

Yukon River Summer Season 2017 Management Review

Presented by:

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(ADF&G)

YRDFA

Pre-season Planning Meeting

Anchorage, May 2018





2017 Review

Team Outreach

- Increased focus on tribal consultation and community input
- Subsistence Division staff joined the summer team
- Meetings held in season: Nulato, Grayling, Beaver, Fort Yukon
- Other communities visited (funded by TCC): Hughes, Huslia, Alakaket, Koyukuk, Kaltag, Galena, Ruby



Team Outreach

- Facebook Page launched with daily counts and news releases
- Streamlined news releases
- Increased use of toll free hotline
- YRDFA teleconferences attended in person in some villages
- Fish from test fisheries donated to communities when possible



2017 Preseason Planning Meeting

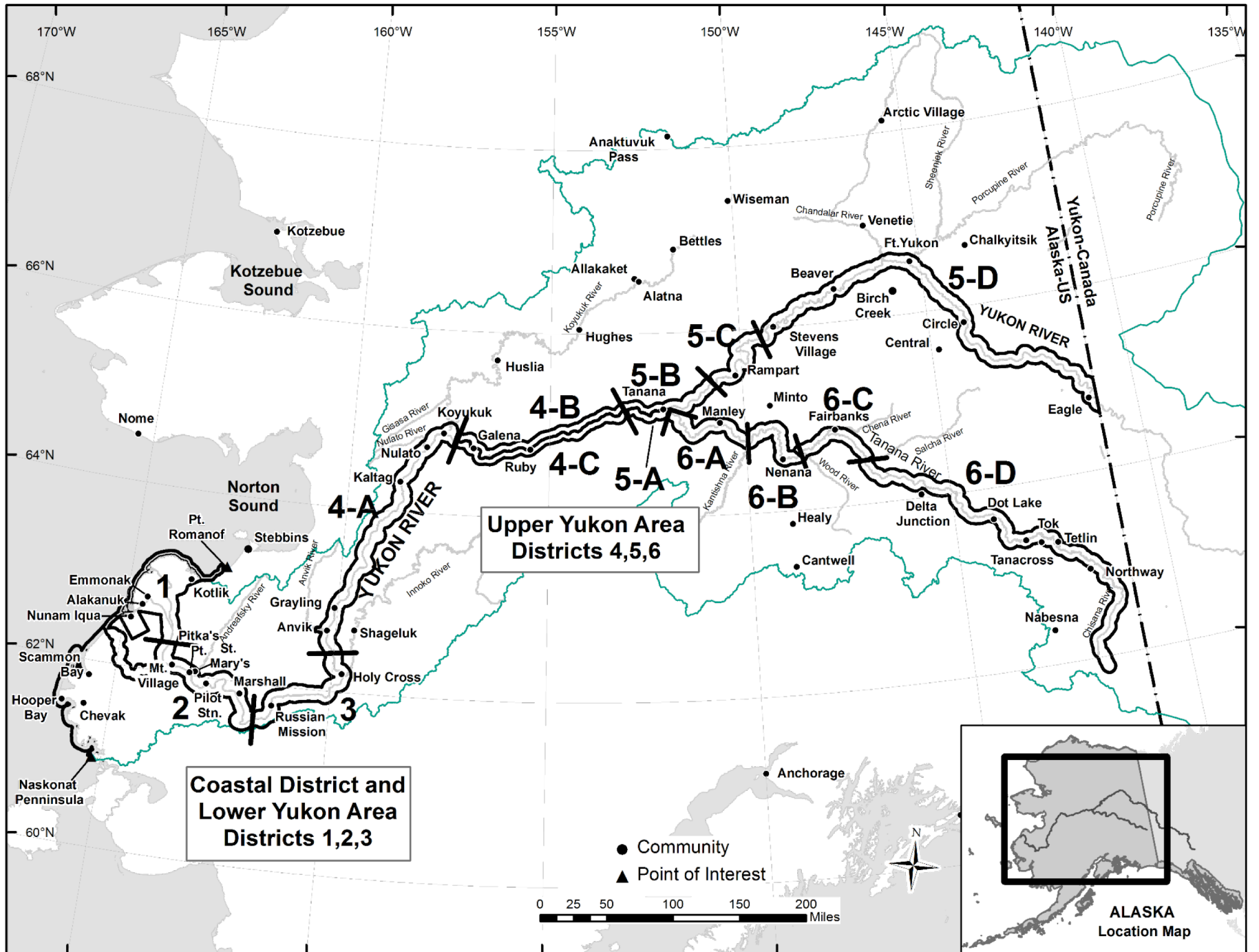
Shapes the management strategy with input from nearly every community (R&E funded), discussion included:

- Need to allow Chinook-directed openings if abundance warrants
- Offer Chinook opportunity sooner in the run
- Less short/surgical openings, use regulatory schedule instead and give plenty of notice
- Fishermen can take conservative actions on their own in addition to restrictions imposed by ADF&G

2017 Management Recap

- Expected a below average Chinook salmon run with an overlapping abundant summer chum run
- Took a conservative approach to management in order to meet escapement goals for Chinook
- Goal was to provide more Chinook salmon harvest than 2016 if the run size was strong enough





2017 Subsistence Management Actions

Early season:

- Reduced regulatory fishing schedule with 6" gillnets & retention from fish wheels
- Fishing with gillnets closed (once first pulse detected at Pilot)
- Selective gear fishing for summer chum (subsistence and commercial)

Once abundance indicated run above lower end of forecast:

- Reduced regulatory fishing schedule with 6" gillnets & retention from fish wheels

Once abundance indicated run at upper end of forecast:

- Regulatory schedule with 7.5" gillnets most districts

Regulatory “windows” schedule

Area	Fishing Periods
Coastal District, Koyukuk and Innoko Rivers	7 days/week
District 1	Two 36-hour periods/week
District 2	Two 36-hour periods/week
District 3	Two 36-hour periods/week
District 4	Two 48-hour periods/week
Subdistricts 5A, 5B, 5C	Two 48-hour periods/week
Subdistrict 5D	7 days/week
Subdistrict 6	Two 42-hour periods/week
Old Minto Area	5 days/week

2017 Summer Chum Commercial Management

- Limited buyer capacity in District 2
- Buyer returned to District 4 (Kaltag live-release fish wheels)
- Need to conserve Chinook salmon early in the season limits harvest of Summer Chum
- Selective gear types to start: dip nets, beach seines (live release)



2017 Summer Chum Commercial Management

- 6" or smaller mesh gillnets to target summer chum once Chinook run was projected to provide less restrictive subsistence harvest
- Approximately 0.5 Million summer chum harvested (over 1/3 from selective gear)
- ~5,600 Chinook salmon retained for personal use from commercial chum gillnets



2017 Summer Chum Commercial Management

- No sale of Chinook salmon during the summer season
- During first opening in fall season, 168 incidentally-caught Chinook salmon sold
- 99% of Chinook run had passed the Pilot Station sonar project
- No additional sales were allowed and Board of Fisheries guidance sought

Chinook (all stocks) Subsistence Harvest

Average 2007-2011	2015	2016	PRELIMINARY 2017
44,000	7,300	21,000	37,000

- Includes Chinook from test fisheries and commercial gillnet openings
- U.S. harvest of Canadian stock was ~56% of mainstem fish: 20,800



2017 Chinook Escapement (Alaskan stocks)

Escapement project	Current Goal	2017 Estimate*
EF Andreafsky River Weir	2,100 – 4,900	2,970 ✓
WF Andreafsky River Aerial	640 – 1,600	942 ✓
Anvik River Index Aerial	1,100 – 1,700	1,101 ✓
Nulato River Aerial	940 – 1,900	943 ✓
Chena River tower/sonar	2,800 – 5,700	4,201 ✓
Salcha River tower/sonar	3,300 – 6,500	4,195 ✓
Henshaw Weir	Average: 1,175	677
Gisasa Weir	Average: 2,203	1,083

* Point estimate. Uncertainty associated with each assessment method varies and is not represented here

2017 Summer Chum Escapement

Escapement project	Current goal	2017 Estimate
EF Andraefsky River Weir	>40,000	55,500
Anvik River Sonar	350,000–750,000	415,000
Drainage-wide	500,000–1.2 Million	3 Million +

* Estimates rounded. Uncertainty associated with each assessment method varies and is not represented here

Preseason expectations vs Post season reality

- **Preseason**, we *forecast* the Canadian-origin and drainage-wide Chinook runs, both based on Canadian-origin spawning parents
- **Post season**, we use Eagle sonar to assess the Canadian origin run, and that works well.

2017 Canadian-origin Chinook Management report card

	Preseason projections		Post Season
	Lower	Upper	Estimates
Pre-Season run size	70,000	97,000	~92,600
Spawning Escapement Goal (IMEG)	42,500	55,000	68,300
Total Allowable Catch:	15,000	54,000	38,000*
Canadian (23%)	3,500	12,500	3,500
U.S. (74%)	11,600	42,000	20,800

*total TAC if top end of goal achieved (55,000)

Preseason Expectations vs Post Season Reality

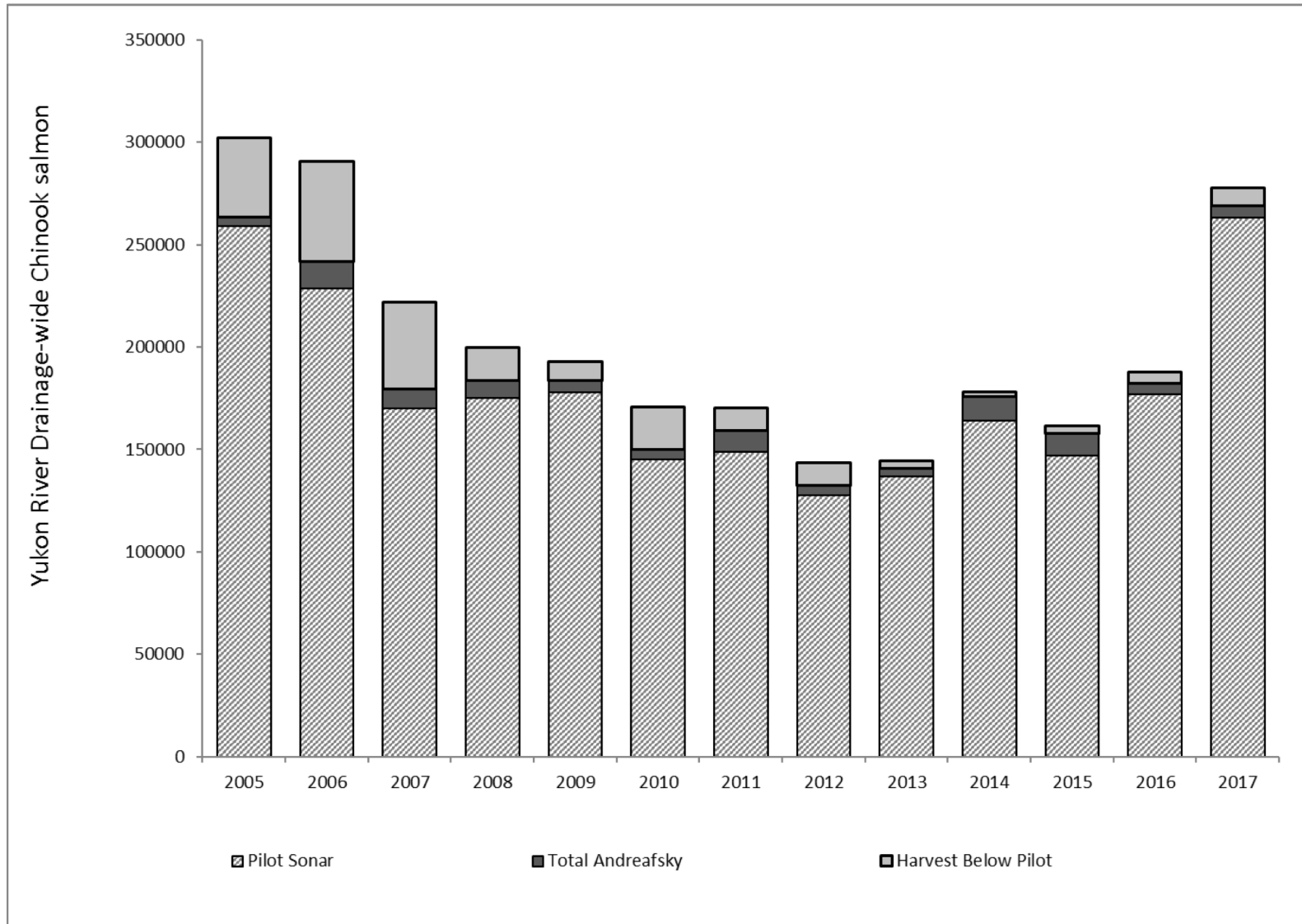
How do we assess the total run (drainage-wide) after the season?

Use our long term data sets:

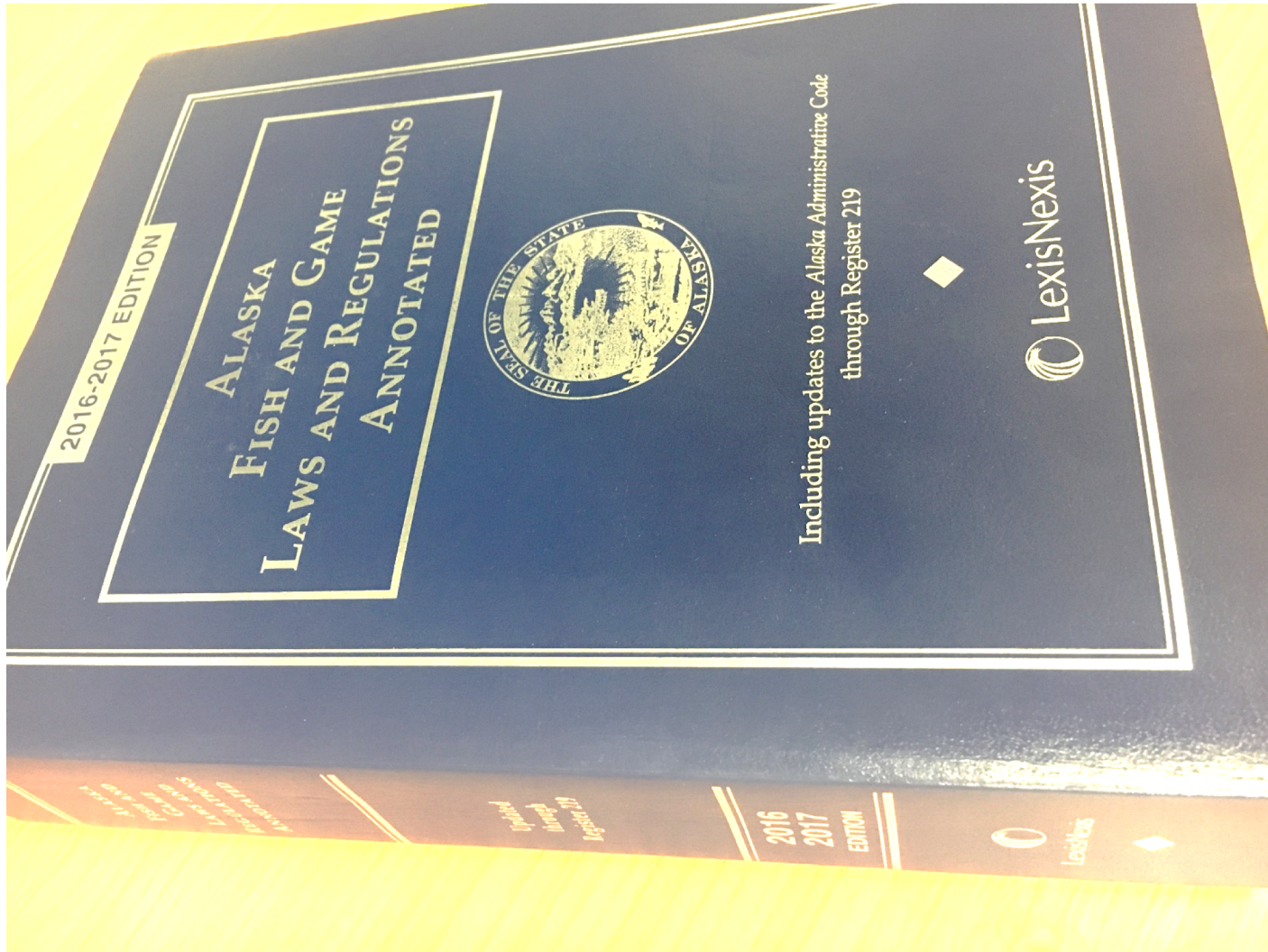
1. The end of season sonar count at Pilot Station
- 2) Then we add the fish harvested below Pilot Station
- 3) Then we add the fish that escaped into the Andreafsky river

This creates a reconstructed drainage-wide estimate post season

Drainage-wide Reconstructed Total Run (Pilot Station-based)



2018 Regulatory Changes made by the Board of Fisheries



Relevant Board of Fisheries Changes

Proposal 230:

District 4 B,C fishermen may use *drift* gillnet as well as set gillnets like Districts 1- 4A



Credit: Stephanie Quinn-Davidson/ Fish Commission

- A possible solution for people impacted by changing river conditions
- No need for separate Federal and State management actions
- May reduce crowding
- May reduce harvest of Koyukuk River Chinook
- May make harvests more efficient

Relevant Board of Fisheries Changes

Proposal 231:

Mandatory closure of first pulse in districts 1 and 2

- Based on run strength, department always has discretion to close fishing on any group of fish in any district
- Substitute language now only **REQUIRES** closure on first pulse in districts 1 and 2 if preseason forecast indicates poor run strength
- Precautionary management approach may mean restrictions (i.e. reduced fishing time) during early part of season, and possibly in more districts than Y1 and Y2, but not necessarily full closures

Relevant Board of Fisheries Changes

Proposal 232:

Sale of incidentally-caught Chinook salmon in commercial fishery

- Broad support from upriver and downriver stakeholders for department to have discretion to allow sales
- With priority on meeting escapement goals and providing subsistence opportunity
 - Including treaty agreements and harvest share objectives between U.S. and Canada

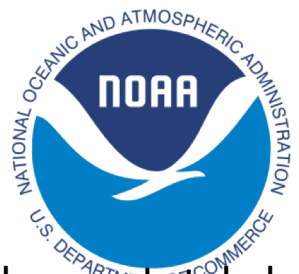


Credit: Stephanie Quinn-Davidson/ Fish Commission

Rebuilding Salmon Runs Together...



...in Consultation with Many Stakeholders



*Not a complete sample of all tribes and stakeholders

... Rebuilding Fish Camp Culture

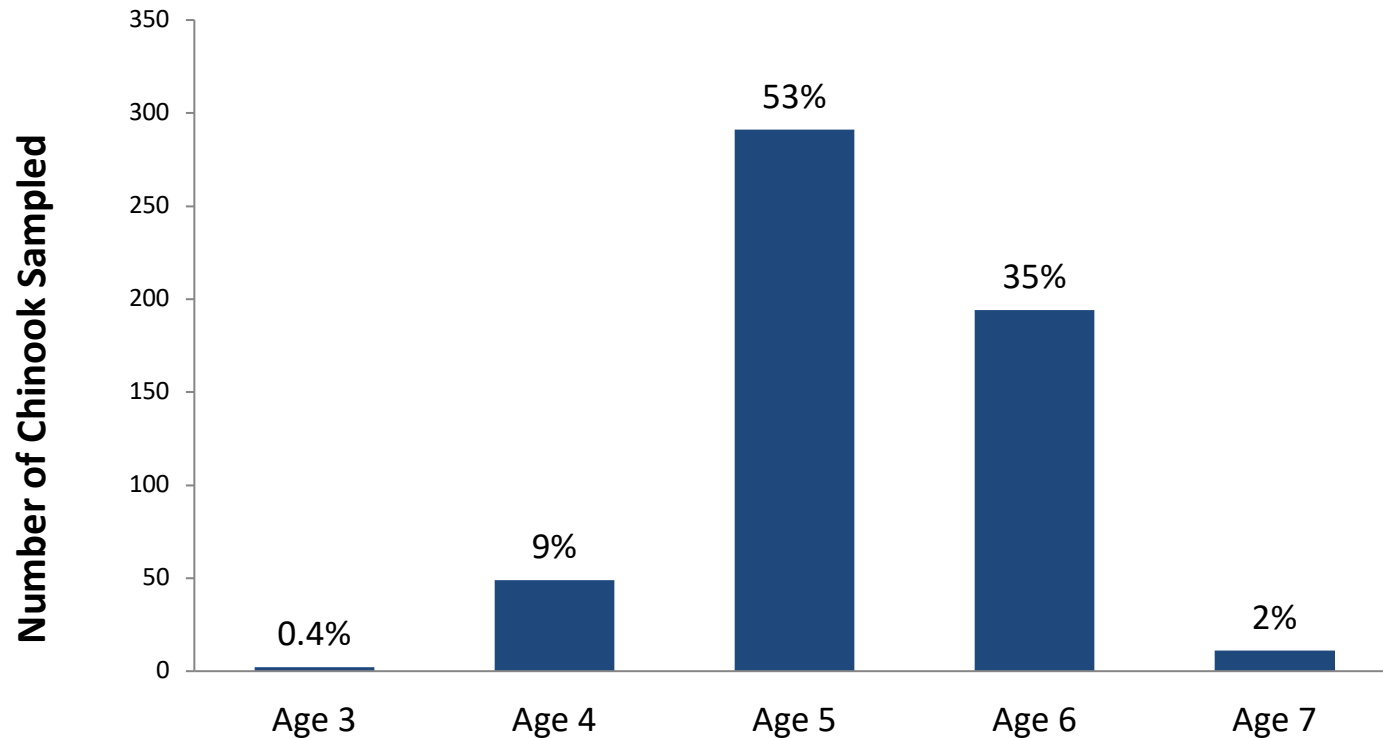


Questions?

Follow us at Yukon River Fishing- ADF&G

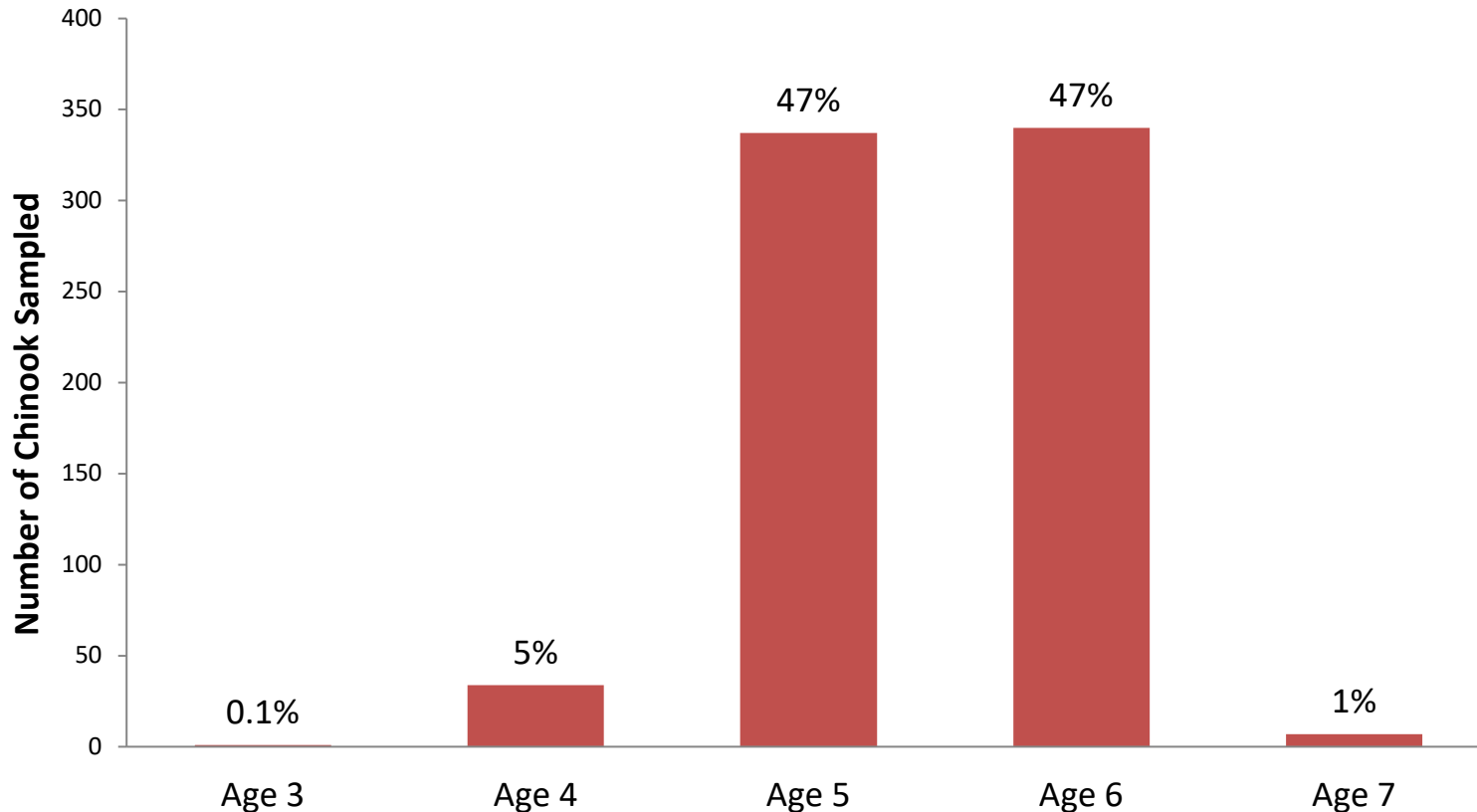


Chinook Age Composition Pilot Station



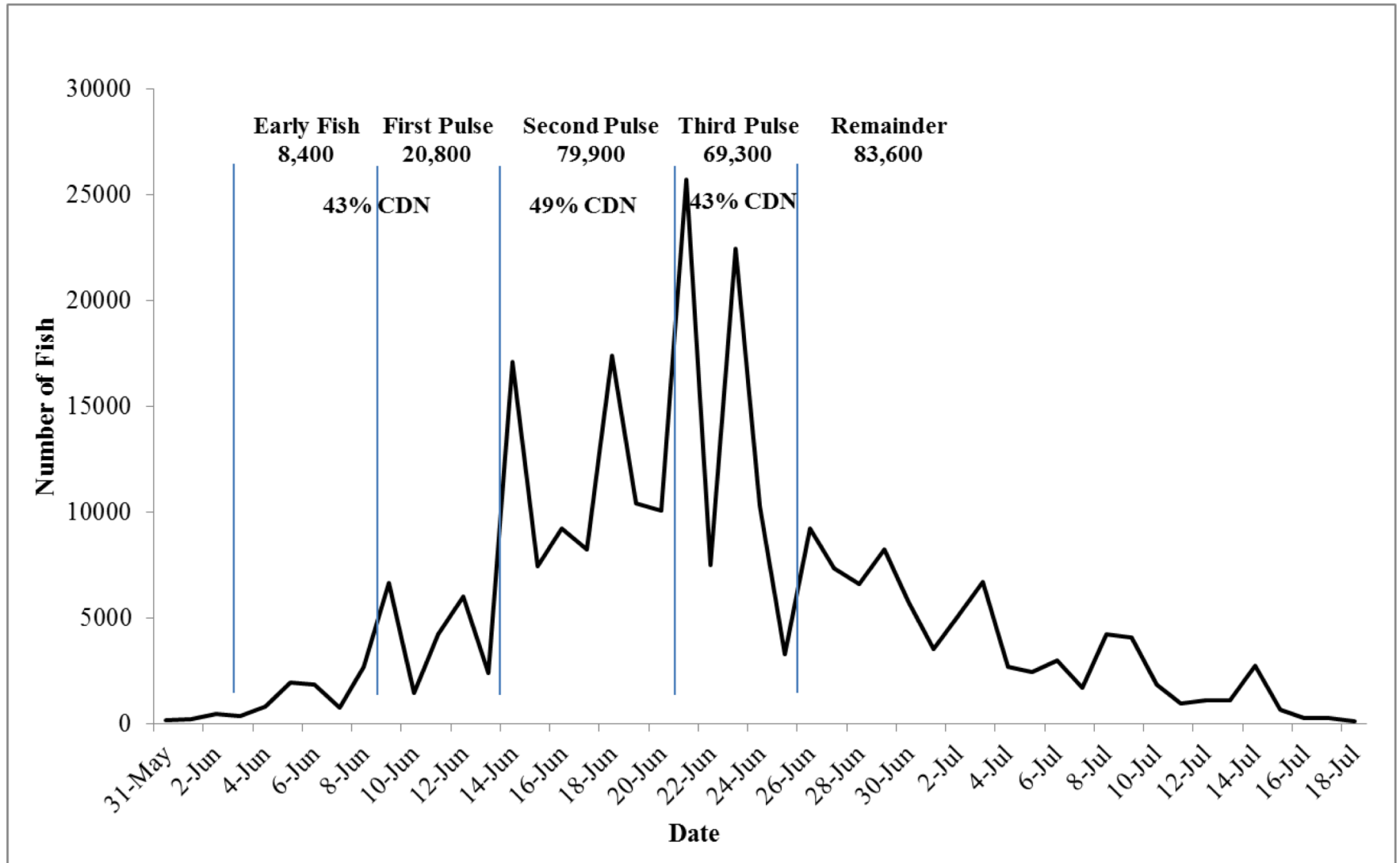
- Includes Lower River, Middle River, Upper US and Canadian stocks

Chinook Composition at Eagle Sonar



- 719 samples, second largest sample size since 2005
- 51% female, highest proportion female since 2005
- Chinook were about 17 mm larger than 2005-2016 average length

Chinook Pulses and GSI Strata at Pilot Station Sonar



2017 Chinook salmon travel time

Community	RIVER MILES	DAYS BETWEEN SITES	FIRST FISH	EARLY FISH	PULSE 1	PULSE 2
	Number of Days		1	6	5	7
	Dates at Pilot		3-Jun	3-Jun	9-Jun	14-Jun
	Pilot Station Passage			8,410	20,779	79,873
Travels in Miles Per Day		40	40	40	40	40
Emmonak	24	2.5	31-May	31-May	6-Jun	11-Jun
Y1/Y2 Border	63	1.5	1-Jun	1-Jun	7-Jun	12-Jun
Mt Village	87	0.9	2-Jun	2-Jun	8-Jun	13-Jun
Pilot Station	123	0.0	3-Jun	3-Jun	9-Jun	14-Jun
Marshall	161	1.0	4-Jun	4-Jun	10-Jun	15-Jun
Y2/Y3 Border	193	1.8	5-Jun	5-Jun	11-Jun	16-Jun
Russian Mission	213	2.3	5-Jun	5-Jun	11-Jun	16-Jun
Holy Cross	279	3.9	7-Jun	7-Jun	13-Jun	18-Jun
Y3/Y4A Lower Border	300	4.4	7-Jun	7-Jun	13-Jun	18-Jun
Travels in Miles Per Day		40	40	40	40	40

Y5D Lower/Y5D Middle Border	952	20.7	24-Jun	24-Jun	30-Jun	5-Jul
Fort Yukon	1,002	22.0	25-Jun	25-Jun	1-Jul	6-Jul
Y5D Middle/Y5D Upper	1,039	22.9	26-Jun	26-Jun	2-Jul	7-Jul
Circle	1,061	23.5	26-Jun	26-Jun	2-Jul	7-Jul
Canadian Border	1,224	27.5	1-Jul	1-Jul	7-Jul	12-Jul

District or Subdistrict	Regulatory schedule with 6-inch mesh	Selective gear ^a	Reduced schedule with 6-inch mesh	Surgical opening with 7.5-inch mesh	Regulatory schedule with 7.5-inch mesh
South Coastal	May 31				June 18
District 1 and North Coastal	May 31	June 11	10-hour openings June 19 and June 20	12-hour opening June 18	June 21: open except for commercial ^b
District 2	June 2	June 11	10-hour openings June 19 and June 20	12-hour opening June 18	June 21: open except for commercial ^c
District 3	June 6	June 11	June 18 ^c	24-hour opening June 20	June 21
4-A Lower	June 9	June 14			June 21
4-A Upper	June 11	June 17			June 25
4 -ABC		June 19			June 25
5-A, 5-B, and 5-C	June 27	June 23			June 27
5-D and Koyukuk, and Innoko Rivers					All season
District 6					June 12 to end of season ^d

2017 Commercial Harvest

Gear	Summer Chum Harvested	Chinook Released Alive	Chinook Kept for Personal Use
Dip Net & Beach Seine and Y4 manned wheels (selective)	286,400	4,700	
Gillnet/wheels	268,600		5,800
Total	555,000		

(not including any salmon caught in Fall Season)

Preliminary Alaska Subsistence Harvest

(all stocks)

District	Avg. 2007-2016	2017	2017 test fish	% from test fish
Coastal	1,200	1,115	0	0%
Y-1	4,000	4,577	912	20%
Y-2	5,500	4,585	88	2%
Y-3	2,600	2,294	0	0%
Y-4	7,000	8,730	0	0%
Y-5	8,100	14,579	0	0%
Y-6	900	778	0	0%
<i>Koyukuk River</i>	300	334	0	0%
Yukon Area Total	30,000	~37,000 (+23%)	~1,000	3%

2018 Relevant Board of Fisheries Changes

Proposal 232:

Sale of incidentally-caught Chinook salmon in commercial fishery

Substitute language for Proposal 232.

5 AAC 05.360. Yukon River King Salmon Management Plan.

(i) If the department projects that the Yukon River king salmon [ESCAPEMENTS] **abundance** [ARE BELOW] **will be insufficient to achieve** the escapement goals or king salmon subsistence fishing is restricted in more than one district or portion of a district, the commissioner shall, by emergency order, close a fishery and immediately reopen a fishery during which king salmon may be retained, but not sold. **If the department thereafter projects king salmon escapement goals will be met and king salmon subsistence fishing is not restricted in the district or portion of the district where commercial salmon fishing is open, and reasonable opportunity for subsistence uses of king salmon has been or will be provided within the season, the commissioner may, by emergency order, open a fishery during which incidentally caught king salmon taken during the summer and/or fall salmon commercial fisheries may be sold.**