

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: 05/16/2018

Time: 10:00a.m.

Place: Bethel

Time Called to Order:

Chair:

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.*

2018 ADF&G MANAGEMENT OVERVIEW– Aaron Tiernan (ADF&G) (10 min.)

2018 ADF&G SUBSISTENCE KING SALMON PERMIT– Dave Runfola (ADF&G) (5 min.)

PEOPLE TO BE HEARD:

SUBSISTENCE REPORTS FROM WORKING GROUP

OLD BUSINESS:

- Escapement goal review– Nick Smith (ADF&G) (45 min.)
- FACA process update– Barb Carlson (Co-Chair) (5 min.)
- Regional Planning Team (RPT) update– Barb Carlson (10 min.)
- Discussion of Working Group by-law review– Barb Carlson, Jen Peeks (ADF&G) (15 min.)
- April 3-4, 2018 WG motion: To elect LaMont Albertson as the working group representative on the Kuskokwim River Inter-Tribal Fish Commission (KRITFC). (5 min.)
- Board of Fisheries update– Jen Peeks (5 min.)

NEW BUSINESS:

- Letter of support for the Kuskokwim Sonar project- Nick Smith (10 min.)

COMMENTS FROM WORKING GROUP MEMBERS:

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



Alaska Department of Fish and Game

Kuskokwim River Subsistence King Salmon Permit 2018

What is the permit for?

- The permit gives households an opportunity to harvest a total of 10 king salmon when fishing is closed in state waters. The permit is free and completely voluntary. Households are not required to get a permit. Anyone interested in fishing for kings during a closure must have a permit. You do not need to have a permit when fishing is open, and you do not need a permit to fish for any other species of fish. You must have the permit on your person, in your personal gear, or in your boat if you plan to fish for kings during a closure.

Who is eligible for the permit?

- All Alaska residents.

When and where can I get a permit?

- Permits will be available by May 1, 2018 at various vendors in Kuskokwim River communities. Check your tribal council office or at a local store to ask if you can register for one.

When can I use the permit?

- You can use the permit after June 11, 2018. Alaska Department of Fish and Game will announce permit fishing openings in an Emergency Order.

Where on the river can I use the permit?

- In the Kuskokwim River drainage from the Yukon Delta National Wildlife Refuge boundary near the mouth of the Aniak River upriver to the Kuskokwim headwaters of the Kuskokwim.

Can I use the permit to fish on the refuge below the mouth of the Aniak River or in the Aniak River drainage?

- No.

What kind of gear can I use?

- The permit is subject to gear restrictions, but unless otherwise stated by emergency order, the following gear is allowed to be used under this permit: drift gillnets, set gillnets, dip nets, rod and reel, fish wheel, and beach seine.

Do I need a permit to fish all summer?

- No. The permit is intended to be used only when king salmon fishing is closed in State waters, above the refuge boundary at the mouth of the Aniak River and upriver to the Kuskokwim's headwaters. If king salmon fishing is open, you do not need to have a permit. If fishing is closed and you want to fish with the permit you must wait for an opening to be announced by Emergency Order.

I caught my 10 kings with the permit. Can I reuse it?

- No. The permit allows a household to harvest a maximum of 10 kings. Once the permit has been fulfilled, it can no longer be used.



Alaska Department of Fish and Game

Our village has a community fish wheel. How will the permit work if we get our fish from a fish wheel?

- The fish wheel can be used during closures as long as people collecting kings from the wheel have a permit. Record your harvests of up to 10 kings on your permit.

Can I keep other kinds of fish besides kings that I catch while I'm using the permit?

- Yes.

There are several fishers living in my household, including myself. Can we all get permits?

- No, but all of the names of fishers living in your household can be listed on the same permit. In other words, a household can have a permit that has several names listed on it as long as all of the names listed on the permit are people who all reside in the same household. Permits are issued to interested households on a per-household basis and not on an individual basis. Each household is eligible to receive 1 permit only regardless if multiple fishers all reside in the same household.

I usually fish for several households and they all want some kings. Can I catch some kings for them?

- Yes. You can continue to fish for other households and take advantage of this opportunity to get them some kings. If so, the households that you fish for must each have a permit and a member(s) of that household must have the permit on their person and be present with you on the boat during the fishing.

What if the people who I fish for are physically incapable of accompanying me on my boat during the fishing?

- The person fishing for a household that cannot fish for themselves would need to be in possession of not only their own household's permit but also the permit that belongs to the household they're fishing for.

What do I do with the permit after I've caught my ten kings?

- Record your household's fishing information on the permit and mail the permit to ADFG by 8/31/2018. Even if your household was issued a permit and didn't fish or didn't catch any kings, you still must fill it out and mail it in. The permit doesn't require any postage to mail it.

I've got more questions. How do I get more information?

- Alaska Department of Fish and Game:
 - **BETHEL: (907) 543-2433**
 - **ANCHORAGE: (907) 267-2353**
 - **EMAIL: dfg.sub.permits@alaska.gov**

List of Permit Vendors

Community	Name & Location	Phone	Email
Aniak	Laura Simeon Aniak TC	675-4349	aniaktribe88@yahoo.com
Napaimute	Dan Gillikin NVN	545-0564	dangillikin@gmail.com
Chuathbaluk	Tracy Simeon Chuathbaluk TC	467-4313	tracysimeon@gmail.com
Crooked Creek and Georgetown	Janine Stewman Thomas Trading Post	432-2224	crookedcreektraditionalcouncil@gmail.com azaukar@gmail.com
Sleetmute and Red Devil	Hill's Store	449-4227	bhillslq3@gmail.com
McGrath	ADF&G	524-3323	jon.barton@alaska.gov
Nikolai	Winchel Ticknor Nikolai City Office	293-2113	tg_twds@outlook.com
Bethel	ADF&G		aaron.tiernan@alaska.gov
Anchorage	ADF&G	907-267- 2353	dfg.sub.permits@alaska.gov



Alaska Department of Fish & Game 2018

Kuskokwim Subsistence King Salmon Fishery Permit

ALASKA RESIDENTS ONLY

Permit #

[Empty box for permit number]

Last Name

F I S H E R

First Name

J A N E

Initial

X

Mailing Address

P O B 9 9 9 9

City

A N I A K

State

A K

Zip Code

9 9 5 5 7

One Permit per Household

Total Household Members

0 2

King Salmon Limit

1 0

List All Household Members:

JANE X. FISHER, JOHN Q. PUBLIC

The total annual household possession limit for each King salmon permit during closures (except for preseason closures) is 10 chinook (King) salmon per household permit.

Please sign on reverse



Alaska Department of Fish & Game 2018

Kuskokwim Subsistence King Salmon Fishery Permit

ALASKA RESIDENTS ONLY

BOTH LOBES OF THE CAUDAL FIN (TAIL) MUST BE IMMEDIATELY REMOVED AND SALMON HARVEST MUST BE RECORDED PRIOR TO LEAVING FISHING SITE OR CONCEALING FISH FROM VIEW.



Last Name

F I S H E R

First Name

J A N E

Initial

X

Total Household Members

0 2

King Salmon Limit

1 0

List All Household Members:

JANE X. FISHER
JOHN Q. PUBLIC

This permit is for the Kuskokwim River upstream of Aniak as defined in 5 AAC 7.365. This permit may NOT be used during preseason closures. You must have this permit with you while fishing for chinook (King) salmon during other closures. This permit does not contain complete regulations pertaining to the Kuskokwim subsistence salmon fishery. The complete regulations in the Alaska Administrative Code are filed with the Lieutenant Governor. Copies of complete regulations are available at local Fish and Game offices.

TEAR HERE AND RETURN BOTTOM PORTION TO ADF&G. POSTAGE PREPAID.



Alaska Department of Fish & Game 2018

Kuskokwim Subsistence King Salmon Fishery Permit

Permit #

1 2 3 4

FISHING SEASONS AND DAILY FISHING PERIODS:

Did you fish for subsistence in 2018?

YES
 NO

This permit allows for chinook salmon fishing and harvest of no more than 10 chinook salmon in the waters above Aniak during times of conservation closures. This permit may NOT be used during preseason closures.

DATES	KING	While fishing for Chinook (King) salmon, did you catch other species?					TOTAL
		RED	PINK	CHUM	SILVER	OTHER	
JUN 29	5	0	0	2	0	0	7
JULY 2	5	1	0	6	0	0	7
S A M P L E							

Report each day you fished and record your harvest, even if you did not catch anything.



Upper portion to be retained by issuing officer and returned to the Alaska Department of Fish and Game, Division of Subsistence, in Anchorage.

SAMPLE

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 August 15, 2018.

Permit Holder Signature

Jane Fisher

Date

5-1-18

Issuing Officer Signature

MR. Fishngame

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}?

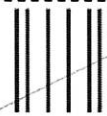
(Fish may be taken for subsistence purposes without a subsistence fishing permit, except as otherwise provided in this section.)

(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:

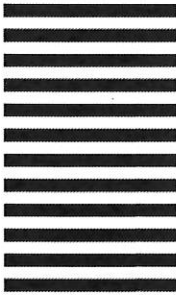
- (A) annual limit of 10 king salmon;
(B) fishing under the permit may not commence until the subsistence king salmon fishery opens after June 11 as described in 5 AAC 07.365;
(C) the commissioner may, by emergency order, implement one or more of the gear limitations specified in 5 AAC 01.270(n) (1) 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.

Horizontal lines for address



NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES



BUSINESS REPLY MAIL FIRST-CLASS MAIL PERMIT NO. 37 ANCHORAGE AK POSTAGE WILL BE PAID BY ADDRESSEE

SAMPLE

DIVISION OF SUBSISTENCE DEPARTMENT OF FISH AND GAME STATE OF ALASKA 333 RASPBERRY RD ANCHORAGE AK 99518-9981

YOU MUST REMOVE BOTH TIPS FROM THE TAIL FIN OF SALMON CAUGHT IN SUBSISTENCE FISHERIES



Kuskokwim River Escapement Goal Review and Chinook Salmon Run Reconstruction Model Review



Kuskokwim River Working Group Meeting
May 16, 2018

ESCAPEMENT GOAL OVERVIEW

ADF&G is responsible for establishing escapement goals consistent with state policy. An escapement goal review team made up of research and management biologists and biometricians from the divisions of Commercial Fisheries and Sport Fish reviews escapement goals every three years concurrent with the Board of Fisheries (BOF) regulatory cycle. In preparation for the 2019 BOF meeting, Kuskokwim Area escapement goals have been reviewed with new data since the last escapement goal review (i.e., 2015). A summary of potential changes to existing escapement goals are in Table 1.

Table 1.—Escapement goals and potential changes for Kuskokwim Management Area salmon stocks.

Stock unit	Assessment method	Escapement goal			Potential change
		Goal	Type	Year established	
Chum salmon (2 Goals)					
Kuskokwim Bay rivers					
Middle Fork Goodnews River	Weir	> 12,000	SEG	2005	No Change
Kuskokwim River tributaries					
Kogruluk River	Weir	15,000–49,000	SEG	2005	No Change
Sockeye salmon (4 goals)					
Kuskokwim Bay rivers					
Kanektok River	Aerial Survey	15,300–41,000	SEG	2016	No Change
Middle Fork Goodnews River	Weir	18,000–40,000	BEG	2007	Revise to SEG: 21,200-42,000
North Fork Goodnews River	Aerial Survey	9,600–18,000	SEG	2016	No Change
Kuskokwim River / tributaries					
Kogruluk River	Weir	4,400–17,000	SEG	2010	No Change
Coho salmon (3 goals)					
Kuskokwim Bay rivers					
Middle Fork Goodnews River	Weir	> 12,000	SEG	2005	Discontinue
Kuskokwim River / tributaries					
Kogruluk River	Weir	13,000–28,000	SEG	2005	No Change
Kwethluk River	Weir	> 19,000	SEG	2010	No Change
Chinook salmon (14 Goals)					
Kuskokwim Bay rivers					
Kanektok River	Aerial Survey	3,900–12,000	SEG	2016	No Change
Middle Fork Goodnews River	Weir	1,500–2,900	BEG	2005	Revise to SEG: 1,300-3,300
North Fork Goodnews River	Aerial Survey	640–3,300	SEG	2005	No Change
Kuskokwim River / tributaries					
Aniak River	Aerial Survey	1,200–2,300	SEG	2005	No Change
Cheeneetnuk River	Aerial Survey	340–1,300	SEG	2005	No Change
Gagarayah River	Aerial Survey	300–830	SEG	2005	No Change
Kisaralik River	Aerial Survey	400–1,200	SEG	2005	No Change
Salmon River (Pitka Fork)	Aerial Survey	470–1,600	SEG	2005	No Change
Salmon River (Aniak Drainage)	Aerial Survey	330–1,200	SEG	2005	No Change
Holitna River	Aerial Survey	970–2,100	SEG	2005	Discontinue
Run					
Kuskokwim River Drainage ^a	Reconstruction	65,000–120,000	SEG	2013	Pending Review
George River	Weir	1,800–3,300	SEG	2013	Pending Review
Kogruluk River	Weir	4,800–8,800	SEG	2013	Pending Review
Kwethluk River	Weir	4,100–7,500	SEG	2013	Pending Review

^a Run reconstruction is conducted postseason using a model to estimate total run from harvest and escapement monitoring projects.

OVERVIEW OF MODEL REVIEWS AND UPDATES

Like many tools, the run reconstruction model requires regular review and when necessary updates to ensure the estimates of total run and escapement are reasonable. Colleagues from USFWS, Bechtol Research, Auburn University, and others have investigated several issues related to the run reconstruction model. These issues include data weighting, model scaling, and model uncertainty to name a few. In addition, The Arctic-Yukon-Kuskokwim Sustainable Salmon Initiative (AYKSSI) commissioned an independent peer review of the Kuskokwim Chinook Salmon run reconstruction model. ADF&G has encouraged and facilitated external reviews by providing fishery and assessment orientations, filling data requests, and providing model codes. Additionally, ADF&G has convened a collaborative Kuskokwim River Interagency Model Development Team (KRIMDT) to consider options for incorporating new abundance data and improving the model. Finally, ADF&G undertook a four-year (2014–2017) effort to evaluate performance of the Kuskokwim River Chinook salmon model during years of low run abundance and develop additional independent estimates of the total run for model scaling purposes. The following is an overview of changes that have been made to the existing run reconstruction model and how these changes impact the historical interpretation of total run and escapement of Kuskokwim River Chinook salmon.

What refinements were made to the model and input data:

- Changed software used to run the model
- Changed underlying distribution for input data
- Change individual project variance to pooled variance by data type (e.g., aerial, weir).
- Revised 2003–2007 model scalars
- Added 2014–2017 model scalars
- Changed commercial catch formula

What are the effects:

- Improved estimation of total run and escapement
- Increased model stability
- Model changes resulted in smaller annual estimates (average approximately 11% or about 14,800 fish) of Kuskokwim River Chinook salmon run size compared to the published model (Table 1)
- Revised estimates decreased in 34 (81%) of 42 years (1976–2017) and increased in eight years (19%, Figure 1)
- The revised model produced total run size estimates that are on average 45,000 fish (28%) smaller for years 2014–2017
- Historical trends in abundance were similar between the two models, showing three distinct periods of high abundance followed by periods of low abundance (Figures 2 and 3)

Next Steps:

- Integrate revised total run and escapement estimates into management decisions.
- Escapement Goal Analysis
 - Preliminary analysis does not indicate a dramatic change in the goal
 - Follow up meeting with Kuskokwim River residents to discuss drainagewide goal
- Submit revised model and data to NPFMC for meeting on June 4–11, 2018 in Kodiak

Information on the upcoming NPFMC meeting that will be held in Kodiak can be found at:
<https://www.npfmc.org/upcoming-council-meetings/>

Table 1. – Comparison of published and revised total run size estimates for Kuskokwim River Chinook salmon based on the published (old) model (Bue et al. 2012; Hamazaki and Liller 2015) and the revised (new) model.

Year	Old Model		New Model		Percent	
	Total Run	CV	Total Run	CV	Difference	Difference
1976	233,967	13%	187,584	13%	-46,383	20%
1977	295,559	13%	348,824	18%	53,265	18%
1978	264,325	12%	241,781	12%	-22,544	9%
1979	253,970	16%	233,787	17%	-20,183	8%
1980	300,573	15%	357,950	25%	57,377	19%
1981	389,791	14%	308,660	16%	-81,131	21%
1982	187,354	9%	173,072	9%	-14,282	8%
1983	166,333	12%	148,278	10%	-18,055	11%
1984	188,238	14%	171,853	12%	-16,385	9%
1985	176,292	14%	143,568	10%	-32,724	19%
1986	129,168	11%	123,452	15%	-5,716	4%
1987	193,465	15%	186,184	13%	-7,281	4%
1988	207,818	9%	204,824	7%	-2,994	1%
1989	241,857	9%	214,081	10%	-27,776	11%
1990	264,802	9%	266,353	8%	1,551	1%
1991	218,705	10%	210,525	9%	-8,180	4%
1992	284,846	10%	259,154	7%	-25,692	9%
1993	269,305	11%	274,830	10%	5,525	2%
1994	365,246	14%	411,724	14%	46,478	13%
1995	360,513	11%	371,079	11%	10,566	3%
1996	302,603	14%	307,072	12%	4,469	1%
1997	303,189	13%	295,259	10%	-7,930	3%
1998	213,873	13%	184,356	13%	-29,517	14%
1999	189,939	12%	158,770	11%	-31,169	16%
2000	136,618	9%	129,138	7%	-7,480	5%
2001	223,707	11%	205,152	9%	-18,555	8%
2002	246,296	10%	226,106	8%	-20,190	8%
2003	248,789	9%	232,282	6%	-16,507	7%
2004	388,136	10%	366,725	6%	-21,411	6%
2005	366,601	9%	326,904	5%	-39,697	11%
2006	307,662	10%	326,067	6%	18,405	6%
2007	273,060	8%	244,754	5%	-28,306	10%
2008	237,074	9%	219,709	6%	-17,365	7%
2009	204,747	10%	189,370	7%	-15,377	8%
2010	118,507	8%	112,975	5%	-5,532	5%
2011	133,059	10%	113,749	6%	-19,310	15%
2012	99,807	14%	79,238	10%	-20,570	21%
2013	94,166	7%	84,311	5%	-9,855	10%
2014	135,749	15%	84,326	8%	-51,423	38%
2015	172,055	16%	125,058	6%	-46,997	27%
2016	176,916	16%	128,855	7%	-48,061	27%
2017	166,863	13%	133,267	8%	-33,596	20%
			Average		-14,775	11%

Source: Bue et al. 2012; Hamazaki and Liller 2015; Liller and Hamazaki 2016; Liller 2017; Smith and Liller 2018.

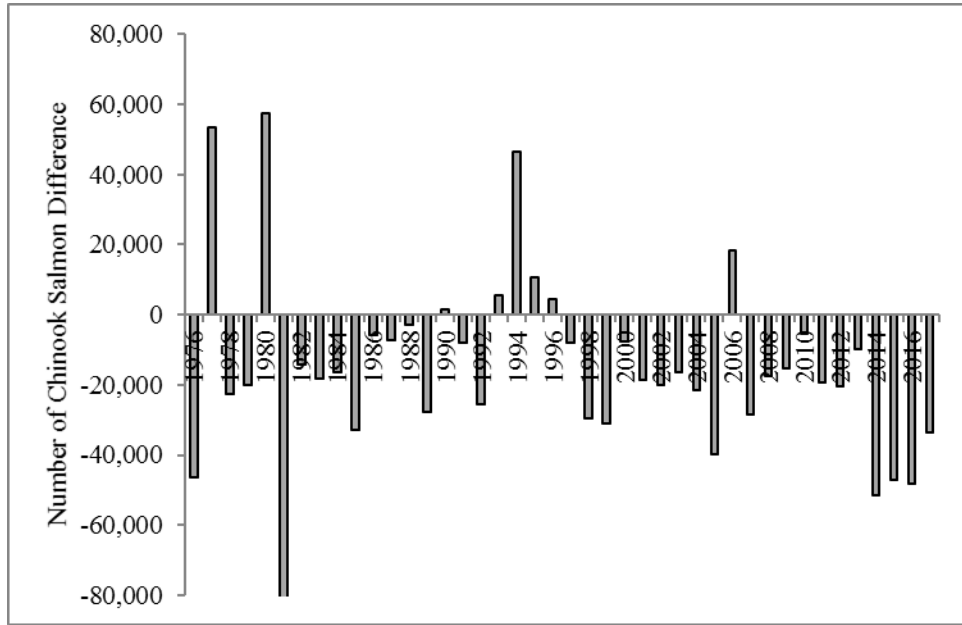


Figure 1. –Difference in the number of Chinook salmon estimated using the revised (new) maximum likelihood model compared to the published (old) model.

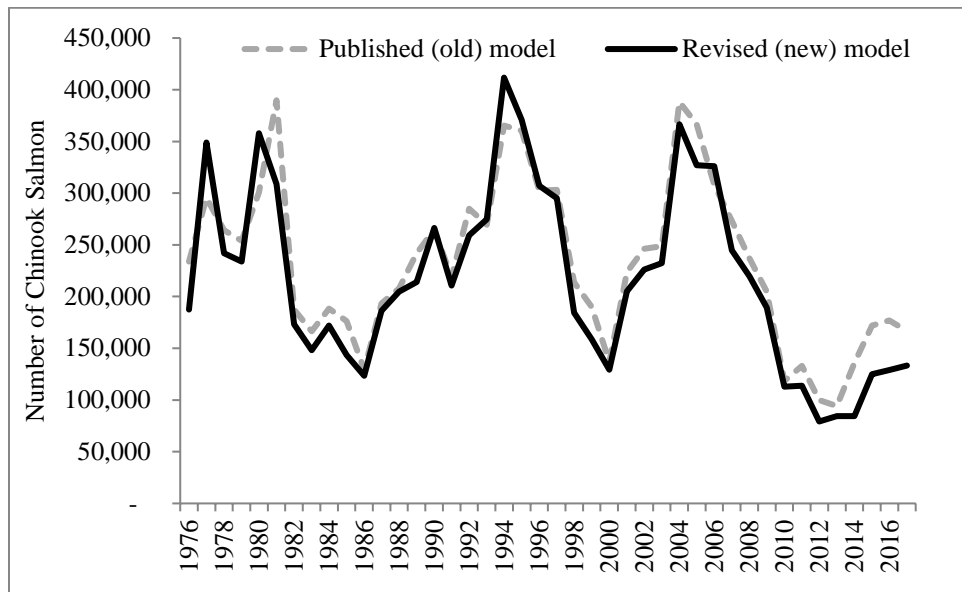


Figure 2.– Total abundance of Kuskokwim River Chinook salmon estimated using the revised (new) and published (old) maximum likelihood model.

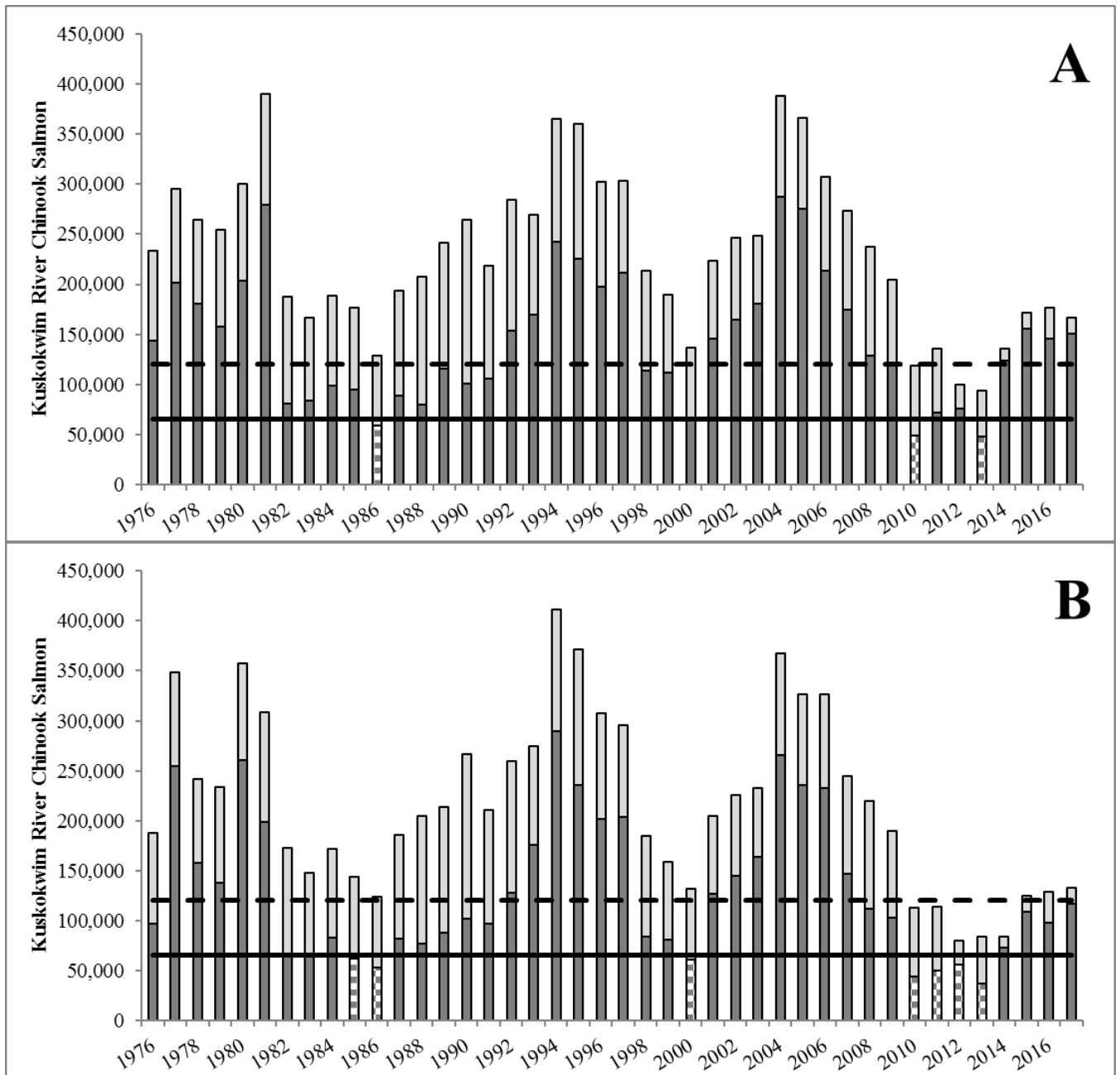


Figure 3.– Total run size of Kuskokwim River Chinook salmon based on the A) published (old) model and B) revised (new) model. Total run size is the sum of drainagewide escapement (dark gray bars) and total harvest (light gray bars). Escapements that fall below the lower bound of the drainagewide escapement goal of 65,000 fish (solid blackline) are highlighted with a checkered pattern. The upper bound of the drainagewide escapement goal of 120,000 is shown as the black dashed line. Note that the drainagewide escapement goal was established in 2013 and is shown for reference.