

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: 06/15/2020

Time: 6:00 p.m.

Place: Teleconference

Time Called to Order:

Chair: Barbara Carlson

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 MINUTES: *Optional. ADF&G does not prepare official meeting minutes.*

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

USFWS/KRITFC UPDATE:

ADF&G MANAGEMENT ACTIONS UNDER CONSIDERATION:

PEOPLE TO BE HEARD: *Non-Working Group Members*

CONTINUING BUSINESS:

- Subsistence Reports: Lowest River, ONC Inseason Subsistence Report, Lower River, Middle River, Upper River, Headwaters
- Overview of Kuskokwim River salmon run assessment:
 - a. Test Fisheries (Bethel and Aniak):
 - b. Sonar/Weirs/Aerial Surveys/Other:
 - c. Subsistence Division Project Update:
 - d. NVN Report:
- Commercial Catch Report: N/A
- Processor Report: N/A
- Sport Fish Report:
- Intercept Fishery Report: *optional*
- Weather Forecast:
- Discussion of ADF&G Management considerations and discussion of possible alternatives (recommendations from the Working Group):
- Motion for Discussion and Action:

OLD BUSINESS:

- Meeting attendance and vacant seats

NEW BUSINESS:

COMMENTS FROM WORKING GROUP MEMBERS:

NEXT MEETING DATE: _____ **Time:** _____ **Place:** _____

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
Working Group Coordinator**

Orutsararmiut Native Council (ONC) Inseason Harvest Monitoring Weekly Report

June 15, 2020

Summary of Interview Activities

On June 9 and 10, our crew conducted surveys at the Bethel boat harbor and gathered information from 26 unique fishing trips. On June 12 and June 13, of the 27 fish camps our crew surveyed, three of the fish camps were not actively fishing. We also gathered information from 119 unique fishing trips at the Bethel boat harbor on June 12.

Comments from interviewees at the boat harbor include the following:

- Too many people at the choke points
- Too many boats out fishing
- Fishing wasn't too good
- Fishing was very slow
- Several fishers reported snags
- Requesting more fishing openers
- Long nets observed by other fishers
- Still early for fishing

Two fish camps reported better, larger Chinook salmon catches when compared to last year. Several fish camps requested more fishing and for the fishing opportunities to be closer together. Two fish camps reported concerns regarding boats fishing too close together and people not knowing the unwritten rules of fishing. One fish camp reported the June 12 opener to be chaotic. Three fish camps reported fishing to still be pretty slow. Two fish camps were content with management, and nearly all fishers who provided comments were grateful to harvest salmon.

Table 1. Average fish harvest, net length and mesh size range reported by surveyed Bethel boat harbor fishers from the June 9-10 fishing opportunity.

Data Source	Number of Surveys Conducted	Average Chinook Salmon Harvest	Average Chum Salmon Harvest	Average Sockeye Salmon Harvest	Average other harvest	Net Length Range (ft.)	Mesh Size Range (in.)
Bethel Boat Harbor	26	3.7	<1	<1	<1	50-300 (ft.)	4-8"

Please note: The 8-inch mesh gear reported above was from a fishing trip in a non-salmon spawning tributary.

Table 2. Average fish harvest, net length and mesh size range reported by surveyed Bethel area fish camps and Bethel boat harbor from the June 12 fishing opportunity.

Data Source	Number of Surveys Conducted	Average Chinook Salmon Harvest	Average Chum Salmon Harvest	Average Sockeye Salmon Harvest	Average other harvest	Net Length Range (ft.)	Mesh Size Range (in.)
Bethel Boat Harbor	119	3.5	<1	<1	<1	45-300 (ft.)	4-6"
Bethel Fish Camps	22	8.1	<1	<1	<1	40-300 (ft.)	5-6"

Table 3. Average fish harvest from the June 12th fishing opportunity in 2018-202.

Year	Fishing Date	Data Source	Number of Surveys Conducted	Average Chinook Salmon Harvest	Average Chum Salmon Harvest	Average Sockeye Salmon Harvest	Average other harvest
2020	6/12	Boat Harbor	119	3.5	<1	<1	<1
		Bethel Fish Camps	22	8.1	<1	<1	<1
2019	6/12	Boat Harbor	82	6.5	<1	~1	<1
		Bethel Fish Camps	17	10	~1	~1	~1
2018	6/12	Boat Harbor	98	4.2	1.2	<1	~1
		Bethel Fish Camps	17	5.6	1.8	<1	~1

Chinook Salmon Age-Sex-Length (ASL) Sampling Program Recruitment

Thus far this season, there are 35 interested samplers from the Bethel community. We are continuing recruitment efforts at the Bethel boat harbor, in the community & at Bethel area fish camps.

Fish Distribution

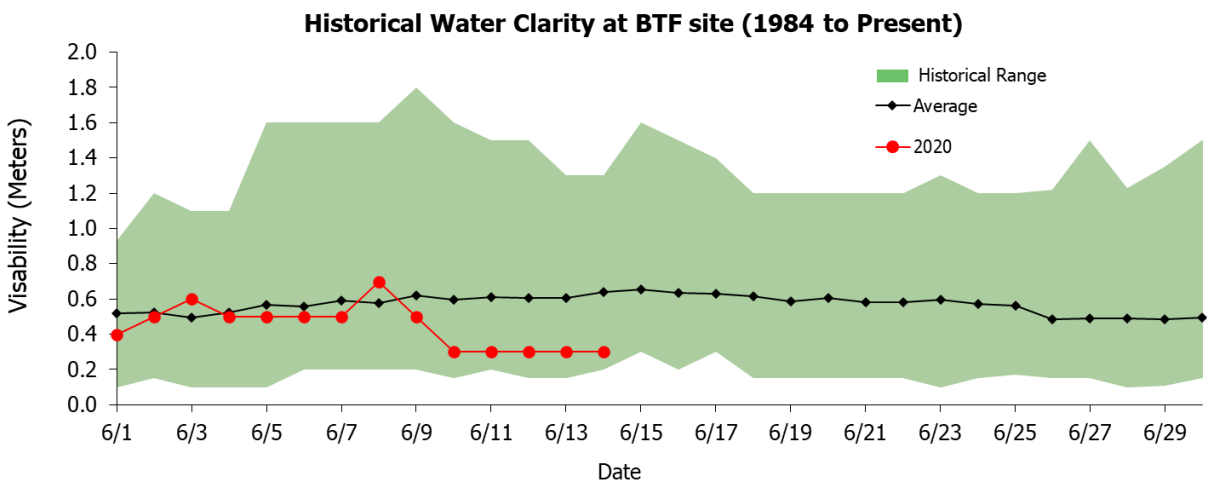
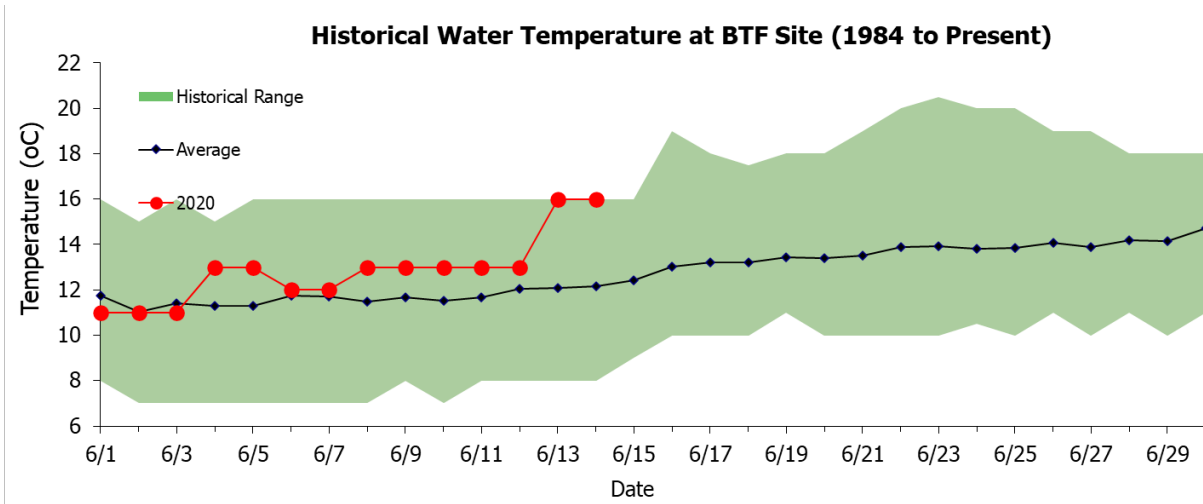
From June 8-June 14, we delivered 40 Chinook salmon, 2 chum salmon, 1 red salmon, 3 sheefish and 2 whitefish to Bethel area Elders. These fish were caught by the Alaska Department of Fish & Game Bethel Test Fishery.



Figure 1. Lucy Crow receiving a King salmon.



Figure 2. Arles Andrew and Danielle Lowrey conducting a fish camp survey with Andrew Martin.



Crooked Creek water gauge is out of operation.

Kuskokwim River Salmon Assessment Update

6/14/2020



This document presents the key assessment information considered by managers in-season. The production of this document is a collaborative effort between USFWS and ADF&G. **All data and analyses contained are preliminary and are subject to change, so please make interpretations carefully.**

If you have any questions about the content, please contact Gary Decossas (USFWS; gary_decossas@fws.gov) or Sean Larson (ADF&G; sean.larson@alaska.gov). Major credit for the development of this data packet belongs to Benjamin Staton.

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Abbreviations:

- BTF: Bethel Test Fishery
- ATF: Aniak Test Fishery
- CPUE: Catch-per-unit-effort
- EOS: End-of-Season
- ADF&G: Alaska Department of Fish and Game
- KRITFC: Kuskokwim River Inter-tribal Fisheries Commission
- OTNC: Orutsaramiut Traditional Native Council
- USFWS: United States Fish and Wildlife Service
- YDNWR: Yukon Delta National Wildlife Refuge

To view escapement information, please visit the ADF&G Kuskokwim River Fish Counts page:

- <http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareakuskokwim.salmon#fishcounts>

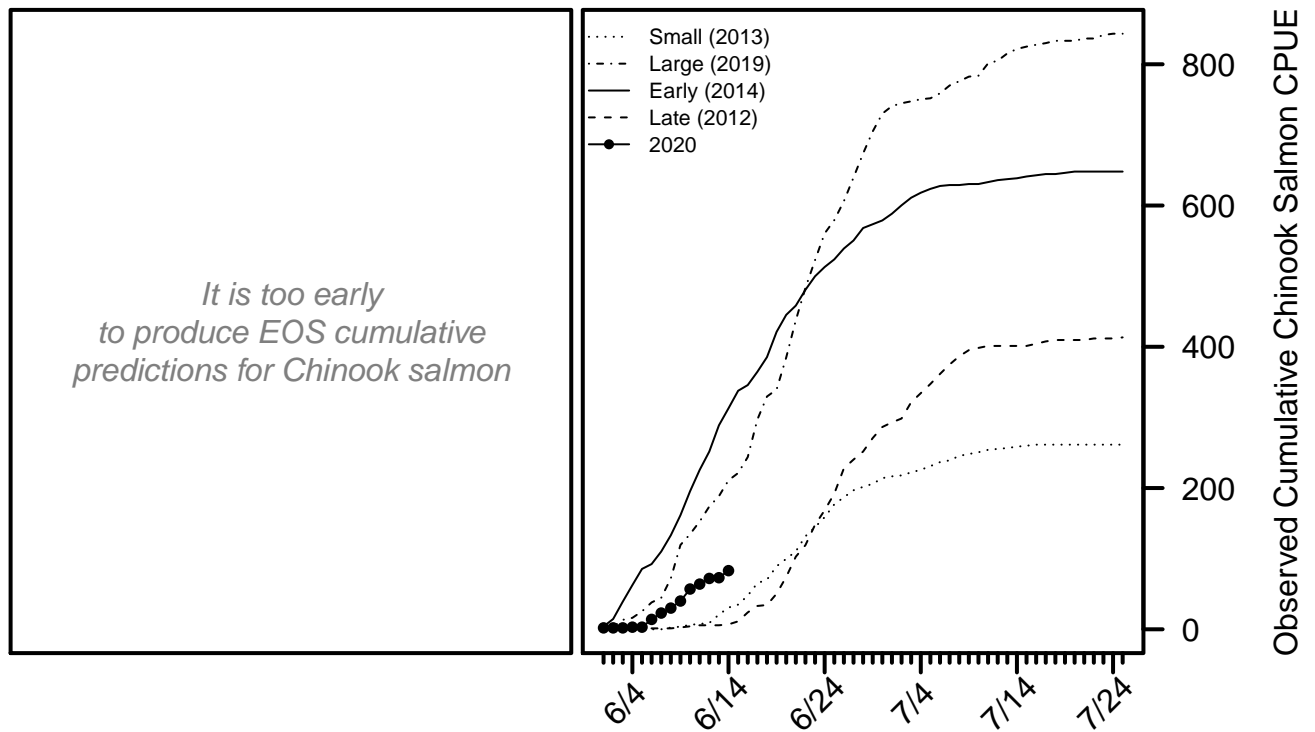
For the most up-to-date information regarding fishing opportunities please visit:

- **USFWS:** https://www.fws.gov/refuge/yukon_delta/wildlife_and_habitat/dailyupdate.html
- **ADF&G:** <http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main>

Chinook Salmon BTF Summary (6/14)

- The BTF daily CPUE was **10**.
- The BTF cumulative CPUE is now **83**.
- **50%** years since 2008 fell below this cumulative CPUE on this date.
- **17%** of the run is complete based on historical average run timing.
- **10% - 26%** of the run is complete based the central 50% of all historical run timing scenarios.
- **18% - 22%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, Chinook salmon made up **100%** of the BTF catches, compared to **38%** on average.

Chinook Salmon Figure 1. *Left:* will show predicted cumulative EOS BTF CPUE according to various run timing scenarios when enough data have been collected. *Right:* The cumulative BTF CPUE from 2020 plotted along with four previous years intended to represent a range of early/late and small/large index values.



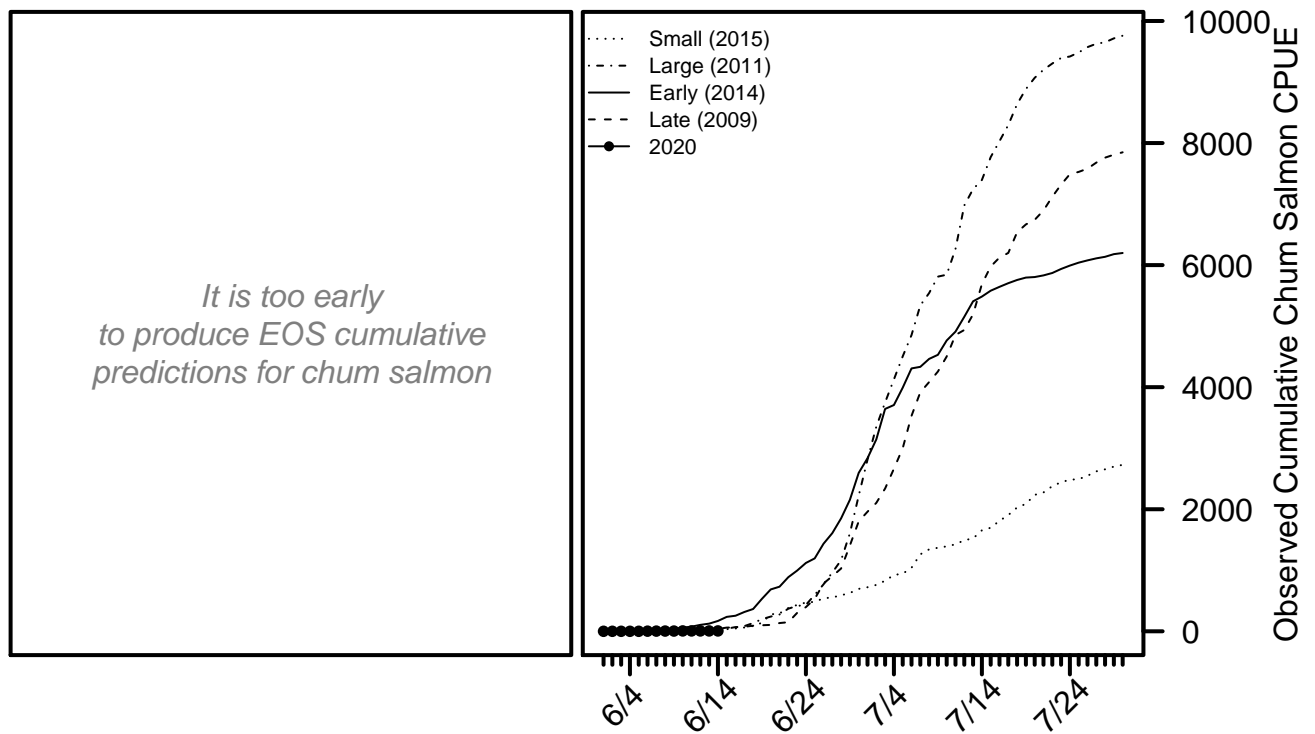
For more detailed information, see the [Chinook salmon appendix](#) at the end of this document.

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Chum Salmon BTF Summary (6/14)

- The BTF daily CPUE was **0**.
- The BTF cumulative CPUE is now **6**.
- **8%** years since 2008 fell below this cumulative CPUE on this date.
- **1%** of the run is complete based on historical average run timing.
- **<1% - 2%** of the run is complete based the central 50% of all historical run timing scenarios.
- **2% - 6%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, chum salmon made up **0%** of the BTF catches, compared to **37%** on average.

Chum Salmon Figure 1. *Left:* will show predicted cumulative EOS BTF CPUE according to various run timing scenarios when enough data have been collected. *Right:* The cumulative BTF CPUE from 2020 plotted along with four previous years intended to represent a range of early/late and small/large index values.



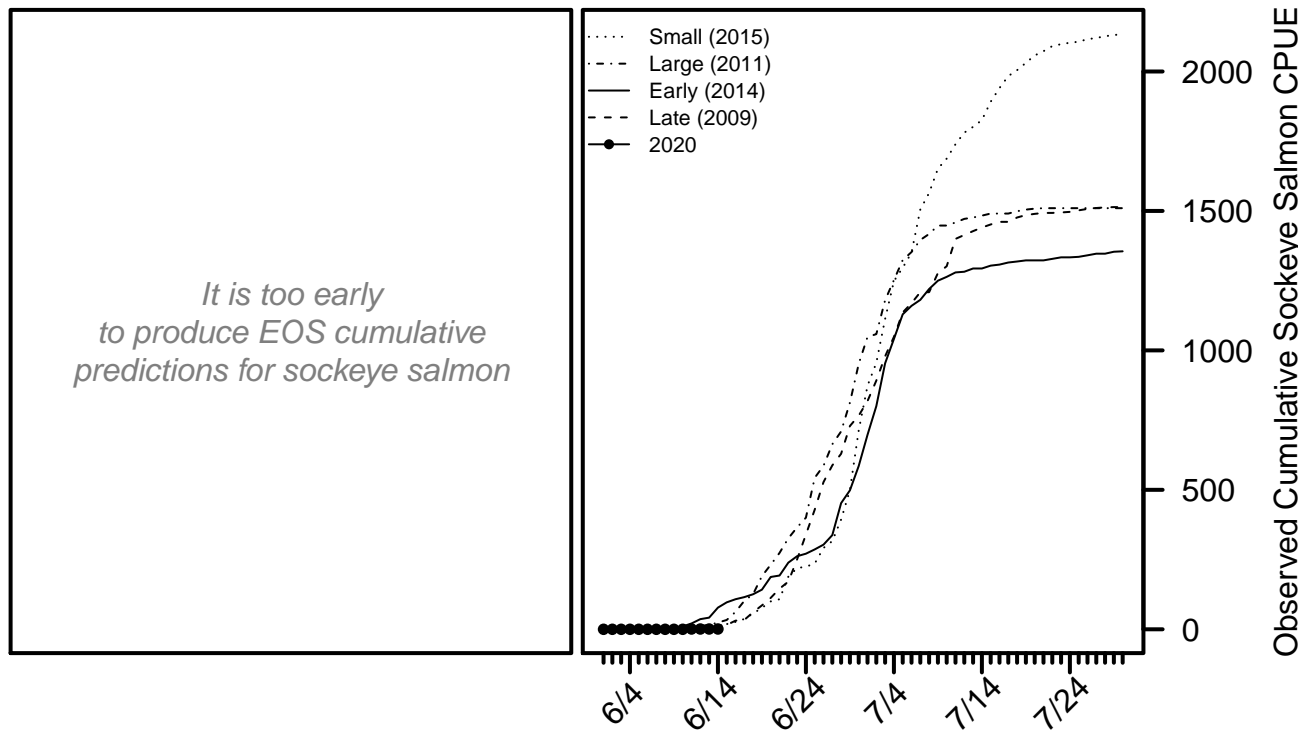
For more detailed information, see the [chum salmon appendix](#) at the end of this document.

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Sockeye Salmon BTF Summary (6/14)

- The BTF daily CPUE was **0**.
- The BTF cumulative CPUE is now **1**.
- **8%** years since 2008 fell below this cumulative CPUE on this date.
- **2%** of the run is complete based on historical average run timing.
- **<1% - 4%** of the run is complete based the central 50% of all historical run timing scenarios.
- **4% - 12%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, sockeye salmon made up **0%** of the BTF catches, compared to **25%** on average.

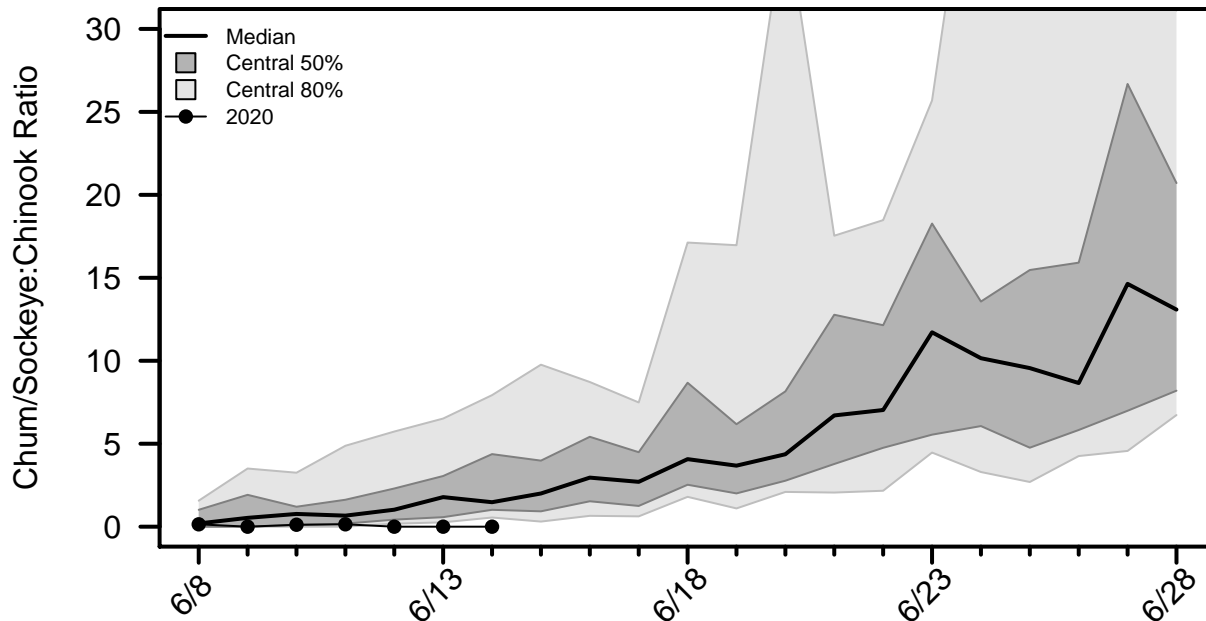
Sockeye Salmon Figure 1. *Left:* will show predicted cumulative EOS BTF CPUE according to various run timing scenarios when enough data have been collected. *Right:* The cumulative BTF CPUE from 2020 plotted along with four previous years intended to represent a range of early/late and small/large index values.



Chum/Sockeye:Chinook Salmon Ratio

This ratio is calculated by dividing the total number of chum and sockeye salmon counted by the number of Chinook salmon counted by a project each day. A value of zero indicates Chinook salmon were counted that day, but not chum or sockeye salmon. A missing value on a day the project operated indicates no Chinook salmon were counted that day.

Species Ratio Figure 1. Time series of the species ratio with historical quantiles shown as grey regions and the ratio time series for 2020 shown with points connected by lines.



Ratio Table 1. A subset of the species ratios displayed in **Ratio Figure 1**, including the ratios from the ATF.

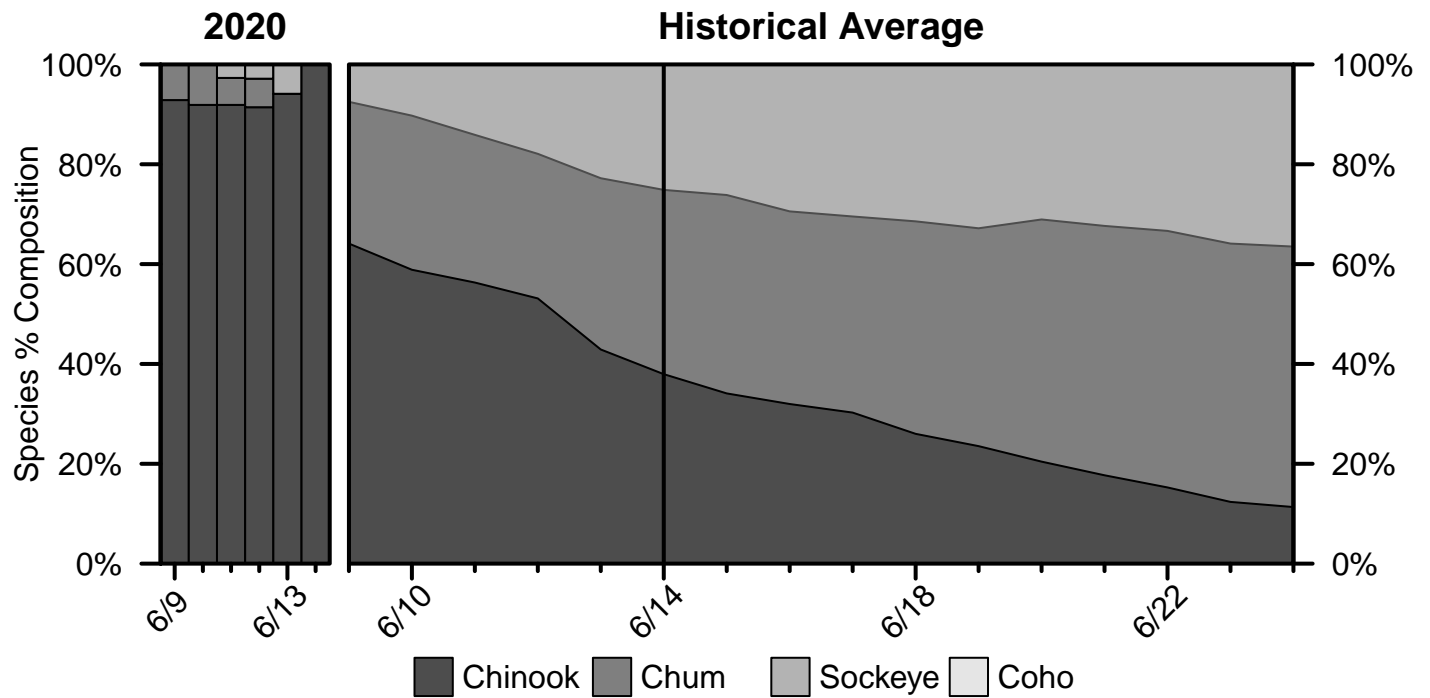
Date	2020 BTF	BTF Median	BTF Lower 10%	BTF Upper 10%	2020 ATF
6/11	0.14	0.67	0	4.88	–
6/12	0	1.02	0.18	5.74	–
6/13	0	1.78	0.26	6.52	–
6/14	0	1.48	0.55	7.93	1.92
6/15		2	0.31	9.76	
6/16		2.96	0.66	8.72	
6/17		2.7	0.62	7.49	

Ratio Table 2. The percent of previous years in which a given species ratio was exceeded at least once before a certain day in the BTF.

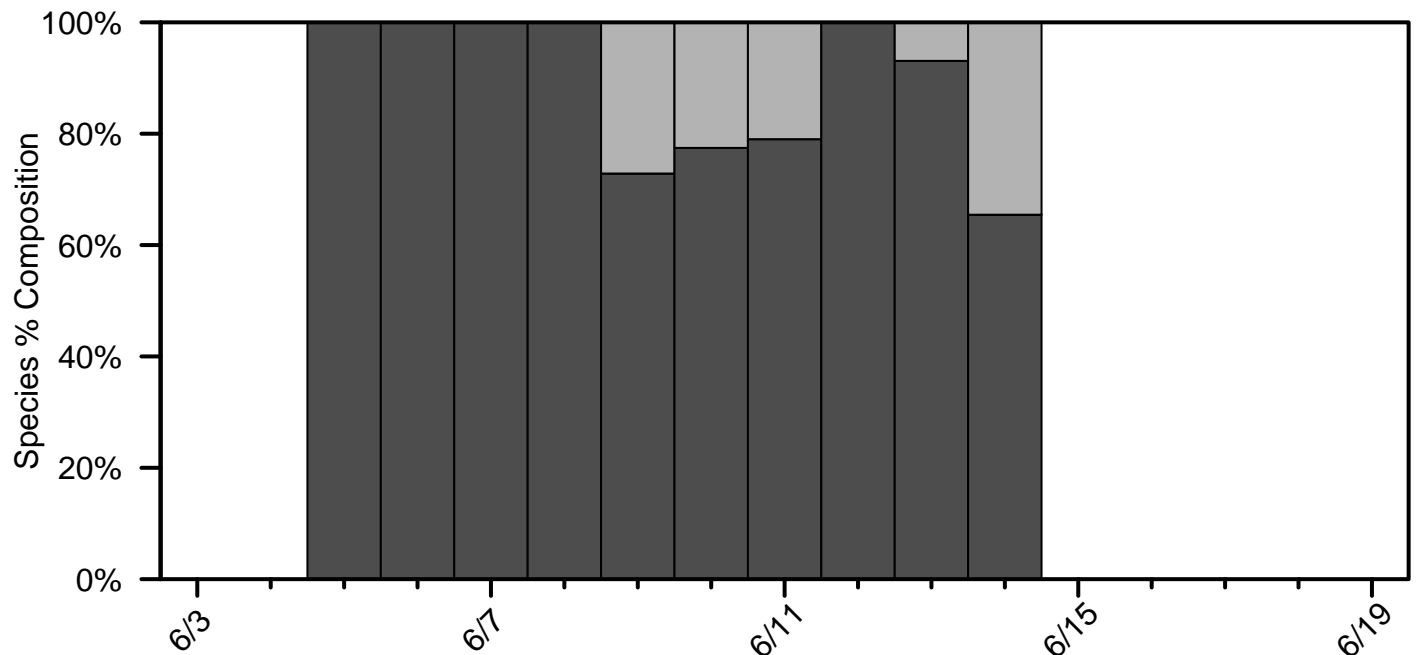
Date	Ratio > 1	Ratio > 3	Ratio > 5	Ratio > 10	Ratio > 20
6/11	78%	44%	17%	3%	3%
6/12	81%	44%	25%	3%	3%
6/13	86%	50%	33%	6%	3%
6/14	89%	64%	42%	8%	3%
6/15	92%	72%	47%	17%	3%
6/16	92%	75%	50%	19%	6%
6/17	94%	78%	53%	22%	6%

Percent Composition by Salmon Species

Percent Composition Figure 1. Species percent composition in the BTF from 2020 and based on the historical average. The composition presented on each day represents the average composition over the past 2 days.

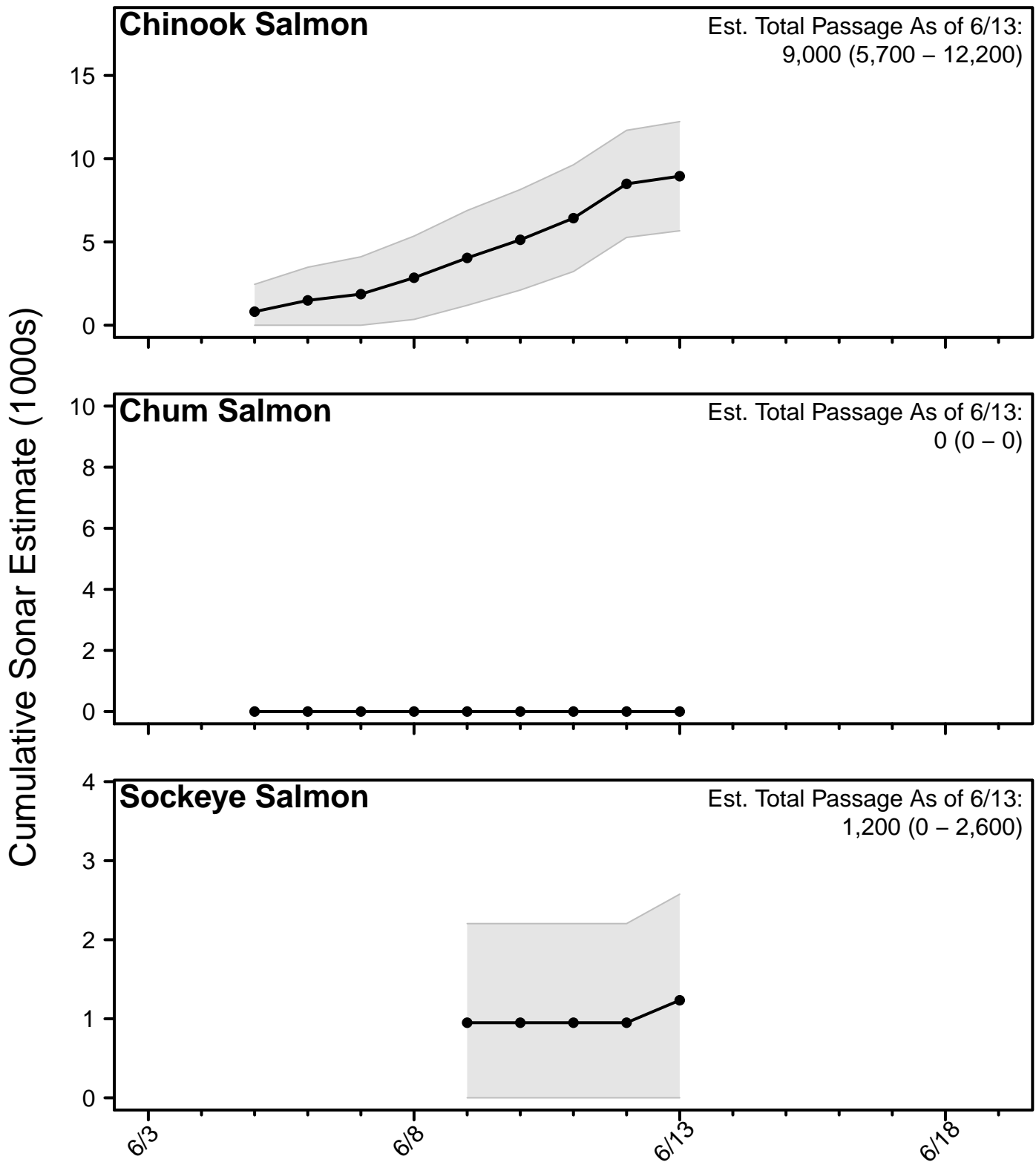


Species Composition Figure 2. Species percent composition from the sonar estimates from 2020 (salmon species only, excluding pink salmon). The composition presented on each day represents the average composition over the past 3 days.



Sonar Passage Estimates

Sonar Figure 1. Cumulative estimates of salmon passage from the 2020 sonar operation through the last complete reporting day. Grey bands show the 95% confidence intervals on each complete reporting day.



In-Season Harvest Estimates

In-season harvest estimates are produced by combining counts of total fishing effort (usually obtained via aerial survey) and on-the-ground fisher interview information using statistically-rigorous methodology. The data collection efforts to produce these estimates is a highly collaborative effort, involving staff from ADF&G, KRITFC, OTNC, and USFWS. Although USFWS performs the data analysis and harvest estimation, all estimates undergo technical review by a panel comprised of representatives from each of these entities.

Much more detailed information can be found on the YDNWR website (https://www.fws.gov/refuge/yukon_delta/wildlife_and_habitat/dailyupdate.html).

In the tables below, CV stands for coefficient of variation, which is a commonly-used measure of uncertainty in the estimate (larger CV values are more uncertain).

Harvest Table 1. Estimated total Chinook salmon harvest within the YDNWR, excluding the section between Akiak and Kalskag.

Date	Daily Harvest	Cumulative Harvest	Daily CV	Cumulative CV
6/3	180	180	54.02	54.02
6/6	570	730	20.48	11.77
6/9	670	1,400	14.74	8.24

Harvest Table 3. Estimated total chum salmon harvest within the YDNWR, excluding the section between Akiak and Kalskag.

Date	Daily Harvest	Cumulative Harvest	Daily CV	Cumulative CV
6/3	0	0	0	0
6/6	90	90	26.16	16.66
6/9	60	140	40.55	11.87

Harvest Table 3. Estimated total sockeye salmon harvest within the YDNWR, excluding the section between Akiak and Kalskag.

Date	Daily Harvest	Cumulative Harvest	Daily CV	Cumulative CV
6/3	0	0	0	0
6/6	20	20	52.22	28.86
6/9	30	50	61.24	22.65

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Chinook Salmon Appendix

Chinook Salmon Table A1. Cumulative CPUE from the BTF.

Date	2020	2019	2018	2017	2016	5-Yr Avg.	2008 - 2019 Avg.
6/11	64	153	49	18	144	94	74
6/12	72	174	67	21	165	108	85
6/13	73	188	91	23	175	122	98
6/14	83	211	112	27	196	138	111
6/15		221	145	36	218	157	131
6/16		244	161	43	230	174	152
6/17		297	174	43	245	195	171
EOS		848	667	374	687	640	575

Chinook Salmon Table A2. Cumulative CPUE from the ATF.

Date	2020	2019	2018	2017	2016
6/11	0	114	31	131	659
6/12	0	218	64	186	724
6/13	0	328	80	238	731
6/14	7	403	104	307	867
6/15		569	104	451	971
6/16		595	119	559	1,076
6/17		645	135	650	1,149
EOS		1,691	820	6,508	2,729

Chinook Salmon Table A3. Percent of run complete according to various historical run timing scenarios from the BTF.

Timing	Midpoint	6/14 Cumulative %
Earliest	6/13	48%
Early 10%	6/16	36%
Early 25%	6/20	27%
Median	6/21	17%
Late 25%	6/23	10%
Late 10%	6/26	5%
Latest	7/2	2%

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Chum Salmon Appendix

Chum Salmon Table A1. Cumulative CPUE from the BTF.

Date	2020	2019	2018	2017	2016	5-Yr Avg.	2008 - 2019 Avg.
6/11	6	9	37	27	21	22	21
6/12	6	9	49	41	21	28	27
6/13	6	9	74	59	24	38	35
6/14	6	11	106	65	35	49	46
6/15		11	188	92	42	74	70
6/16		11	205	130	50	88	87
6/17		14	216	148	50	98	106
EOS		4,989	8,212	6,785	3,894	5,365	6,537

Chum Salmon Table A2. Cumulative CPUE from the ATF.

Date	2020	2019	2018	2017	2016
6/11	0	0	8	61	19
6/12	0	0	8	91	27
6/13	0	5	8	98	27
6/14	13	5	8	106	49
6/15		5	8	145	72
6/16		5	8	175	80
6/17		5	15	190	105
EOS		1,051	10,277	11,588	5,304

Chum Salmon Table A3. Percent of run complete according to various historical run timing scenarios from the BTF.

Timing	Midpoint	6/14 Cumulative %
Earliest	6/22	7%
Early 10%	6/30	4%
Early 25%	7/2	2%
Median	7/5	1%
Late 25%	7/7	<1%
Late 10%	7/10	<1%
Latest	7/17	<1%

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Sockeye Salmon Appendix

Sockeye Salmon Table A1. Cumulative CPUE from the BTF.

Date	2020	2019	2018	2017	2016	5-Yr Avg.	2008 - 2019 Avg.
6/11	1	2	3	0	3	3	4
6/12	1	3	3	3	3	4	7
6/13	1	4	6	3	3	5	9
6/14	1	6	8	15	5	9	15
6/15		6	13	23	5	13	23
6/16		7	16	58	5	23	37
6/17		12	16	71	8	29	47
EOS		1,749	2,275	2,690	2,463	2,267	1,761

Sockeye Salmon Table A2. Cumulative CPUE from the ATF.

Date	2020	2019	2018	2017	2016
6/11	0	0	0	0	0
6/12	0	0	0	0	0
6/13	0	0	0	0	0
6/14	0	0	0	7	0
6/15		0	0	7	0
6/16		0	0	7	0
6/17		0	0	7	0
EOS		33	75	393	405

Sockeye Salmon Table A3. Percent of run complete according to various historical run timing scenarios from the BTF.

Timing	Midpoint	6/14 Cumulative %
Earliest	6/21	13%
Early 10%	6/23	8%
Early 25%	6/26	4%
Median	6/28	1%
Late 25%	6/30	<1%
Late 10%	7/6	<1%
Latest	7/9	<1%

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KUSKOKWIM RIVER SALMON MANAGEMENT WORKING GROUP (ATTENDANCE 2019-2020)

Seat	Member	Letter Sent ?/ETC	2019 Meetings							2020 meetings				
			17-May	5-Jun	14-Jun	21-Jun	26-Jun	3-Jul	10-Jul	14-Aug	28-Aug	20-Nov	5-May	8-Jun
DOWNRIVER ELDER	JAMES CHARLES		P	X	X	X	P	X	X	P	X	P	P	P
	JOHN W. ANDREW		P	X	P	X	P	X	X	X	P	X	P	P
UPRIVER ELDER	MISHKA ANDREANOFF	Yes 7/19	<i>Vacant</i>	X	X	X	X	X	X	X	X	X	X	X
LOWER RIVER SUBSISTENCE	MIKE WILLIAMS SR.		P	P	P	EXC	P	P	X	P	X	P	P	P
	ALISSA ROGERS		P	P	P	P	P	P	P	P	P	P	P	P
	MARY PELTOLA		P	P	X	P	P	P	EXC	X	X	P	P	P
MIDDLE RIVER SUBSISTENCE	MIKE SAVAGE	Yes 7/19	X	X	X	X	X	X	X	X	X	X	X	X
	LISA FEYEREISEN		P	P	P	P	P	P	P	P	P	P	P	P
	DARREN DEACON	still has interest	X	X	X	X	X	X	X	X	X	X	P	X
UPRIVER SUBSISTENCE	MARK LEARY		X	P	EXC	X	P	X	X	X	EXC	P	X	EXC
	BARBARA CARLSON		P	P	EXC	P	P	P	P	P	EXC	EXC	P	EXC
HEADWATERS	DANIEL ESAI	Yes 7/19	P	X	P	X	X	X	P	X	X	X	X	X
MEMBER AT LARGE	FRITZ CHARLES		EXC	X	X	X	P	P	P	X	X	X	P	P
	CHARLES GUEST	No contact	X	X	X	X	X	X	X	X	X	P	X	X
	ALBERT KAWAGLEY		X	X	X	X	EXC	X	X	P	P	X	X	P
	<i>BARBARA CARLSON</i>		P	P	EXC	P	P	P	P	P	EXC	EXC	P	EXC
WESTERN INTERIOR RAC	VACANT						<i>Vacant</i>							
YK DELTA RAC	BOB ALOYSIUS	Send Letter?	P	P	P	X	X	X	EXC	X	X	X	X	X
	<i>JOHN W. ANDREW</i>		P	X	P	X	P	X	X	X	P	X	P	P
PROCESSOR	VACANT						<i>Vacant</i>							
COMMERCIAL FISHING	CHARLIE BROWN	No contact	P	X	X	X	X	X	X	X	X	P	X	X
	GREG HOFFMAN, JR.		P	P	X	P	P	P	X	P	P	X	P	X
SPORT FISHING	LAMONT ALBERTSON		P	P	P	EXC	P	P	P	P	P	P	P	P
KRITFC	Robert Lekander (RES)							<i>Vacant</i>						
	James Nicori	Yes 7/19	X	X	X	X	X	X	X	X	X	X	X	X

P = Present

X = Absent

EXC = Excused Absence

Voting Members or Alternates Highlighted in Gray with a Bold Outline are those suggested for discussion