

Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

ADF&G Bethel toll free: 1 (855) 933-2433

Meeting Agenda

Date: May 3-4, 2021

Time: 9:00am–5:00pm*

Place: Teleconference

*The Group may choose to take breaks when needed.

Time Called to Order:

Chair:

Time Adjourned:

ROLL CALL TO ESTABLISH QUORUM:

Upriver Elder:

Downriver Elder:

Commercial Fisher:

Lower River Subsistence:

Middle River Subsistence:

Upper River Subsistence:

Headwaters Subsistence:

QUORUM MET? Yes / No

Processor:

Member at Large:

Sport Fisher:

Western Interior RAC:

Y-K Delta RAC:

KRITFC:

ADF&G:

INTRODUCTIONS:

INVOCATION:

APPROVAL OF AGENDA: *the agenda may be amended at this time.*

PEOPLE TO BE HEARD:

A. 2020 Season Recap / Presentations

- Subsistence Section Project Overview (Dave Runfola, ADF&G)
- Southern Bering Sea Survey (Sean Larson, ADF&G)
- Assessment projects review (Weirs, Aerial, ASL) (Sean Larson, ADF&G)
- Chinook salmon total run and drainage wide escapement estimate (Sean Larson, ADF&G)
- 2021 Chinook Salmon Forecast (Sean Larson, ADF&G)
- Overview of the Kuskokwim River Management Strategy Evaluation process

B. 2021 Fishery Management:

- 2021 Assessment projects (Sean Larson, ADF&G)
 - ADF&G
 - NVN
 - USFWS
 - BSFA/ KRITFC
 - ONC (Katherine Russell, Danielle Lowrey, ONC)
- ADF&G Management Presentation & Discussion On Specific Management Actions For 2021 (Nick Smith, ADF&G)
 - Date to begin early season closure
 - Set gillnet fishing periods during early season closure
 - Tributary Management
 - Salmon Tributaries (Eek, Kwethluk, Kisaralik, Kasigluk, Tuluksak, and Aniak Rivers)
 - Non-Salmon Tributaries (i.e. Gweek, Tunt, Johnson Rivers)
 - Use of live release gear (fish wheels, dip nets, beach seines, and hook and line)
 - Post-Front End Closure management
 - Chum/sockeye management
 - 2023 Alaska Board of Fisheries (Nick Smith, ADF&G)
 - Sport Fishing (John Chythlook, ADF&G)
- Yukon Delta National Wildlife Refuge (Boyd Blihovde, USFWS)

C. WORKING GROUP BUSINESS:

- **Bylaws change:** Create a second Member at Large seat to replace the Processor seat, with the stipulation that a processor could hold this seat in the future.

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- Vacant Seat Election(s)
- Election of Co-Chairs
- Working Group In-Season Meeting Schedule
- Nominate WG representative to serve at KRITFC inseason meetings
- ONC Letter of Support inseason harvest monitoring and King salmon age-sex-length sampling

D. COMMENTS FROM WORKING GROUP MEMBERS:

NEXT MEETING DATE: _____ Time: _____ Place: _____

Informational Packet

Information Packets *ARE*:

- Intended to help inform Working Group discussions.
- To be viewed and used in context with Working Group meetings only.

Packets *ARE NOT*:

- To be viewed as standalone documents.
- A final say on fisheries management decisions.

Please use this information responsibly:

Packet information is an incomplete snapshot of an ongoing discussion and changing conditions. Packet information should not be reproduced for any purpose other than to describe Working Group meeting discussions.

Misuse of Packet information can contribute to misunderstandings that can **cause harm to salmon users** and potentially **damage salmon resources**.

Ask Questions: ADF&G staff will be happy to answer biology and management questions. Please call **1-855-933-2433** to reach ADF&G Kuskokwim Area staff.

Attend Meetings: Each Working Group meeting is announced at least 48 hours prior to time and date of meeting. In addition, each meeting is recorded. Recordings can be found here:
http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyarea_kuskokwim.kswg

Viewing the information packet while listening to meetings/recordings will provide a better understanding of the information presented in this packet.

Thank you,
Nick Smith and Ben Gray
Working Group Coordinators

ADF&G Subsistence Division Review of Kuskokwim Area Projects

Postseason Salmon Harvest Surveys, 2020

Chris McDevitt, P.I.

AKSSF Subsistence Chinook Salmon Harvest in Lower Kuskokwim River Tributaries, 2021

Dave Runfola, P.I.

2021 Subsistence Division Season Outlook

Kuskokwim River Salmon Management Working Group
Pre-Season Meeting, May 3 – 4, 2021



FRMP Project 18-351: Kuskokwim Management Area Postseason Salmon Harvest Survey Project

- **Funding Agency:** USFWS Office of Subsistence Management
- **Background:** Data collection began in 1960, Division of Commercial Fisheries (DCF) surveyed Kuskokwim area fish camps in late July
 - ONC has partnered with ADF&G since 1999
- **Purpose:** To estimate annual salmon harvest in Kuskokwim area communities
 - 28 communities- Bay to headwaters

Methods



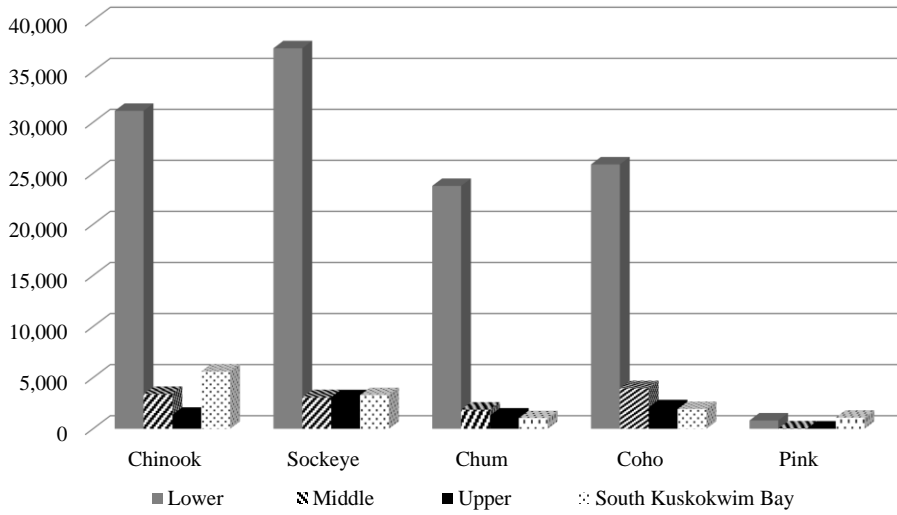
- **Contingency Planning:**
 - Began in spring 2020
 - Align w/ Community health & safety guidelines
- **Methods:**
 - Typical year: Door to door
 - 2020: phone, online, mail-in
- **Sampling:**
 - Typical year: Communities w/ 40 households or less = census, Communities w/ 41 or greater households = random sample
 - 2020 season: All communities (outside of BET) were censused
 - BET was a simple random sample of 25% of households

Post Season Survey Results, 2020

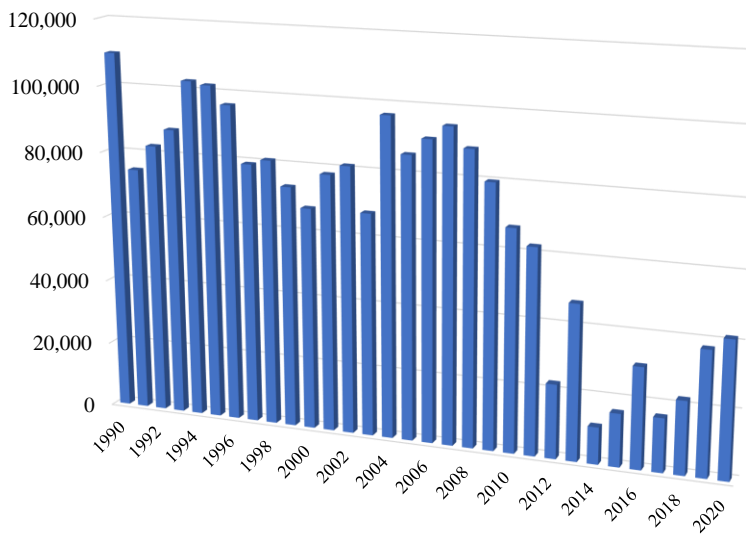
Kuskokwim Area subsistence salmon harvest estimates, Kuskokwim River Post Season Survey, 2020.

	Chinook	Sockeye	Chum	Coho	Pink
Lower	31,126	37,258	23,768	25,876	812
Middle	3,406	3,091	1,867	3,974	30
Upper	1,373	3,088	1,293	2,103	19
TOTAL Kuskokwim River	35,905	43,437	26,928	31,953	861
South Kuskokwim Bay	5,606	3,299	1,044	1,930	1,087
TOTAL Kuskokwim Area	41,511	46,736	27,972	33,883	1,948

Kuskokwim Area subsistence salmon harvest estimates
Kuskokwim River Post Season Survey, 2020



Kuskokwim Chinook salmon harvest
Kuskokwim River Post Season Survey, 1990 - 2020



AKSSF: Subsistence Chinook Salmon Harvest in Lower Kuskokwim River Tributaries, 2021

Purpose

- Estimate daily salmon harvest and number of fishers in 4 lower Kuskokwim River tributary mouths during mainstem closures
 - Gweek, Johnson, Kialik, Paillek
- Outreach in study communities to discuss project goals, and to document comments about subsistence salmon fishing in these locations
 - Napakiak, Tuntutuliak, Eek



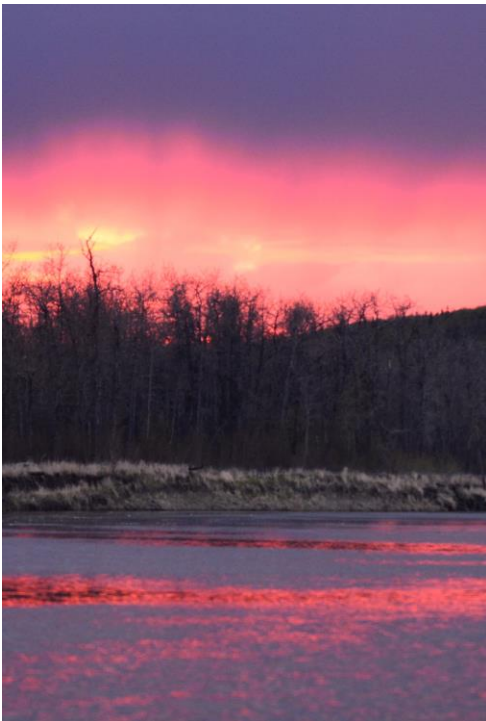
Project Methods

- Tribal consultations and community outreach in public meetings
- Hire local research assistants for outreach to fishers
- Meet with fishers in tributary mouths and ask about their harvests for the day
- Record public comments and compile survey results to share with tribes, stakeholders, and managers in season



Kuskokwim King Salmon Harvest Permit

- Beginning in 2018 fishing households can obtain a subsistence king salmon fishing permit for use above the mouth of the Aniak River
- Each household can be issued 1 permit, which any household member listed on the permit can use
- Limit of 10 king salmon per household when using the permit
- Effective after June 11, 2021 when announced by Emergency Order
- Fishers do not need a permit to subsistence fish during regularly scheduled openings
- Return the permit to ADF&G with harvest information by October 31, 2021



2021 Season Outlook

Post Season Survey:

- Review/revise contingency plan as needed
- Consult with TCs
- Plan accordingly

King Permit:

- Vendors
- Outreach

Draft harvest estimates, Kuskokwim River Post Season Survey, 2020.

Community ^{a,b}	n	N	Chinook		Sockeye		Chum		Coho		Pink		Total harvest
			Est.	CI(95%)+/-	Est.	CI(95%)+/-	Est.	CI(95%)+/-	Est.	CI(95%)+/-	Est.	CI(95%)+/-	
Tuntutuliak	64	116	2,322	428	1,839	503	1,261	234	423	137	67	42	7,214
Eek	53	103	1,999	444	1,422	457	475	108	553	156	38	24	5,652
Kasigluk	75	122	1,908	345	2,701	675	2,697	729	687	170	4	4	9,916
Nunapitchuk	81	131	1,750	295	2,609	430	2,384	509	614	208	10	8	8,809
Atmautluak	46	73	692	130	1,055	305	957	449	425	206	18	20	4,237
Napakiak	55	101	869	173	1,503	306	879	206	929	233	8	5	5,106
Napaskiak	63	109	1,036	179	1,708	303	1,246	274	865	193	79	63	5,883
Oscarville	12	16	360	194	497	93	502	138	63	28	7	5	1,882
Bethel ^c	531	1,993	13,582	2,350	16,855	2,622	7,892	1,394	16,613	2,886	364	134	64,558
Kwethluk	103	171	1,870	222	2,540	333	1,709	221	1,963	327	89	27	9,274
Akiachak	109	180	2,516	343	2,126	276	1,318	192	1,230	279	43	27	8,323
Akiak	57	93	1,245	150	1,595	254	1,452	249	843	195	42	16	6,025
Tuluksak	50	98	919	235	870	267	987	224	673	255	51	21	4,481
Lower Kuskokwim	1,299	3,306	31,126	2,533	37,258	2,917	23,768	1,811	25,876	2,971	812	163	129,072
Lower Kalskag	49	86	685	161	427	127	624	267	319	201	0	0	2,811
Upper Kalskag ^d	34	66	860	212	661	189	295	61	390	86	13	17	2,767
Aniak	86	157	1,544	292	1,723	422	658	151	3,139	2,530	17	22	10,476
Chuathbaluk	25	30	317	51	280	29	291	66	126	48	0	0	1,208
Middle Kuskokwim	194	339	3,406	392	3,091	474	1,867	314	3,974	2,519	30	27	16,067
Crooked Creek ^e	15	29	238	72	678	411	179	29	243	140	9	0	1,999
Red Devil	6	7	45	29	118	63	25	27	30	19	0	0	356
Sleetmute	19	30	176	61	816	193	25	11	307	58	0	0	1,647
Stony River ^f	0	14	<u>95</u>	<u>99</u>	<u>626</u>		<u>41</u>		<u>118</u>		—		<u>979</u>
Lime Village ^f	0	6	<u>6</u>	<u>6</u>	<u>549</u>		<u>128</u>		<u>32</u>		—		<u>721</u>
McGrath ^d	76	125	439	165	291	190	864	57	1,342	321	10	11	3,679
Takotna	15	25	7	10	0	0	0	0	0	0	0	0	17
Nikolai	28	33	367	71	10	0	31	0	31	5	0	0	515
Upper Kuskokwim	159	271	1,373	200	3,088	462	1,293	67	2,103	348	19	11	8,953
Kuskokwim River Total	3,304	7,832	35,905	2,570	43,437	2,990	26,928	1,839	31,953	3,901	861	166	150,384
Quinhagak	105	186	4,757	746	2,000	366	829	215	1,395	283	165	97	10,756
Goodnews Bay	49	82	766	212	941	304	146	102	155	62	19	25	2,707
Platinum	13	17	84	4	358	56	69	9	380	262	42	6	1,264
S. Kuskokwim Bay	167	285	5,606	771	3,299	474	1,044	236	1,930	375	226	99	13,961
Total	1,819	4,291	41,511	2,682	46,736	3,026	27,972	1,853	33,883	3,919	1,087	193	162,669

Source ADF&G and ONTC household harvest surveys, 2020.

Note: — indicates no estimate available.

- a. No household surveys or online forms were processed after 01/31/2021. As of 02/08/2021, no additional surveys have been received.
- b. Estimates should be considered 'minimum estimate.' An attempt was made to reach 100% of all households in the drainage. We were unable to replicate the sample design.
- c. Estimates in Bethel were derived from simplified 1-page door-to-door surveys, surveys completed independently by respondents, and surveys completed using the online tool.
- d. We were unable to reach at least half of the prescribed 50% sample of households in the medium harvester group.
- e. We were unable to achieve at least 50% of the prescribed sample size for the 'low' harvester group.
- f. Bayesian estimates. No households in Lime Village could be reached, and only 3 surveys were collected for Stony River.

2020 Assessment Review

Sean Larson
Alaska Dept. Fish and Game

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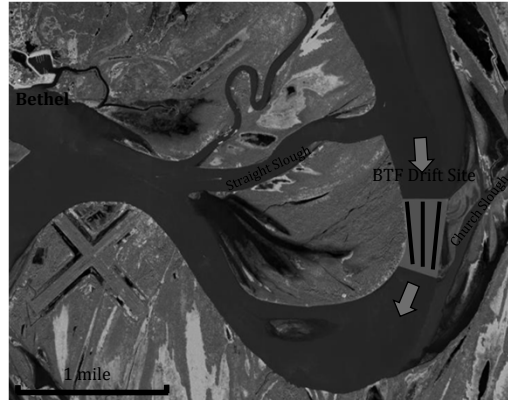
Bethel Test Fishery



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Bethel Test Fishery

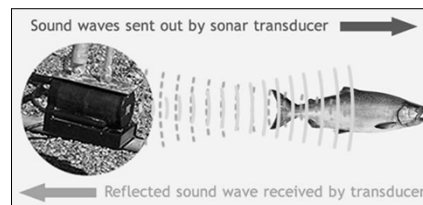
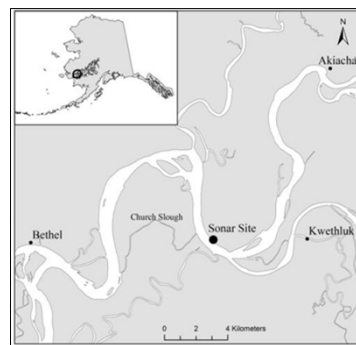
- Objectives:
 - Daily CPUE for salmon from June 1 through August 24
 - Relative abundance and timing of salmon
 - Collect biological data
- 8" and 5.375" early season
- 5.375" late season
- Comparisons across years problematic due to varying water levels, crew fishing styles, and gear alteration (2008)



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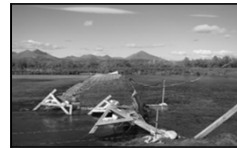
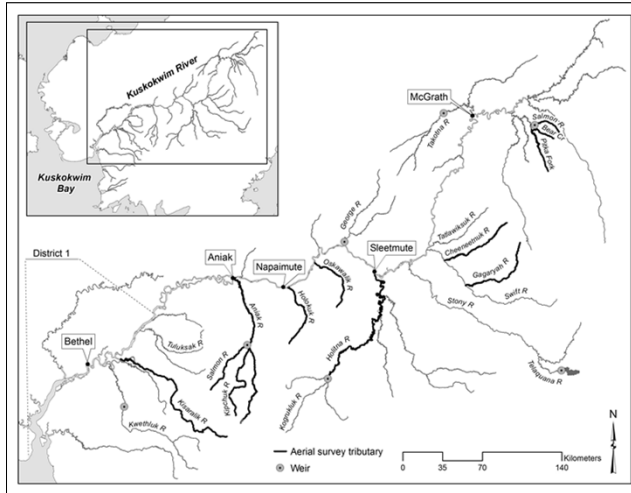
Kuskokwim River Sonar

- What it does:
 - Display all fish moving through the beam
 - Show distance and direction from transducer
 - Provides inseason estimates of abundance
 - Chum and coho are indices
- What it doesn't do:
 - Count fish for us
 - Distinguish between species



5

Escapement Monitoring: Weirs



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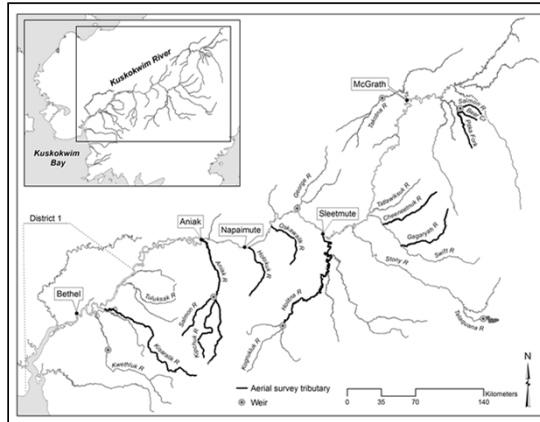
Escapement Monitoring: Aerial



7

Aerial Surveys

- Monitor Escapement
- Provide an index of abundance
- Low cost
- Can be challenging
 - Observer error
 - Weather
 - High water



8 Subsistence Harvest Monitoring and ASL Collection



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2020 Escapement



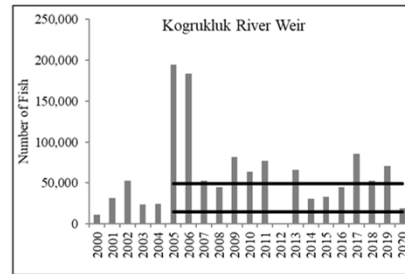
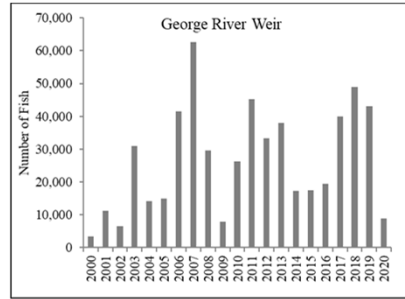
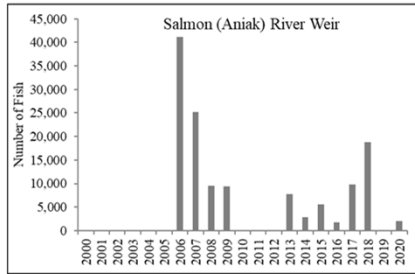
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Chum, Coho, and Sockeye Salmon Escapement Goal Performance

	Escapement				
	2016	2017	2018	2019	2020
CHUM SALMON					
Middle Fork Goodnews River	Met	Met	NS	Exceeded	NS
Kogrukluk River	Met	Exceeded	Exceeded	Exceeded	Met
COHO SALMON					
Middle Fork Goodnews River	NS	NS	NS	NS	NS
Kogrukluk River	NS	NS	Under	Met	NA
Kwethluk River	NS	Met	NS	Exceeded	NS
SOCKEYE SALMON					
North (Main) Fork Goodnews R.	Exceeded	NS	NS	Exceeded	Exceeded
Middle Fork Goodnews River	Exceeded	Exceeded	NS	Exceeded	NS
Kanektok River	Exceeded	NS	Exceeded	Exceeded	Exceeded
Kogrukluk River	Exceeded	Exceeded	Exceeded	Exceeded	Met

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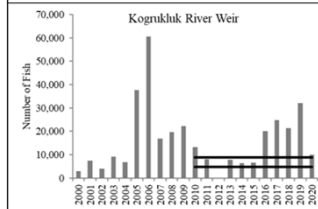
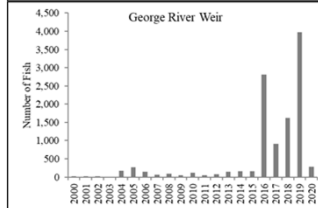
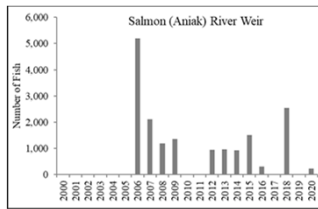
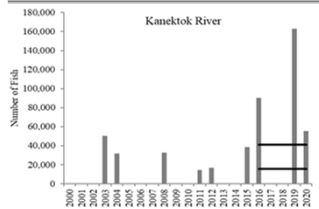
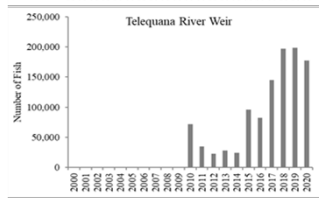
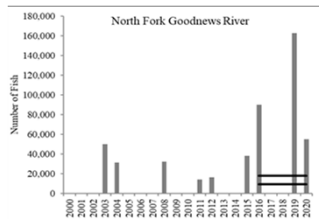
Chum Salmon



- Few age-4 in western AK in 2020
- 2016 spawners
 - Poor freshwater survival?
 - Poor marine survival?
- SBS surveys
- 2021 is uncertain

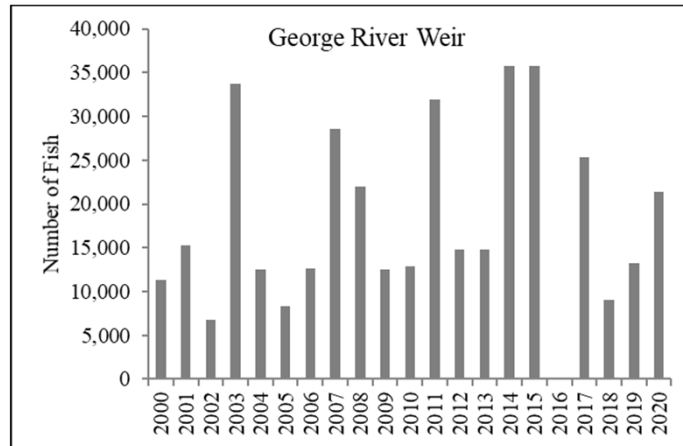
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Sockeye Salmon



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Coho Salmon

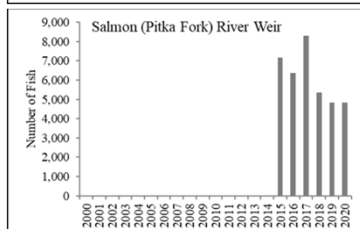
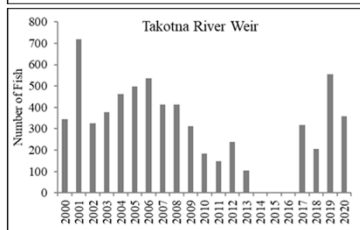
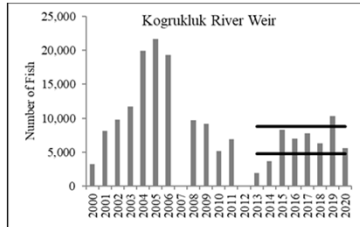
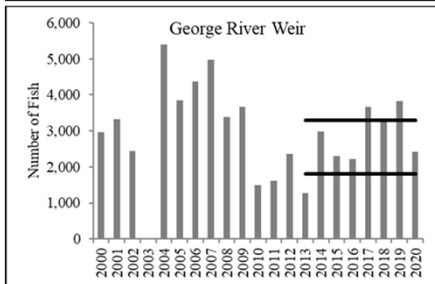
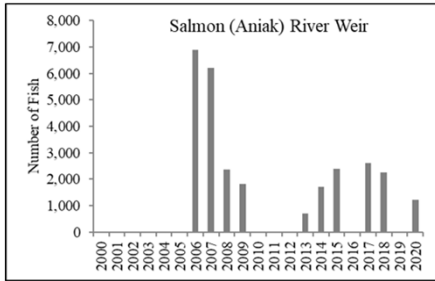


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Chinook Salmon Escapement Goal Performance

	Escapement				
	2016	2017	2018	2019	2020
CHINOOK SALMON					
North (Main) Fork Goodnews R.	Met	NS	NS	NS	Met
Middle Fork Goodnews River	Exceeded	Exceeded	NS	NS	NS
Kuskokwim River	Met	Met	Met	Exceeded	Met
Kanektok River	Met	NS	Met	Met	NS
Kogruklu River	Met	Exceeded	Met	Exceeded	Met
Kwethluk River	NA	Met	NA	Exceeded	NS
George River	Under	Exceeded	Exceeded	Exceeded	Met
Kisaralik River	Met	NS	Met	Met	<i>Under</i>
Aniak River	Under	Met	Met	Exceeded	Met
Salmon River (Aniak R)	NS	Met	Met	Met	<i>Under</i>
Cheeneetnuk River (Stony R)	Under	Met	Met	Exceeded	Met
Gagaryah River (Stony R)	Under	Met	Met	Met	NS
Salmon River (Pitka Fork)	Met	Met	Met	Exceeded	Met

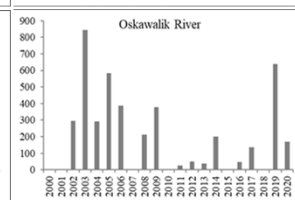
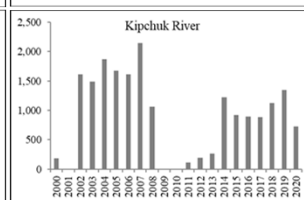
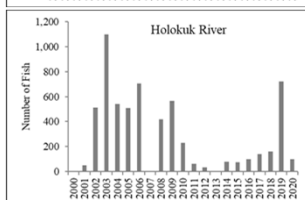
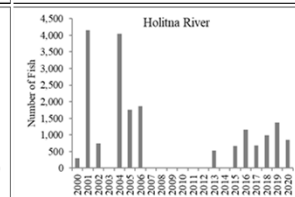
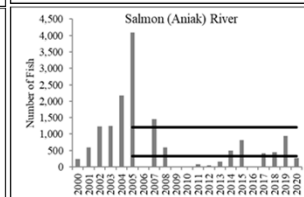
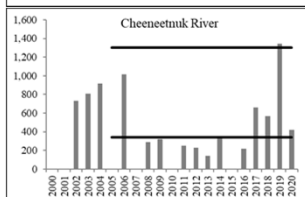
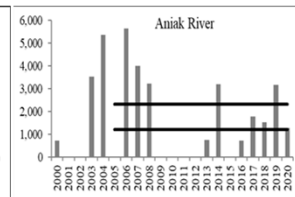
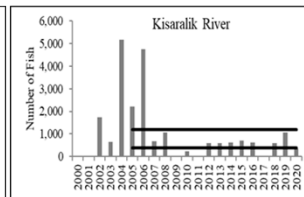
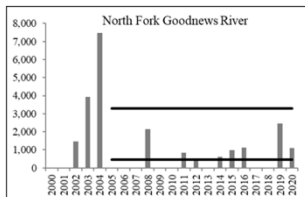
Chinook Salmon-Weirs



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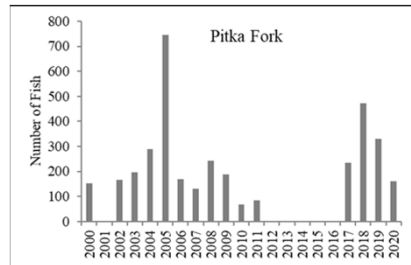
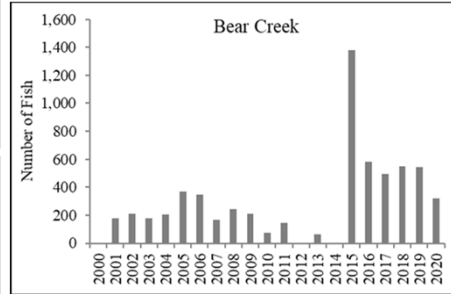
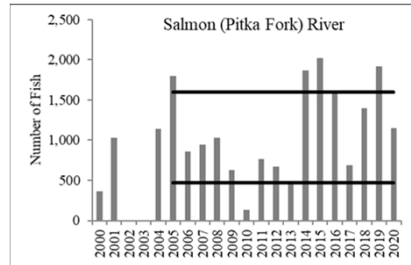
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Chinook Salmon-Lower/Middle Aerial



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Chinook Salmon-Upper Aerial

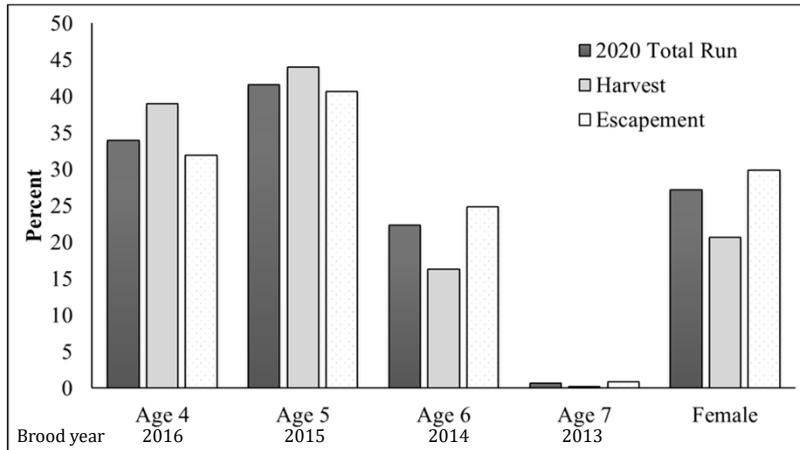


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Chinook Salmon Age and Sex Summary

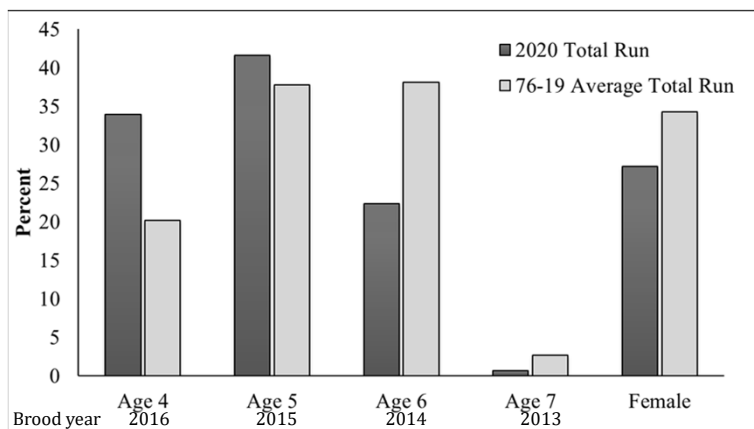
19

Chinook Salmon - Age/Sex Composition



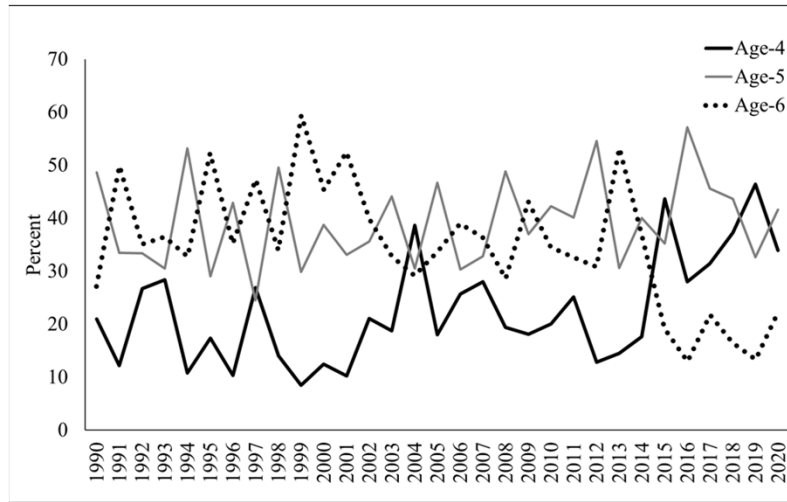
20

Chinook Salmon - Age/Sex Composition



21

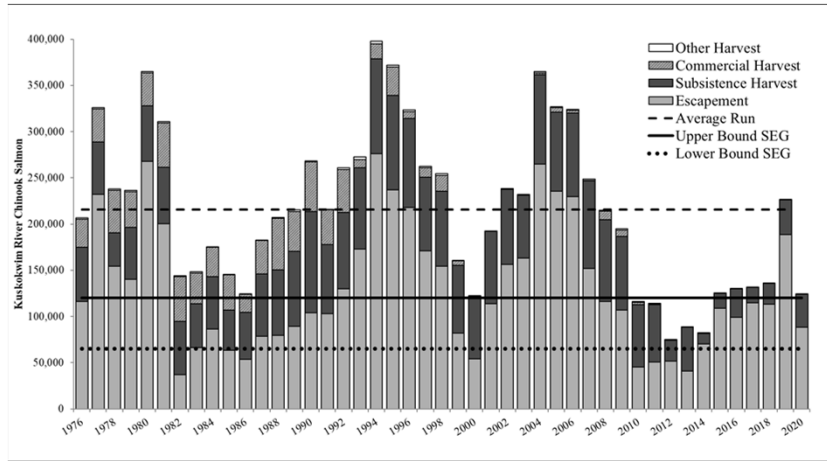
Chinook Salmon – Total Run Age Composition



22

2020 Kuskokwim River Chinook Salmon Run Reconstruction

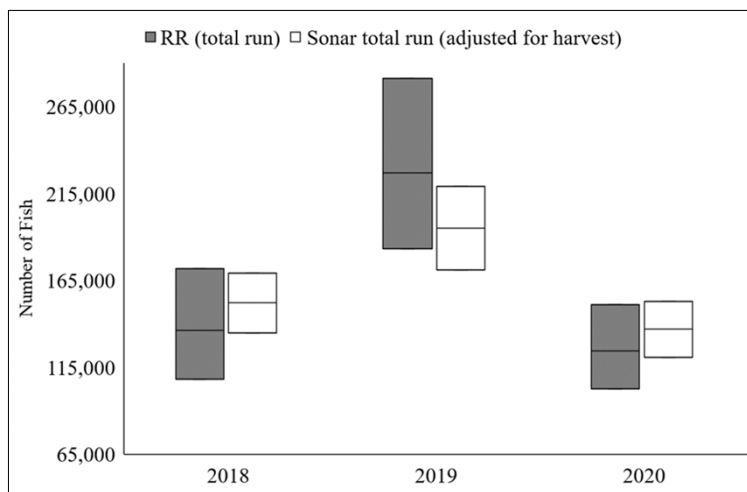
23 Chinook Salmon Run Reconstruction



- Total Run Size – 124,000 (95% CI: 103,000–151,000)
- Total Escapement – 88,000 (95% CI: 66,000–115,000)
- Total Harvest – 36,000 (95% CI 33,000–38,000)

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RR vs Sonar

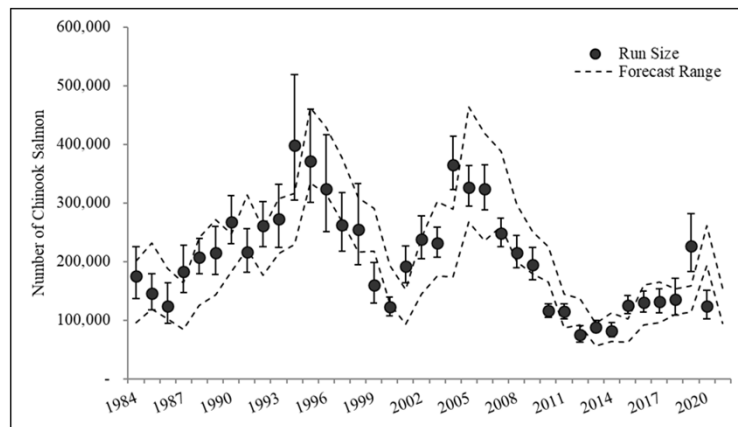


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2021 Kuskokwim River Chinook Salmon Forecast

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Chinook Salmon Forecast



Forecast Range: 94,000–155,000

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Summary Report Card

- Escapement goals
 - Chinook: 7 met; 2 under
 - Chum, Coho, and Sockeye: All met or exceeded
- Ages
 - Percentage of age-4 Chinook salmon was above average
 - Percentage of age-6 Chinook salmon was below average
- Total Run Size ~ 124,000
 - Below the 216,000 fish average
- Total Escapement ~ 88,000
- Total Harvest ~ 36,000
- Forecast Range ~ 94,000 – 155,000

Fishers... *thank you!*



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2020 BSAI Bycatch

- Chinook bycatch in all groundfish fisheries (pelagic trawl, bottom trawl, and hook-and-line fisheries): 35,096, which was approximately 19% above the recent 5-year average.
- Total bycatch of non-Chinook salmon (primarily chum) in groundfish fisheries was 332,701, which was approximately 7% below the recent 5-year average.
- Bycatch numbers are reported by the National Marine Fisheries Service, available at: <https://alaskafisheries.noaa.gov/fisheries-catch-landings?tid=286>
- Bycatch updates are reported by the North Pacific Fisheries Management Council, available at: <https://www.npfmc.org/bsai-salmon-bycatch/>
- 3-Area-Index
 - Sum of Kusko, Yukon, and Norton Sound king runs
 - Below 250k fish in 2020 so 45k annual limit (not 60k)

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Lets Hear From You

What are traditional knowledge indicators saying about the upcoming salmon runs?

- Size?
- Timing?
- Environmental conditions?
- Anything else?

2021 Kuskokwim River Assessment Projects

Overview:

Project	Location	Start Date	End Date	Species	Data Availability	Organization
<u>Test Fishery</u>						
Bethel Test Fishery	Bethel	June 01	August 20	K, C, R, S	Daily	ADF&G
Aniak Test Fishery	Aniak	June 01	July 15	K, C, R	Daily	Napaimute
<u>Mainstem</u>						
Sonar	Bethel	June 01	August 26	K, C, R, W, S	Daily	ADF&G/ONC
<u>Harvest</u>						
Subsistence Surveys	Bethel	May 29	July 15	K, C, R	Weekly	ONC
Subsistence Surveys	Lower River	June 12	Open	K, C, R, W	As needed	KRITFC
Subsistence ASL	Bethel	June 01	Open	K	End of season	ONC
Subsistence ASL	Lower River	June 02	Open	K	End of season	KRITFC
<u>Weir</u>						
Salmon (Aniak) River	Middle River	June 15	Sept. 20	K, C, S	Daily	NVN
George River	Middle River	June 15	Sept. 20	K, C, S	Daily	ADF&G
Kogruklu River	Holitna River	June 26	Sept. 20	K, C, R, S	Daily	ADF&G
Telaquana River	Stony River	July 03	August 15	R	Daily	NPS
Takotna River	Upper River	June 24	August 15	K, C	Daily	KRITFC
Salmon (Pitka) Fork	Upper River	June 20	August 15	K	Daily	ADF&G
<u>Air Survey</u>	Drainage	July 17	August 05	K	End of season	ADF&G
<u>Juvenile Salmon Survey</u>	Southern Bering Sea	Mid-August	Late-Sept	K, C, R, S	End of season	ADF&G

Species Key: **K** = "King" or Chinook; **C** = chum; **R** = "Red" or sockeye; **S** = "Silver" or coho; **W** = whitefish.

Daily Assessment Document:

- USFWS and ADF&G will continue to produce a daily assessment document summarizing the most relevant inseason data about Chinook, chum, sockeye, and coho salmon run timing and abundance.
- This document will focus exclusively on inseason data from Bethel Test Fishery, Aniak Test Fishery, harvest estimates, and mainstem sonar.
- The assessment documents will be publicly available via email and posted online. ADF&G will distribute the document to the Kuskokwim River Salmon Management Working Group email distribution list. Contact Sean Larson (sean.larson@alaska.gov) or Nick Smith (nick.smith@alaska.gov) if you want to be added or removed from this list.

Project Descriptions:

- **Bethel Test Fishery** – ADF&G, Division of Commercial Fisheries will operate the Bethel Test Fishery in the same location and use the same methods as in prior years. This project will produce daily catch-per-unit-effort (CPUE) for Chinook, chum, sockeye, and coho salmon. Data will provide information about inseason run timing, relative abundance (e.g., species ratios), and run strength. Data will be included in the daily assessment update and posted to the ADF&G Fish Counts webpage by 10AM, Monday through Friday:
<http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareakuskokwim.salmon#fishcounts>

Note: The top of the head will be removed from all Chinook salmon to collect otoliths (ear bones) for a separate study designed to determine where each fish was born.

- **Aniak Test Fishery** – Native Village of Napaimute will operate the Aniak Test Fishery in the same location and use the same methods as in 2015 – 2019. This project will produce daily catch-per-unit-effort (CPUE) for Chinook, chum, and sockeye salmon. Data will provide information about inseason run timing and relative abundance (e.g., species ratios). Data will be included in the daily assessment update.
- **Kuskokwim Sonar** – ADF&G, Division of Commercial Fisheries will operate sonar upriver from Bethel near the upper end of Church Slough and just downriver from the Kwethluk “Y”. Orutsarmiut Native Council (ONC) is a partner on this project and will assist with project operations in August. This project will produce daily inseason estimates of abundance for Chinook, chum, sockeye, coho, whitefish, and other species passing the sonar site. Total cumulative abundance with 95% confidence intervals will be estimated daily. Data will be included in the daily assessment update.
- **Subsistence Harvest Surveys** – There will be several overlapping and complimentary efforts to collect inseason information about subsistence harvest, catch, and effort. Information will be used to monitor fishing progress as the salmon run develops. In addition, detailed catch and effort information may be used by USFWS to estimate inseason subsistence harvest within specific areas of the Yukon Delta National Wildlife Refuge during specified fishery openers.
 - ONC – will conduct weekly fish camp surveys throughout the Bethel area similar to past years. Additional survey effort will be conducted at the Bethel boat harbor as needed and provided to USFWS for estimating inseason subsistence harvest. A summary of survey results will be presented weekly at scheduled Working Group meetings.
 - Kuskokwim River Intertribal Fish Commission (KRITFC) – will collect catch and effort information from several communities.
- **Subsistence Age-Sex-Length (ASL) Sampling** – As in past years, ONC will recruit and train subsistence fishers to collect scales, sex, and length data from Chinook salmon harvested by subsistence fishers in the Bethel area. KRITFC will also assist with collection of Chinook salmon ASL from lower river communities through their community monitoring program. ASL summaries will be generated post-season.

*Note: Training and sampling supplies will be provided for anyone who wants to participate in the ASL program. Training is scheduled in Bethel for **June 1 and June 8, 2020 from 11AM–4PM at the Cultural Center**. Contact Janessa (ONC) or Sean (ADF&G) if you want to schedule training in your home community.*

- **Weirs** – A total of six weirs will be operated (3 – ADF&G; 1 – NVN; 1 – NPS; 1 – KRITFC) to monitor salmon escapement throughout the lower, middle, and upper portions of the Kuskokwim River drainage. Final estimates of escapement for each location will be made post-season. Daily escapement counts will be updated on the ADF&G Fish Counts webpage daily by 10AM, Monday through Friday:
<http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareakuskokwim.salmon#fishcounts>
- **Aerial Surveys** – Surveys will be flown throughout select lower, middle, and upper river tributaries to index Chinook salmon escapement in late July. Aerial survey results will be provided post-season once surveys are completed.
- **Juvenile Salmon Survey** – ADF&G in collaboration with NOAA and Alaska Pacific University will be conducting the second year of feasibility work in the southern Bering Sea. A main objective of this study is to estimate the abundance of southern Bering Sea juvenile Chinook salmon. Results will be provided post-season once the survey is completed.



Box 927, Bethel, AK 99559
(907)543-2608 (907)543-2639 FAX

**Kuskokwim River Salmon Management Working Group
ONC Preseason Report
May 3-4, 2021**

Inseason Harvest Monitoring at Fish Camp and Bethel Boat Harbor

It is almost salmon fishing season, and this summer ONC will again be conducting the inseason harvest monitoring project this year! This means ONC Fisheries staff will be out at the Boat Harbor and Bethel Area fish camps surveying fishers about their salmon catch, needs, and information fishers want to share with inseason managers. Our Fisheries staff will reach out to fish camps and request permission to visit their camps to conduct surveys while taking all COVID-19 precautions. The Fisheries staff will wear masks and maintain six-foot distance when surveying and in all other in person projects as well.

Data collected in this project provides reliable quantitative estimates of salmon harvests and documents the extent that subsistence fish are shared among the people of the lower Kuskokwim River. Weekly updates will be provided by ONC staff at the Kuskokwim River Salmon Management Working Group meetings throughout the summer.

Chinook Salmon Age-Sex-Length Sampling Program

ONC will also collect information about Chinook salmon age-sex-length (ASL) data in collaboration with ADF&G. To gather this data, ONC will be recruiting local fishers in Bethel to take the length, sex, and scales from their Chinook salmon. If you would like to participate in Chinook ASL collection efforts and receive \$5 per Chinook salmon you sample, contact ONC Fisheries at 545-6001 or email Katie Russell (krussell@nativecouncil.org)! In years past, some people have earned up to \$600 from sampling their Chinook salmon catches. We are continuing recruitment efforts at the Bethel boat harbor, in the community & at Bethel area fish camps.

Chinook Salmon Otolith Collection

In addition, ONC will also be conducting Chinook salmon otolith sampling this summer in collaboration with the University of Washington and ADF&G. By analyzing salmon ear stones — called the otolith — scientists can learn that different parts of large watersheds are hot spots for salmon production and growth, and these favorable locations change year to year depending on how climate conditions interact with the landscape to impact the value of habitats for salmon.

Fish Distribution

ONC will continue to deliver fish caught by the ADF&G Bethel Test Fishery (BTF) to local elders (55+ years), disabled, and widowed within the Bethel community. Arrangements can be made to deliver fish outside of Bethel. If you are an Elder, disabled, or widowed in Bethel or know someone who is, please contact ONC Fisheries at 545-6001 or email Danielle Lowrey (dlowrey@nativecouncil.org) to be added to the fish distribution list.

Other Projects

ONC Fisheries Staff will also be involved with the Kuskokwim River Sonar and Bethel Test Fishery with ADF&G, the Aniak & Salmon River Math Science Expedition with Kuspuk School District, the ONC Science & Culture Camp, and the Indigenizing Salmon Management (ISM) project during the summer of 2021. If you would like to know more about ONC Fisheries Department's involvement in these projects please contact ONC Fisheries at 545-6001!

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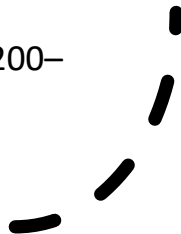
2021 Kuskokwim River
Management Outlook and
Strategy

Nick Smith ADF&G

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What Guides Preseason Chinook Discussions?

- KRSMWG
- Drainage wide escapement goal of 65,000–120,000 Chinook salmon
- Forecast (94,000–155,000 fish)
 - Recent performance
- Management Plan
 - Developed through BOF process over many cycles
- Chinook Salmon ANS 67,200–109,800



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Inseason Chinook Management

Assessment Tools

- Preseason forecast
- Bethel Test Fishery
- Aniak Test Fishery
- Sonar
- Inseason subsistence harvest reports

Management Toolbox

- Management Plan
- Time and area authority
- Different gear types (gillnets, fish wheels, beach seines, dip nets, and hook and line)
- Gillnet mesh size and length restrictions
- Upriver Household Permits

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Front
End
Closure

Start Date –
June 11

- **Mainstem River closed to gillnets**
 - Roll closure upriver
 - At least one weekly 6" set gillnet fishing period
 - Selective legal methods with no King retention
- **Lower Kuskokwim River Spawning Tributaries**
 - Closed to gillnets
 - Selective legal methods with no King retention
- **Non-spawning tributaries**
 - Close to gillnets from their confluence with the Kuskokwim River upstream 100 yards.
- **Sport fishing for King salmon** close by Emergency Order from May 1 through June 11 in alignment w the management plan.

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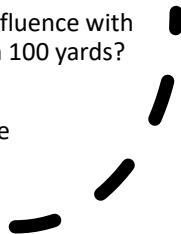
After Front
End Closure
June 12 –
End of
Season

- **Tributaries**
 - Remain closed to gillnets
 - Selective legal methods with no King retention
- **Mainstem**
 - Below Aniak
 - Mainstem subsistence fishing with selective gears allowed **without** retention of Kings.
 - At least one gillnet fishing period per week with 6" or less mesh, 25 fathom length as directed by the management plan.
 - Above Aniak
 - Household Subsistence fishing permit in Sections 4-5; 6" mesh, 25 fathom length; 10 King salmon harvest
 - Aniak box goes into effect for gillnets.
 - Selective legal methods allowed; Kings must be returned to water when not fishing under Household Subsistence permit.
- After June 11th, management of the King salmon sport fishery will be dependent on escapement and management of the subsistence fishery

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Working Group Decisions and Input- Front End

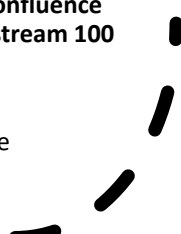
1. Starting Date (s) of Front-End Closure
 - Roll Closure Upriver?
 - Section 1 -
 - Section 2 -
 - Section 3 -
 - Section 4 -
 - Section 5 -
2. Front-End Setnet Fishing Periods
 - One or more weekly?
 - Dates - ?
 - Duration of fishing periods? (6, 12, 16, 24hr...etc)
3. Non-Spawning Tributaries
 - Close to gillnets from their confluence with the Kuskokwim River upstream 100 yards?
4. Selective Gear Types
 - Allow use with Chinook Release
 - Mainstem?
 - Spawning Tributaries?



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Review of 2020 actions

1. Starting Date (s) of Front-End Closure
 - Roll Closure Upriver?
 - Section 1 – June 1
 - Section 2 – June 1
 - Section 3 – June 3
 - Section 4 – June 9
 - Section 5 – June 11
2. Front-End Setnet 6" Fishing Periods
 - One or more weekly
 - Dates - June 3, 6, 9
 - Duration of fishing periods - 24 hrs
3. Non-Spawning Tributaries
 - **Closed to gillnets from their confluence with the Kuskokwim River upstream 100 yards.**
4. Selective Gear Types
 - Allow use with Chinook Release
 - Mainstem - YES
 - Spawning Tributaries - YES



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Board of Fisheries

Meeting Postponed:

Distribute escapement goal memo - TBD

Proposal Deadline: Monday, April 11, 2022

Arctic / Yukon / Kuskokwim Finfish meeting - January 14-18, 2023

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Division of Sport Fish

Dave Rutz, Director
Anchorage Headquarters Office
333 Raspberry Road
Anchorage, AK 99518
Advisory Announcement

**Alaska Department of Fish and Game**

Doug Vincent-Lang, Commissioner
P.O. Box 115526
Juneau, AK 99811-5526
www.adfg.alaska.gov

April 1, 2021

KUSKOKWIM RIVER DRAINAGE CLOSED TO SPORT FISHING FOR KING SALMON

The Alaska Department of Fish and Game is closing the entire Kuskokwim River drainage (including all tributaries) to sport fishing for king salmon, effective 12:01 a.m. Saturday, May 1, 2021. This does not include the Kuskokwim Bay drainages. All king salmon caught while fishing for other species may not be removed from the water and must be released immediately. In addition, anglers may use only one unbaited, single-hook, artificial lure in the Kuskokwim River drainage. These restrictions will remain in effect through at least 11:59 p.m. Friday, June 11, 2021.

The Kuskokwim River Salmon Management Plan (5 AAC 07.365) mandates that when the projected escapement is within the drainagewide escapement goal range, the sport and commercial fisheries are closed through June 11. The forecast of 94,000–155,000 king salmon suggests that the Kuskokwim River king salmon run in 2021 may be similar to 2020 when the Kuskokwim River experienced an estimated total run of approximately 124,486 and spawning escapement of approximately 88,285 fish. If the 2021 run materializes as expected there is not enough fish for a full subsistence harvest (i.e., 110,000 fish) and achieving the midpoint of the drainagewide escapement goal (i.e., 92,500 fish). In 2020, the drainagewide escapement goal (65,000–120,000 king salmon) was attained, however, there were substantial closures of the subsistence fishery. Restrictions to the subsistence king salmon fishery are expected again in 2021. The restriction of bait in the sport fishery is also a conservative measure to reduce the chance of king salmon being caught while fishing for other species.

The numbers of king salmon returning to the Kuskokwim River will be closely monitored using the department's sonar, test fishery, and reports from fishers. In accordance with the Kuskokwim River Salmon Management Plan, if the data suggests that the run is large enough to provide harvest opportunity on surplus king salmon in excess of escapement and subsistence needs, the sport fishery may open after June 11.

For additional information contact John Chythlook, Kuskokwim-Goodnews Area Management Biologist, 907-459-7361.



Upper portion to be retained by issuing officer and returned to:
 Division of Subsistence, Alaska Department of Fish and Game
 333 Raspberry Road
 Anchorage, AK 99518

I have read and understand the permit requirements on this card and agree to return the permit below to Alaska Department of Fish and Game by October 31, 2021.

Permit Holder Signature

Date

Issuing Officer Signature

5 AAC 01.280 has been updated on line:

http://www.legis.state.ak.us/basis/folioproxy.asp?url=http://www.jnu01.legis.state.ak.us/cgi-bin/folioisa.dll/aac/query=*/doc/{t20909}?

(Fish may be taken for subsistence purposes without a subsistence fishing permit, except as otherwise provided in this section.)

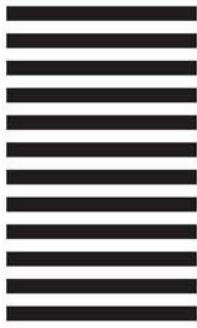
(1) Starting in the 2018 fishing season, during times when the commissioner determines it is necessary for the conservation of king salmon, the commissioner may, by emergency order, require that in the Kuskokwim River drainage, upstream of a line between ADF&G regulatory markers at the Yukon Delta National Wildlife Refuge Boundary near Aniak, king salmon may be taken only under the authority of a subsistence fishing permit with the following conditions:

- (A) annual limit of 10 king salmon;
- (B) fishing under the permit may not commence until the subsistence king salmon fishery opens after June 11 as described in 5 AAC 07.365;
- (C) the commissioner may, by emergency order, implement one or more of the gear limitations specified in 5 AAC 01.270(n) (1) for fishing under the permit;
- (D) permit holders must complete and return permits, including daily records of king salmon harvested, each year by October 31;
- (E) once the annual limit is reached, additional king salmon may not be taken except in compliance with all applicable regulations and emergency orders;
- (F) only one permit may be issued to a household each year;

Each subsistence fisherman must plainly and legibly inscribe his first initial, last name, and address on a keg or buoy attached to a gillnet.



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IF MAILED
IN THE
UNITED STATES



BUSINESS REPLY MAIL
 FIRST-CLASS MAIL PERMIT NO. 37 ANCHORAGE AK
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DIVISION OF SUBSISTENCE
 DEPARTMENT OF FISH AND GAME
 STATE OF ALASKA
 333 RASPBERRY RD
 ANCHORAGE AK 99518-9981

Kuskokwim River Salmon Management Working Group

P.O. Box 1467 · Bethel, AK 99559 · 907-543-2433 · 907-543-2021 fax

April 12, 2021

To: U.S. Fish and Wildlife Service National Native American Programs Office

The Kuskokwim River Salmon Management Working Group (Working Group) was formed in 1988 and is composed of 14 member seats representing Elders, subsistence fishermen, processors, commercial fishermen, sport fishermen, members at large, Federal subsistence regional advisory committees, and the Alaska Department of Fish and Game (ADF&G). Agency members participate on a voluntary basis and receive no compensation. The Working Group serves as an advisory committee to ADF&G on salmon fisheries management decisions within the Kuskokwim River. In addition, the Working Group has a long history of collaboration with fishery researchers and project leaders to ensure that adequate data are collected to inform sustainable management of Kuskokwim River salmon. This relationship ensures that Working Group participants remain informed of data collection plans and new information, which helps them disseminate important information to stakeholders and provide sound advice to fisheries managers.

The Working Group would like to express our support for the inseason harvest monitoring project proposed by Orutsarmiut Native Council (ONC) and ADF&G. This project has two critical components. First, it provides accurate and timely subsistence harvest data from the Bethel area fish camps and Bethel boat harbor. Second, it provides the data needed to estimate the annual age-sex-length (ASL) composition of Chinook salmon harvested in the Bethel area subsistence fishery. Furthermore, the project allows for fishers to share their comments, concerns, and observations regarding the health and management of the Kuskokwim River salmon fishery. ONC has provided weekly inseason data summaries to fisheries managers, scientists, Working Group members, and the public, which have been highly valued.

ONC and ADF&G have provided real-time harvest data and have helped managers to gauge whether subsistence fishers in the Bethel area have met their Chinook, chum, and sockeye salmon needs each fishing season. Both entities have also continued to successfully recruit local fishers to participate in the ASL Chinook salmon sampling program. Collection of ASL data is critical for sustainable management of Kuskokwim River salmon fisheries. The ASL data collected from the subsistence fishery is used in conjunction with data collected from test fishery and escapement projects to estimate the composition of the total annual return, which informs the Kuskokwim River Chinook salmon brood table. Additionally, this data helps us evaluate the effects management actions; i.e., mesh size restrictions, have on the ASL composition of the subsistence harvest. This project is the only source of ASL information from the large and culturally important subsistence fishery.

The Working Group recognizes the value this project has regarding outreach and community involvement. The Working Group is pleased that ONC and ADF&G are continuing their partnership. ONC and ADF&G have conducted inseason monitoring for nearly 20 years and have fostered great trust and support from the community and agency partners in this work. Since this project began, hundreds of individuals from several lower river communities have participated through weekly contact with local ONC technicians. ONC has employed many Tribal youth to work on this project, many of whom have gained invaluable experience and have made important contributions to the project due to their experiences living and fishing along the Kuskokwim, thus bringing a wealth of knowledge to this work. This project continues to provide an important opportunity for data gathering and information sharing between subsistence users, ONC, ADF&G, and other agencies.

For these reasons, we strongly support this proposal and recommend it receive funding through the U.S. Fish & Wildlife Service National Native American Programs Office's Tribal Wildlife Grants Program. Thank you for your consideration.

On behalf of the Kuskokwim River Salmon Management Working Group,