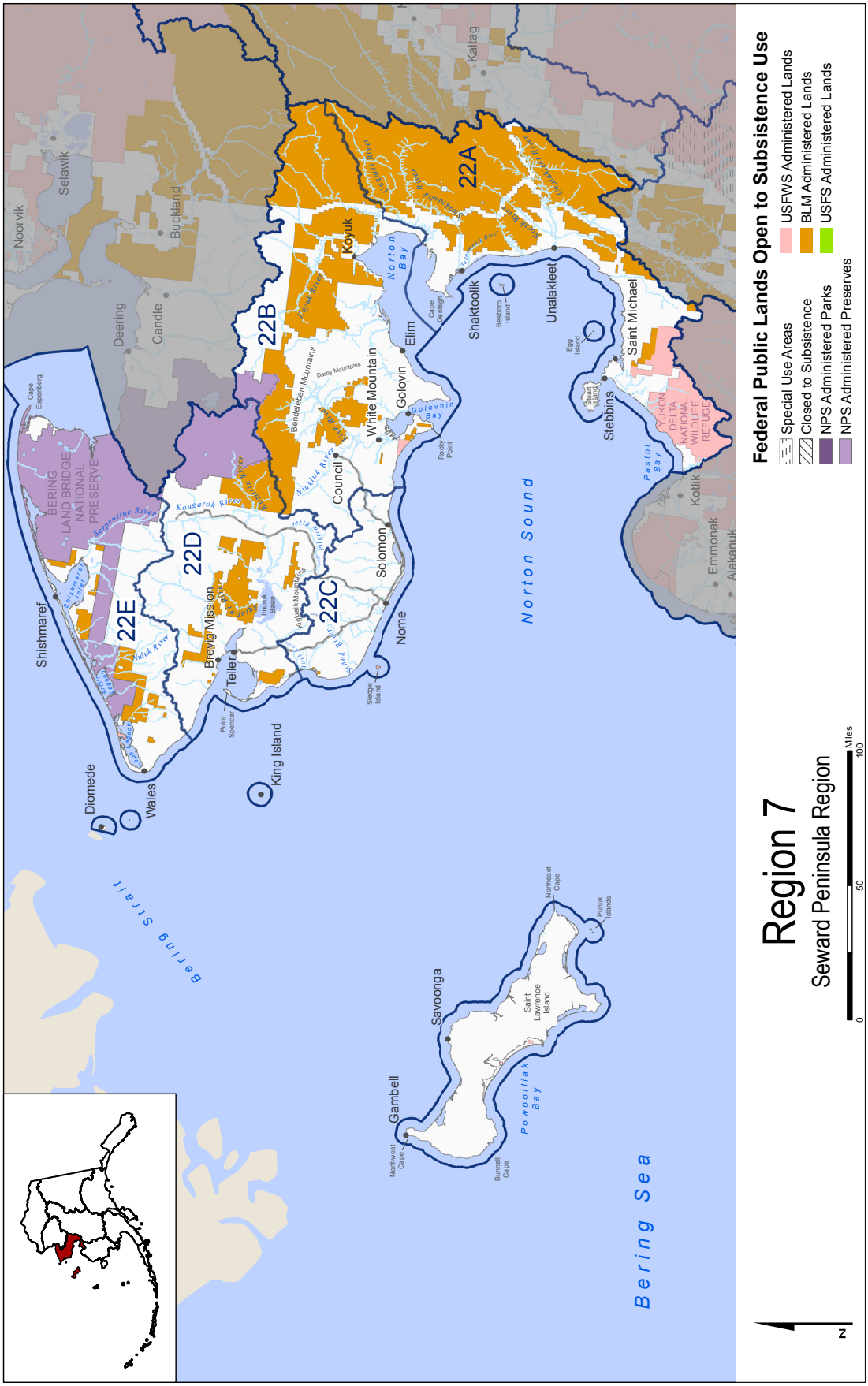
Due to travel budget limitations placed by Department of the Interior on the U.S. Fish and Wildlife Service and the Office of Subsistence Management, the dates and locations of these meetings will be subject to change.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Feb. 3	*Feb. 4* *Window Opens*	*Feb. 5* **BB — Naknek**	*Feb. 6*	*Feb. 7*	*Feb. 8*	*Feb. 9*
Feb. 10	*Feb. 11*	*Feb. 12* **SE — Wrangell**	*Feb. 13* **NS — Utqiaġvik**	*Feb. 14*	*Feb. 15*	*Feb. 16*
Feb. 17	*Feb. 18* ***PRESIDENT'S DAY*** ***HOLIDAY***	*Feb. 19*	*Feb. 20* **WI — Fairbanks**	*Feb. 21* **KA — Kodiak**	*Feb. 22*	*Feb. 23*
Feb. 24	*Feb. 25*	*Feb. 26* **SC — Anchorage**	*Feb. 27* **NWA — Kotzebue**	*Feb. 28*	*Mar. 1*	*Mar. 2*
Mar. 3	*Mar. 4*	*Mar. 5* **EI — Fairbanks** **SP — Nome**	*Mar. 6*	*Mar. 7*	*Mar. 8*	*Mar. 9*
Mar. 10	*Mar. 11*	*Mar. 12* **YKD — Bethel**	*Mar. 13*	*Mar. 14*	*Mar. 15* *Window Closes*	*Mar. 16*

Fall 2019 Regional Advisory Council Meeting Calendar

Due to travel budget limitations placed by Department of the Interior on the U.S. Fish and Wildlife Service and the Office of Subsistence Management, the dates and locations of these meetings will be subject to change.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Aug. 18	*Aug. 19*	*Aug. 20*	*Aug. 21*	*Aug. 22*	*Aug. 23*	*Aug. 24*
Aug. 25	*Aug. 26*	*Aug. 27*	*Aug. 28*	*Aug. 29*	*Aug. 30*	*Aug. 31*
Sept. 1	*Sept. 2* **LABOR DAY HOLIDAY**	*Sept. 3*	*Sept. 4*	*Sept. 5*	*Sept. 6*	*Sept. 7*
Sept. 8	*Sept. 9*	*Sept. 10*	*Sept. 11*	*Sept. 12*	*Sept. 13*	*Sept. 14*
Sept. 15	*Sept. 16*	*Sept. 17*	*Sept. 18*	*Sept. 19*	*Sept. 20*	*Sept. 21*
Sept. 22	*Sept. 23*	*Sept. 24*	*Sept. 25*	*Sept. 26*	*Sept. 27*	*Sept. 28*
Sept. 29	*Sept. 30*	*Oct. 1*	*Oct. 2*	*Oct. 3*	*Oct. 4*	*Oct. 5*
Oct. 6	*Oct. 7*	*Oct. 8*	*Oct. 9*	*Oct. 10*	*Oct. 11*	*Oct. 12*
Oct. 13	*Oct. 14* **COLUMBUS DAY HOLIDAY**	*Oct. 15*	*Oct. 16*	*Oct. 17* **AFN — Fairbanks**	*Oct. 18*	*Oct. 19*
Oct. 20	*Oct. 21*	*Oct. 22*	*Oct. 23* **NS — Utqiagvik**	*Oct. 24*	*Oct. 25*	*Oct. 26*
Oct. 27	*Oct. 28*	*Oct. 29*	*Oct. 30*	*Oct. 31*	*Nov. 1*	*Nov. 2*
Nov. 3	*Nov. 4*	*Nov. 5*	*Nov. 6*	*Nov. 7*	*Nov. 8*	*Nov. 9*


Region 7
Seward Peninsula Region
Federal Public Lands Open to Subsistence Use
Special Use Areas
Closed to Subsistence
NPS Administered Parks
NPS Administered Preserves
USFWS Administered Lands
BLM Administered Lands
USFS Administered Lands
Miles
0
50
100
N
22A
22B
22C
22D
22E
Bering Sea
Norton Sound
Bering Strait
Kotzebue
Noorvik
Selawik
Buckland
Deering
Candle
Kiana
Kaltag
Koyuk
Elim
Golovin
White Mountain
Shaktoolik
Unalakleet
Saint Michael
Stebbins
Emmonak
Alakanuk
Kotlik
Nome
Solomon
Council
Teller
Brevig Mission
Shishmaref
Wales
Diomede
King Island
Gambell
Savoonga
Saint Lawrence Island
BERING LAND BRIDGE NATIONAL PRESERVE
YUKON DELTA NATIONAL WILDLIFE REFUGE

Department of the Interior
U. S. Fish and Wildlife Service

Seward Peninsula Subsistence Regional Advisory Council

Charter

1. **Committee's Official Designation.** The Council's official designation is the Seward Peninsula Subsistence Regional Advisory Council (Council).

2. **Authority.** The Council is renewed by virtue of the authority set out in the Alaska National Interest Lands Conservation Act (ANILCA) (16 U.S.C. 3115 (1988)), and under the authority of the Secretary of the Interior, in furtherance of 16 U.S.C. 410hh-2. The Council is regulated by the Federal Advisory Committee Act (FACA), as amended, 5 U.S.C. Appendix 2.

3. **Objectives and Scope of Activities.** The objective of the Council is to provide a forum for the residents of the Region with personal knowledge of local conditions and resource requirements to have a meaningful role in the subsistence management of fish and wildlife on Federal lands and waters in the Region.

4. **Description of Duties.** Council duties and responsibilities, where applicable, are as follows:

    a. Recommend the initiation of, review, and evaluate proposals for regulations, policies, management plans, and other matters relating to subsistence uses of fish and wildlife on public lands within the Region.

    b. Provide a forum for the expression of opinions and recommendations by persons interested in any matter related to the subsistence uses of fish and wildlife on public lands within the Region.

    c. Encourage local and regional participation in the decision-making process affecting the taking of fish and wildlife on the public lands within the Region for subsistence uses.

    d. Prepare an annual report to the Secretary containing the following:

        (1) An identification of current and anticipated subsistence uses of fish and wildlife populations within the Region.

        (2) An evaluation of current and anticipated subsistence needs for fish and wildlife populations within the Region.

        (3) A recommended strategy for the management of fish and wildlife populations within the Region to accommodate such subsistence uses and needs.

(4) Recommendations concerning policies, standards, guidelines, and regulations to implement the strategy.

e. Make recommendations on determinations of customary and traditional use of subsistence resources.

f. Make recommendations on determinations of rural status.

g. Provide recommendations on the establishment and membership of Federal local advisory committees.

h. Provide recommendations for implementation of Secretary's Order 3347: Conservation Stewardship and Outdoor Recreation, and Secretary's Order 3356: Hunting, Fishing, Recreational Shooting, and Wildlife Conservation Opportunities and Coordination with States, Tribes, and Territories. Recommendations shall include, but are not limited to:

(1) Assessing and quantifying implementation of the Secretary's Orders, and recommendations to enhance and expand their implementation as identified;

(2) Policies and programs that:

(a) increase outdoor recreation opportunities for all Americans, with a focus on engaging youth, veterans, minorities, and other communities that traditionally have low participation in outdoor recreation;

(b) expand access for hunting and fishing on Bureau of Land Management, U.S. Fish and Wildlife Service, and National Park Service lands in a manner that respects the rights and privacy of the owners of non-public lands;

(c) increase energy, transmission, infrastructure, or other relevant projects while avoiding or minimizing potential negative impacts on wildlife; and

(d) create greater collaboration with states, tribes, and/or territories.

i. Provide recommendations for implementation of the regulatory reform initiatives and policies specified in section 2 of Executive Order 13777: Reducing Regulation and Controlling Regulatory Costs; Executive Order 12866: Regulatory Planning and Review, as amended; and section 6 of Executive Order 13563: Improving Regulation and Regulatory Review. Recommendations shall include, but are not limited to:

(1) eliminate jobs, or inhibit job creation;

(2) are outdated, unnecessary, or ineffective;

(3) impose costs that exceed benefits;

(4) create a serious inconsistency or otherwise interfere with regulatory reform initiative and policies;

(5) rely, in part or in whole, on data or methods that are not publicly available or insufficiently transparent to meet the standard for reproducibility; or

(6) derive from or implement Executive Orders or other Presidential and Secretarial directives that have been subsequently rescinded or substantially modified.

At the conclusion of each meeting or shortly thereafter, provide a detailed recommendation meeting report, including meeting minutes, to the Designated Federal Officer (DFO).

5. **Agency or Official to Whom the Council Reports.** The Council reports to the Federal Subsistence Board Chair, who is appointed by the Secretary of the Interior with the concurrence of the Secretary of Agriculture.

6. **Support.** The U.S. Fish and Wildlife Service will provide administrative support for the activities of the Council through the Office of Subsistence Management.

7. **Estimated Annual Operating Costs and Staff Years**. The annual operating costs associated with supporting the Council's functions are estimated to be $155,000, including all direct and indirect expenses and 1.0 staff years.

8. **Designated Federal Officer**. The DFO is the Subsistence Council Coordinator for the Region or such other Federal employee as may be designated by the Assistant Regional Director – Subsistence, Region 7, U.S. Fish and Wildlife Service. The DFO is a full-time Federal employee appointed in accordance with Agency procedures. The DFO will:

(a) Approve or call all of the advisory committee's and subcommittees' meetings;

(b) Prepare and approve all meeting agendas;

(c) Attend all committee and subcommittee meetings;

(d) Adjourn any meeting when the DFO determines adjournment to be in the public interest; and

(e) Chair meetings when directed to do so by the official to whom the advisory committee reports.

9. **Estimated Number and Frequency of Meetings.** The Council will meet 1-2 times per year, and at such times as designated by the Federal Subsistence Board Chair or the DFO.

10. **Duration.** Continuing.

11. **Termination.** The Council will be inactive 2 years from the date the Charter is filed, unless, prior to that date, it is renewed in accordance with the provisions of section 14 of the FACA. The Council will not meet or take any action without a valid current charter.

12. **Membership and Designation.** The Council's membership is composed of representative members as follows:

Ten members who are knowledgeable and experienced in matters relating to subsistence uses of fish and wildlife and who are residents of the Region represented by the Council. To ensure that each Council represents a diversity of interests, the Federal Subsistence Board in their nomination recommendations to the Secretary will strive to ensure that seven of the members (70 percent) represent subsistence interests within the Region and three of the members (30 percent) represent commercial and sport interests within the Region. The portion of membership representing commercial and sport interests must include, where possible, at least one representative from the sport community and one representative from the commercial community.

The Secretary of the Interior will appoint members based on the recommendations from the Federal Subsistence Board and with the concurrence of the Secretary of Agriculture.

Members will be appointed for 3-year terms. A vacancy on the Council will be filled in the same manner in which the original appointment was made. Members serve at the discretion of the Secretary.

Council members will elect a Chair, Vice-Chair, and Secretary for a 1-year term.

Members of the Council will serve without compensation. However, while away from their homes or regular places of business, Council and subcommittee members engaged in Council, or subcommittee business, approved by the DFO, may be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in Government service under section 5703 of title 5 of the United States Code.

13. **Ethics Responsibilities of Members.** No Council or subcommittee member will participate in any Council or subcommittee deliberations or votes relating to a specific party matter before the Department or its bureaus and offices including a lease, license, permit, contract, grant, claim, agreement, or litigation in which the member or the entity the member represents has a direct financial interest.

14. **Subcommittees.** Subject to the DFOs approval, subcommittees may be formed for the purpose of compiling information and conducting research. However, such subcommittees must act only under the direction of the DFO and must report their recommendations to the full Council for consideration. Subcommittees must not provide advice or work products directly to the Agency. Subcommittees will meet as necessary to accomplish their assignments, subject to the approval of the DFO and the availability of resources.

15. **Recordkeeping.** Records of the Council, and formally and informally established subcommittees or other subgroups of the Council, shall be handled in accordance with General Records Schedule 6.2, and other approved Agency records disposition schedule. These records shall be available for public inspection and copying, subject to the Freedom of Information Act, 5 U.S.C. 552.

Secretary of the Interior

DEC 01 2017

Date Signed

DEC 04 2017

Date Filed

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