

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: 06/22/2020

Time: 6:00 p.m.

Place: Teleconference

Time Called to Order:

Chair: Mary Peltola

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:** _____

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
Working Group Coordinator**

Orutsararmiut Native Council (ONC) Inseason Harvest Monitoring Weekly Report

June 22, 2020

Throughout the week of June 15, ONC fisheries crew conducted surveys at 38 Bethel area fish camps. ONC fisheries crew also gathered information from 252 unique fishing trips at the Bethel boat harbor and at Bethel area fish camps. The comments shared with our crew highlighted the warm water temperatures and observed the fish to be swimming very deep in the channel. Several fishers reported their Chinook salmon catches to be larger than usual this year, and especially when compared to last year. Many fishers also reported fishing to be relatively slow and described fishing as combative. Throughout the week fishers stated a few of their fish had sores, parasites, white discoloration on the flesh and reddish-purple speckles on the flesh which smelled rancid. One fisher complained about the most recent Federal Special Action that was proposed. Fishers around Bethel have been inquiring about when there will be another fishing opener. Through our direct interactions with fishers it is clear that many families have yet to come close to meeting their subsistence needs for salmon this season. Several fishers, similar to the June 12 and June 15 opportunities, requested more fishing openers.

Table 1. Average fish harvest, net length and mesh size range reported by surveyed Bethel area fish camps and Bethel boat harbor from the June 15 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	98	5.5	~1	~1	<1	25-300 (ft.)	4-6"
Bethel Fish Camps	29	10.4	~1	~2	<1	50-300 (ft.)	5.5-6"

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 18 fishing opportunity.

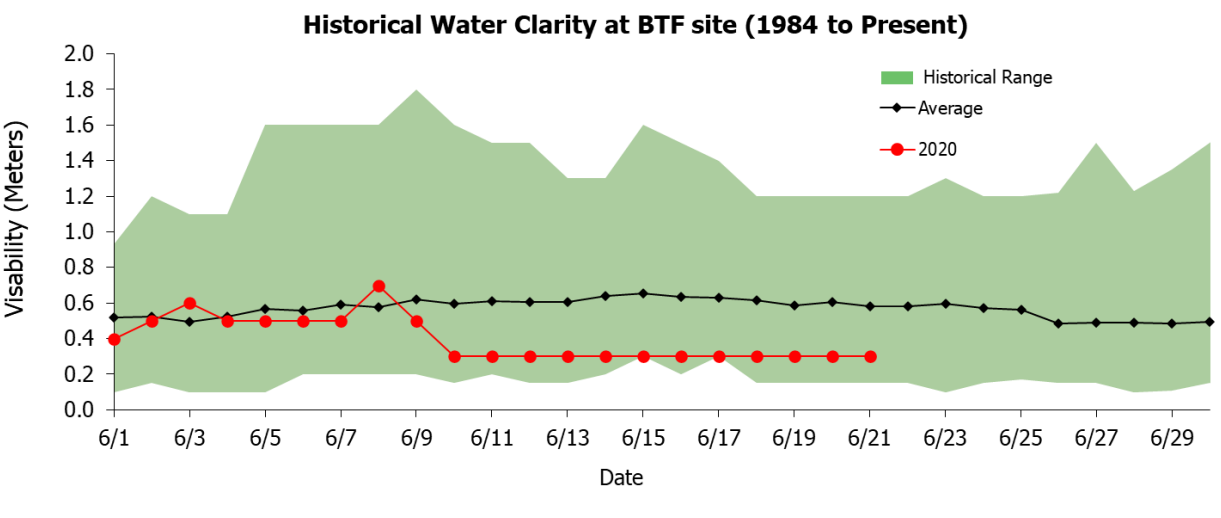
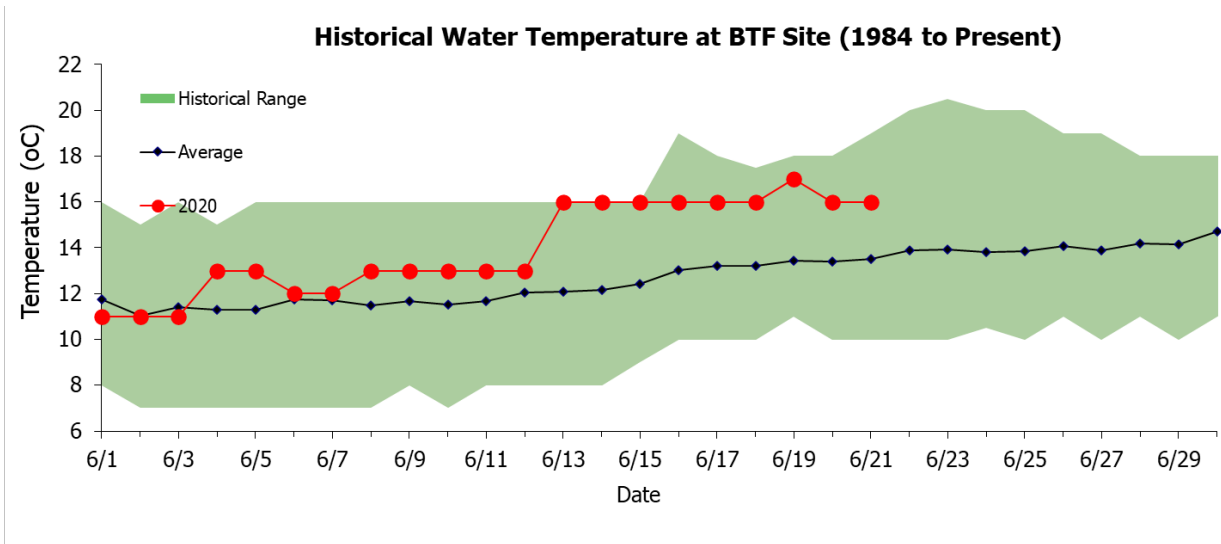
Data Source	Number of Surveys Conducted	Average Chinook Salmon Harvest	Average Chum Salmon Harvest	Average Sockeye Salmon Harvest	Average other harvest	Net Length Range (ft.)	Mesh Size Range (in.)
Bethel Boat Harbor	92	7	1.5	1.6	<1	25-300 (ft.)	5-6"
Bethel Fish Camps	33	12.9	3.2	3.4	~1	40-300 (ft.)	5.5-6"

Table 3. Number of surveys conducted and average fish harvest reported by surveyed Bethel area fish camps and Bethel boat harbor from fishing opportunities in mid-June of 2018-2020.

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	6/18	Boat Harbor	92	7	1.5	1.6	<1
		Bethel Fish Camps	33	12.9	3.2	3.4	~1
2019	6/19	Boat Harbor	93	11.4	1.4	2.7	<1
		Bethel Fish Camps	40	19.4	~3	5.7	<1
2018	6/16	Boat Harbor	90	4.8	2.7	<1	<1
		Bethel Fish Camps	24	11.3	4.0	1	<1

Fish Distribution

From June 15-June 21, we delivered 47 Chinook salmon, 7 chum salmon, 11 red salmon and 3 whitefish to Bethel area Elders. These fish were caught by the Alaska Department of Fish & Game Bethel Test Fishery.



Crooked Creek water gauge is out of operation.

Kuskokwim River Salmon Assessment Update

6/21/2020



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 Ben 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>

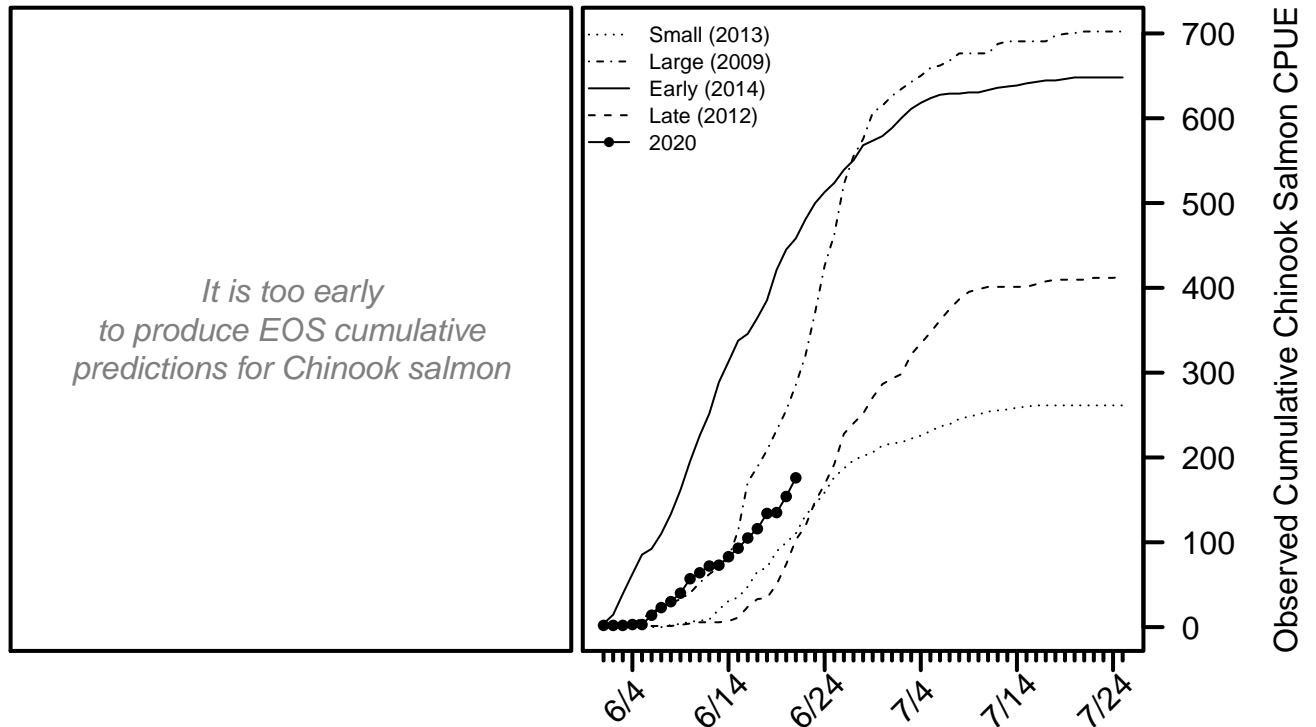
For the most up-to-date information regarding fishing opportunities please visit:

- 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 (6/21)

- The BTF daily CPUE was **22**.
- The BTF cumulative CPUE is now **176**.
- **25%** years since 2008 fell below this cumulative CPUE on this date.
- **46%** of the run is complete based on historical average run timing.
- **35% - 57%** of the run is complete based the central 50% of all historical run timing scenarios.
- **19% - 20%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, Chinook salmon made up **57%** of the BTF catches, compared to **18%** 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.



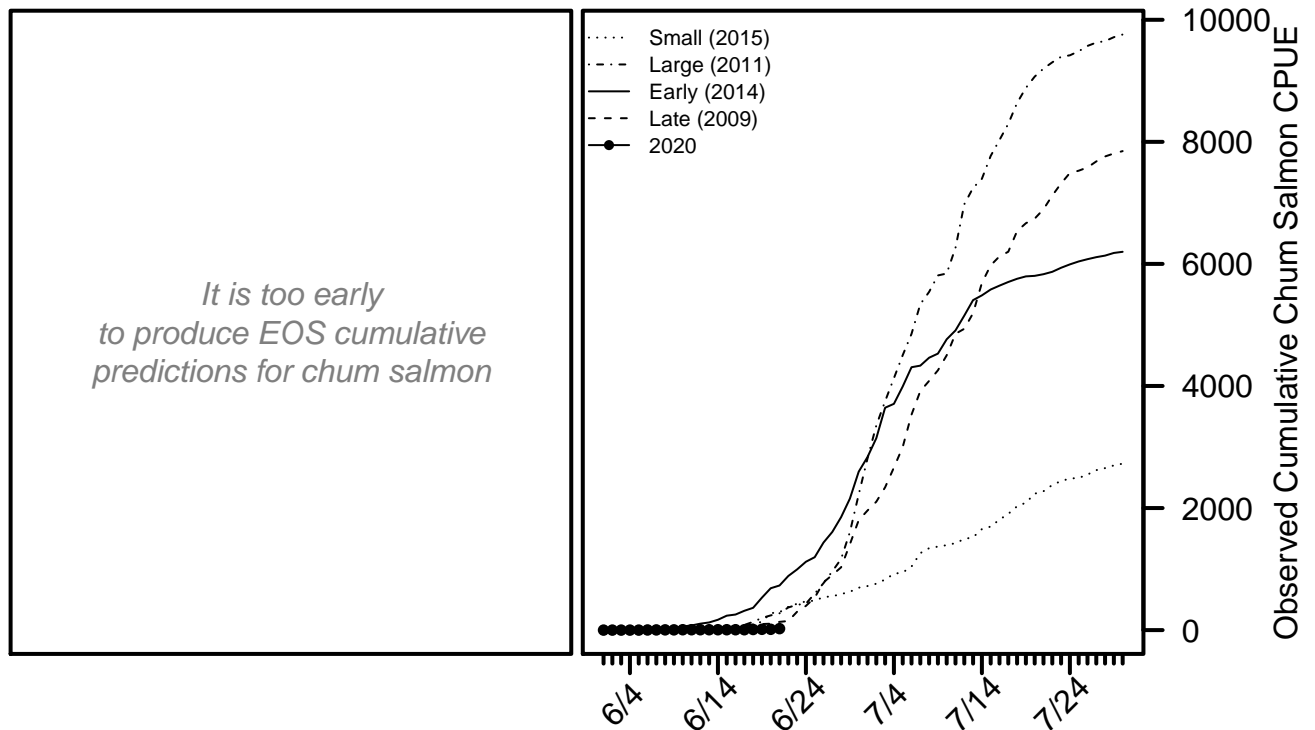
For more detailed information, see the [Chinook salmon appendix](#) at the end of this document.

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Chum Salmon BTF Summary (6/21)

- The BTF daily CPUE was **11**.
- The BTF cumulative CPUE is now **24**.
- **0%** years since 2008 fell below this cumulative CPUE on this date.
- **7%** of the run is complete based on historical average run timing.
- **3% - 13%** of the run is complete based the central 50% of all historical run timing scenarios.
- **7% - 15%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, chum salmon made up **19%** of the BTF catches, compared to **50%** 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.



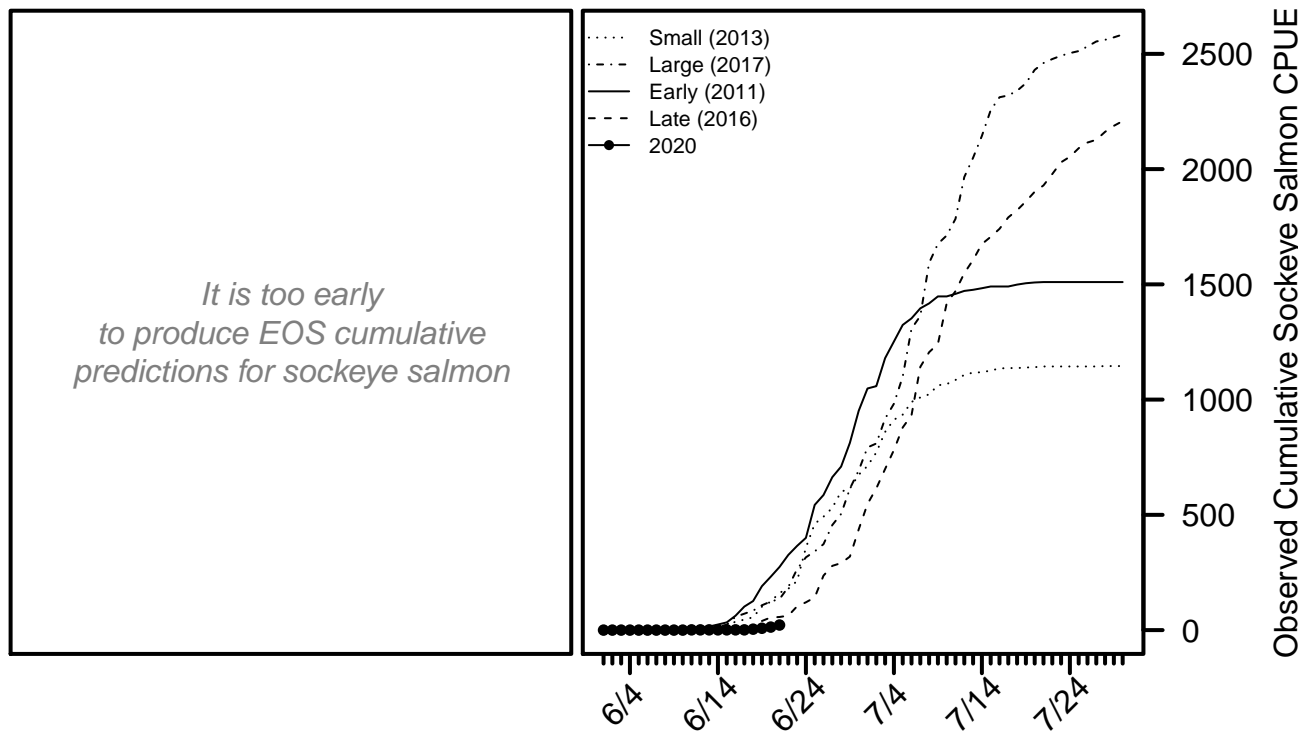
For more detailed information, see the [chum salmon appendix](#) at the end of this document.

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Sockeye Salmon BTF Summary (6/21)

- The BTF daily CPUE was **9**.
- The BTF cumulative CPUE is now **22**.
- **0%** years since 2008 fell below this cumulative CPUE on this date.
- **14%** of the run is complete based on historical average run timing.
- **8% - 24%** of the run is complete based the central 50% of all historical run timing scenarios.
- **16% - 27%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, sockeye salmon made up **24%** of the BTF catches, compared to **32%** 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.



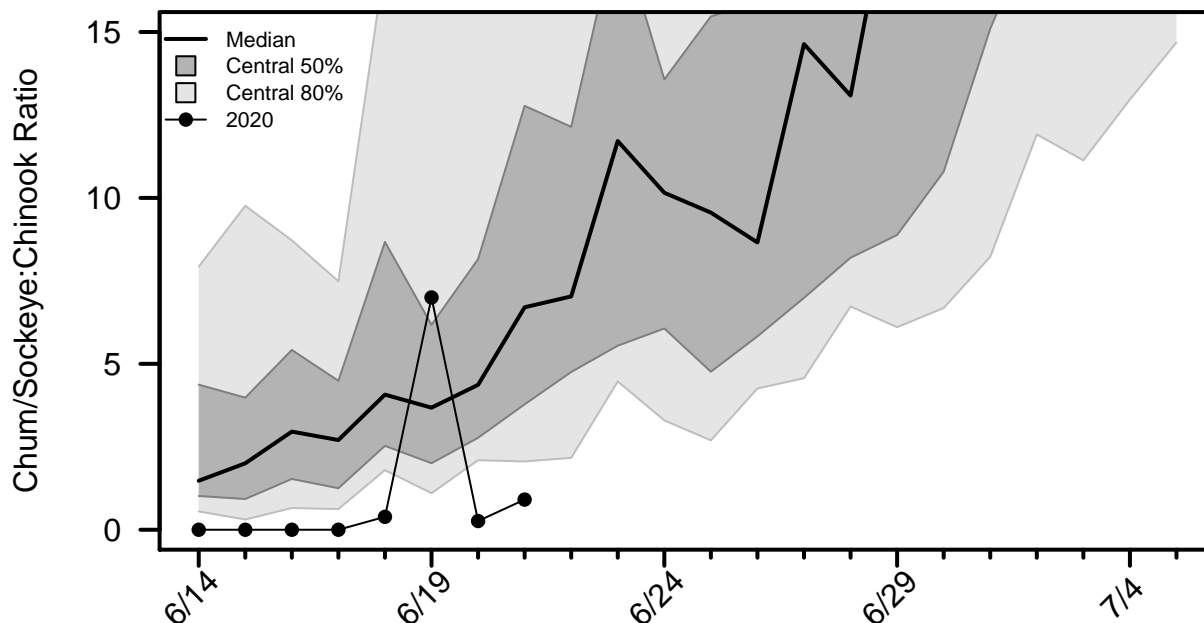
For more detailed information, see the [sockeye salmon appendix](#) at the end of this document.

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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 in the BTF 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.

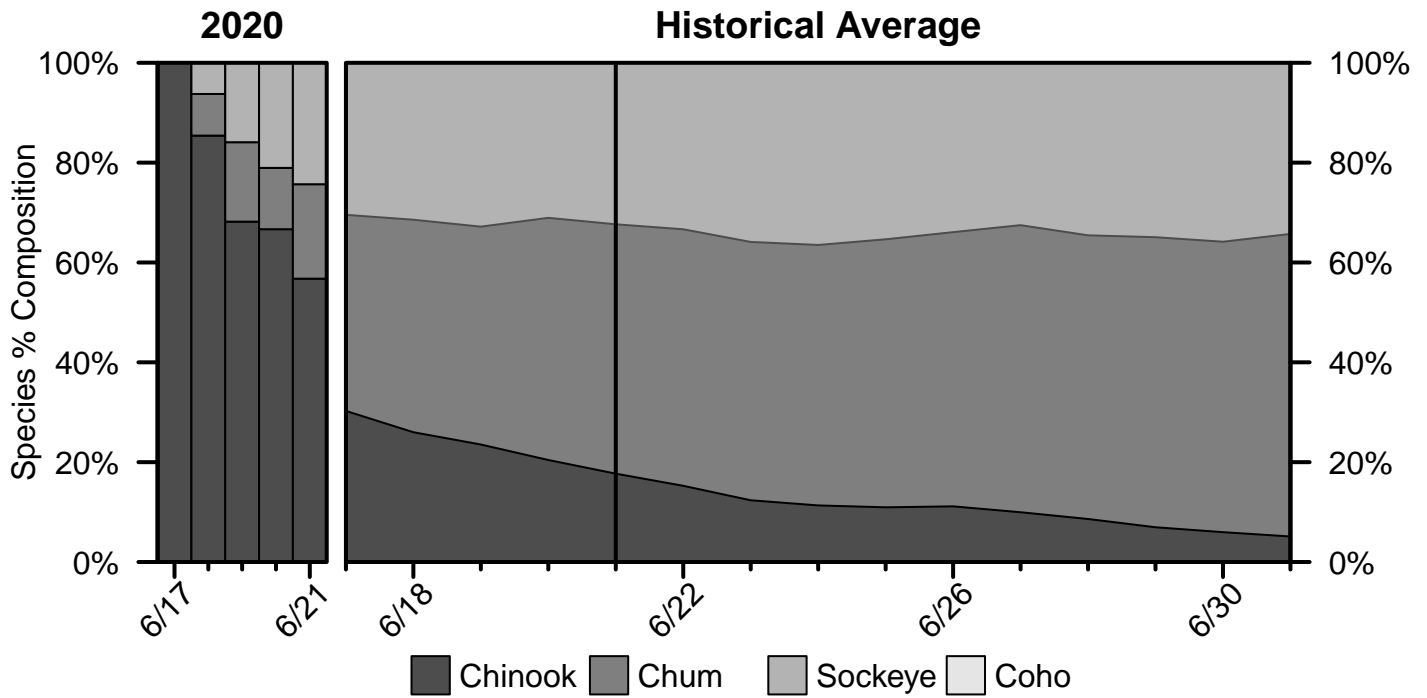
Date	2020 BTF	BTF Median	BTF Lower 10%	BTF Upper 10%	2020 ATF
6/18	0.39	4.07	1.8	17.12	0
6/19	7	3.68	1.1	16.96	0.47
6/20	0.26	4.37	2.1	37	0.12
6/21	0.91	6.7	2.06	17.54	0.5
6/22		7.03	2.17	18.48	
6/23		11.71	4.47	25.69	
6/24		10.15	3.3	45.86	

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.

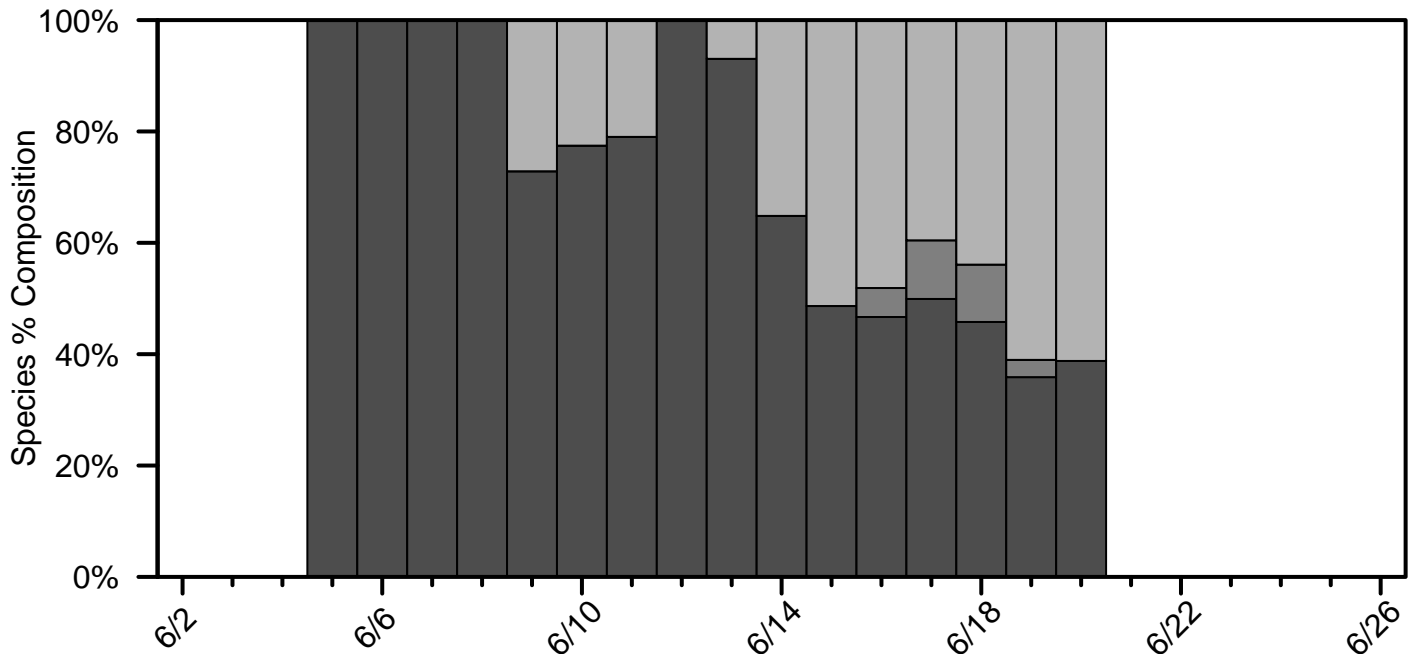
Date	Ratio > 3	Ratio > 5	Ratio > 7	Ratio > 10	Ratio > 20
6/18	81%	58%	44%	36%	11%
6/19	86%	69%	50%	39%	14%
6/20	89%	75%	64%	47%	22%
6/21	92%	89%	72%	58%	22%
6/22	94%	94%	78%	64%	22%
6/23	97%	94%	83%	67%	33%
6/24	97%	94%	86%	75%	39%

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 3 days.



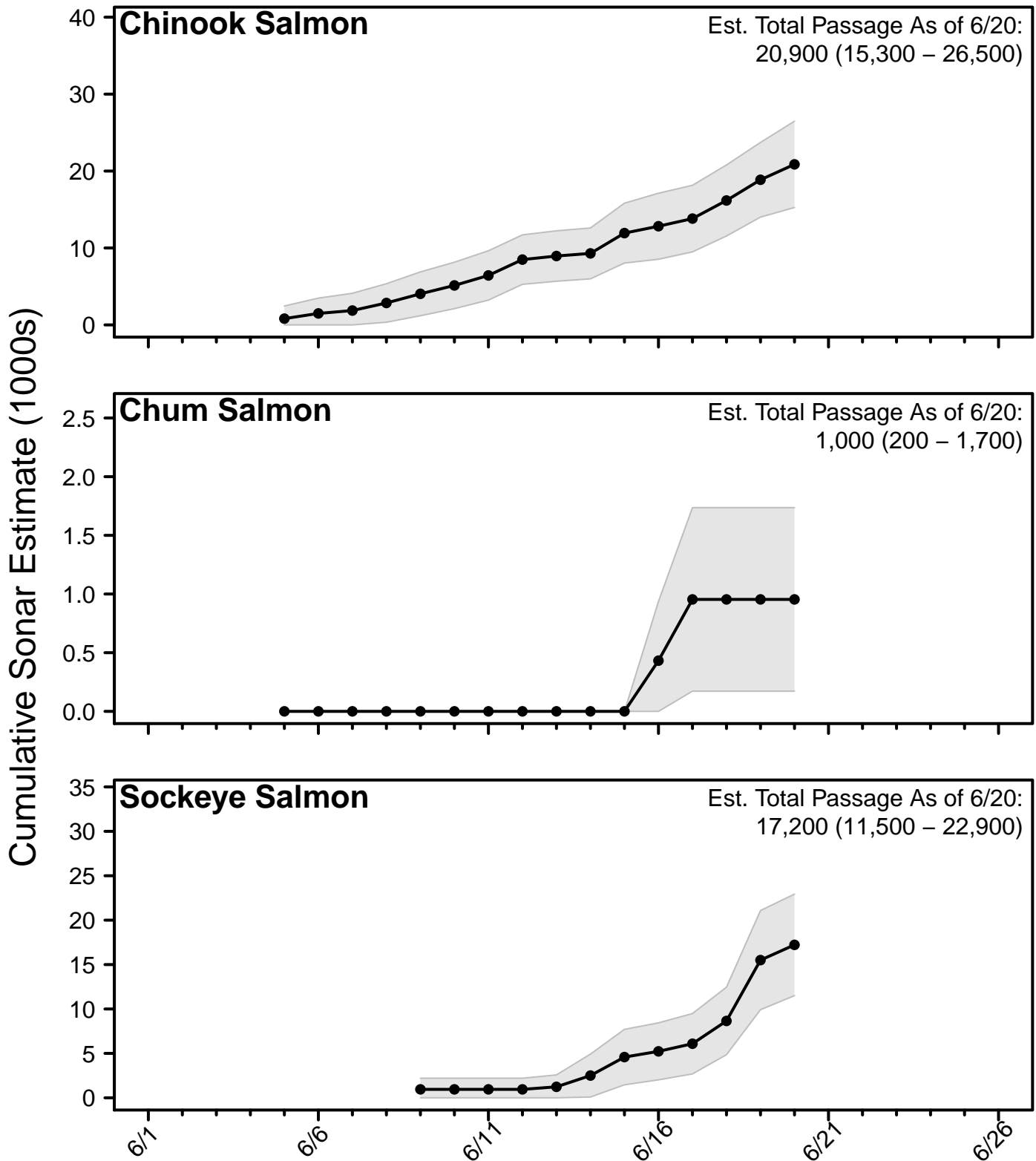
Species Composition Figure 2. Species percent composition from the sonar estimates from 2020 (salmon species only, excluding pink salmon). The composition presented on each day represents the average composition over the past 3 days.



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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.



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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	750	20.48	10.73
6/9	670	1,390	14.74	6.79
6/12	3,090	4,480	11	5.9
6/15	5,080	9,510	10	6.18
6/18	8,160	17,590	6	4.07

Harvest Table 2. 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	13.79
6/9	60	150	40.55	10.12
6/12	460	560	21	8.94
6/15	790	1,300	13	6.22
6/18	2,040	3,330	10	4.74

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	22.67
6/9	30	50	61.24	16.99
6/12	90	140	22	9.39
6/15	610	760	13	8.72
6/18	2,060	2,720	12	6.07

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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.
6/18	134	330	189	47	266	214	189
6/19	135	339	199	71	278	229	210
6/20	154	385	213	81	304	251	232
6/21	176	438	221	94	318	273	255
6/22		483	235	109	340	298	279
6/23		523	275	121	357	322	305
6/24		561	306	148	378	348	328
EOS		848	667	374	687	640	575

Chinook Salmon Table A2. Cumulative CPUE from the ATF.

Date	2020	2019	2018	2017	2016
6/18	140	795	135	726	1,189
6/19	167	810	135	792	1,304
6/20	218	836	141	906	1,334
6/21	245	836	165	1,081	1,386
6/22		953	172	1,244	1,403
6/23		973	172	1,481	1,435
6/24		1,023	180	1,645	1,470
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	6/21 Cumulative %
Earliest	6/13	76%
Early 10%	6/16	66%
Early 25%	6/20	57%
Median	6/21	46%
Late 25%	6/23	35%
Late 10%	6/26	26%
Latest	7/2	18%

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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.
6/18	10	18	244	206	58	123	151
6/19	13	20	314	326	61	172	213
6/20	13	32	405	345	120	236	272
6/21	24	52	447	388	209	278	342
6/22		58	518	482	239	336	431
6/23		100	716	565	283	419	534
6/24		121	787	698	353	486	621
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
6/18	13	5	32	206	113
6/19	26	5	95	222	137
6/20	32	5	137	271	153
6/21	45	5	168	417	196
6/22		5	209	607	221
6/23		19	264	728	229
6/24		31	286	927	307
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	6/21 Cumulative %
Earliest	6/22	30%
Early 10%	6/30	20%
Early 25%	7/2	13%
Median	7/5	7%
Late 25%	7/7	3%
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.
6/18	4	15	16	84	18	38	60
6/19	8	17	19	108	39	52	87
6/20	13	32	33	124	55	69	108
6/21	22	47	33	135	57	76	135
6/22		73	46	187	63	111	177
6/23		91	72	265	103	150	221
6/24		108	91	316	120	172	264
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
6/18	0	0	0	7	0
6/19	0	0	0	7	0
6/20	0	0	0	7	0
6/21	0	0	0	7	0
6/22		0	0	58	0
6/23		0	0	67	0
6/24		0	0	67	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	6/21 Cumulative %
Earliest	6/21	46%
Early 10%	6/23	34%
Early 25%	6/26	24%
Median	6/28	15%
Late 25%	6/30	8%
Late 10%	7/6	4%
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	15-Jun
DOWNRIVER ELDER	JAMES CHARLES		P	X	X	X	P	X	X	P	X	P	P	P	P
	JOHN W. ANDREW		P	X	P	X	P	X	X	X	P	X	P	P	X
UPRIVER ELDER	MISHKA ANDREANOFF	Yes 7/19	<i>Vacant ?</i>	X	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	X
	ALISSA ROGERS		P	P	P	P	P	P	P	P	P	P	P	P	X
	MARY PELTOLA		P	P	X	P	P	P	EXC	X	X	P	P	P	P
MIDDLE RIVER SUBSISTENCE	MIKE SAVAGE	Yes 7/19	X	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	EXC
	DARREN DEACON	still has inter	X	X	X	X	X	X	X	X	X	X	X	X	X
UPRIVER SUBSISTENCE	MARK LEARY		X	P	EXC	X	P	X	X	X	EXC	P	X	EXC	EXC
	BARBARA CARLSON		P	P	EXC	P	P	P	P	P	EXC	EXC	P	EXC	P
HEADWATERS	DANIEL ESAI	Yes 7/19	P	X	P	X	X	X	P	X	X	X	X	X	X
MEMBER AT LARGE	FRITZ CHARLES		EXC	X	X	X	P	P	P	X	X	X	P	P	P
	CHARLES GUEST	No contact	X	X	X	X	X	X	X	X	X	P	X	X	X
	ALBERT KAWAGLEY		X	X	X	X	EXC	X	X	P	P	X	X	P	X
	BARBARA CARLSON		P	P	EXC	P	P	P	P	P	EXC	EXC	P	EXC	P
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	X
	JOHN W. ANDREW		P	X	P	X	P	X	X	X	P	X	P	P	X
PROCESSOR	VACANT						<i>Vacant</i>								
COMMERCIAL FISHING	CHARLIE BROWN	No contact	P	X	X	X	X	X	X	X	X	P	X	X	X
	GREG HOFFMAN, JR.		P	P	X	P	P	P	X	P	P	X	P	X	EXC
SPORT FISHING	LAMONT ALBERTSON		P	P	P	EXC	P	P	P	P	P	P	P	P	P
KRITFC	Robert Lekander (RES)						<i>Vacant</i>								<i>Vacant</i>
	James Nicori	Yes 7/19	X	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