

# 2018 Summer Season Outlook and Management Considerations



# 2018 Canadian-origin Chinook Outlook

---

- Joint Technical Committee forecast : 71,000- 103,000
- Indicates a Chinook run size similar to last year (~93,000)
- Likely to achieve escapement goals and harvest sharing objectives
- But could require subsistence harvest restrictions

# 2018 Chinook Drainage-wide Outlook

---

JTC 2018 forecast of Canadian-origin chinook:

71,000 to 103,000

The Canadian stock makes up  
41% of the run

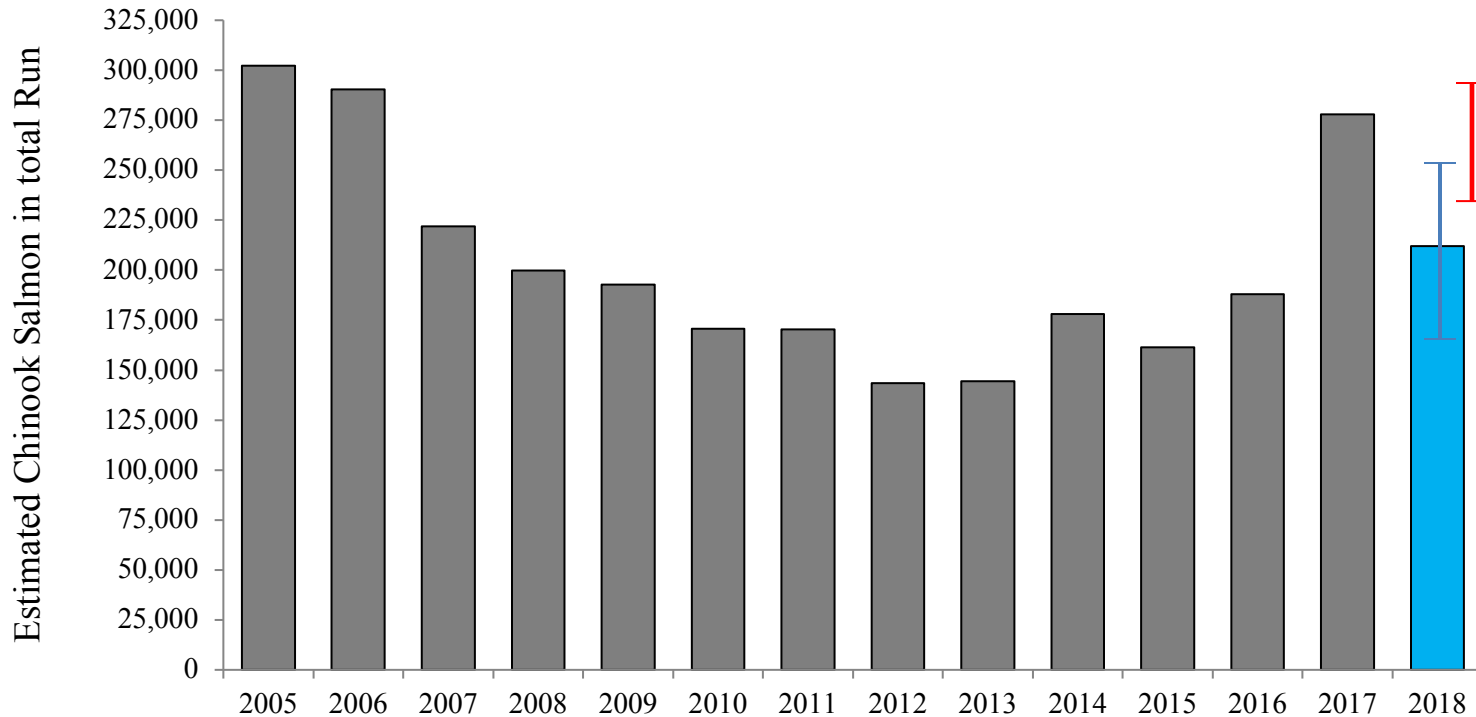
$$71,000 / .41 = 173,000$$

$$103,000 / .41 = 251,000$$

Drainage-wide run size range=  
173,000 to 251,000

# 2018 Chinook Drainage-wide Outlook

Drainage-wide range: 173,000- 251,000



Juvenile-based Drainage-wide range: 233,000- 283,000



# 2018 Potential Allowable Catch Ranges

## Canadian-Origin Chinook Salmon

---

Based on JTC forecast : 71,000- 103,000

	From	To
Total Allowable Catch	16,000	60,500
Canadian Allowable Catch (23% harvest share)	3,700	13,900
US Allowable Catch (77% harvest share)	<b>12,300</b>	<b>46,600</b>

Escapement Goal (IMEG): 42,500 - 55,000

**2017 US harvest of Canadian-origin Chinook 20,800**

# 2018 Chinook Management Strategy

---

Drainage-wide run size =  
173,000 to 251,000

- Similar harvest levels to last year should be possible
- Could change strategy to be more simple, less management actions
- Complicated by low data certainty early season

# 2018 Summer Chum Outlook

---

- Run outlook: 2.5 M
- Similar to last year's run size
- Sufficient for escapement goals and subsistence needs
- Potential surplus for commercial harvest of up to 1.5M fish
- Harvest likely affected by Chinook run strength

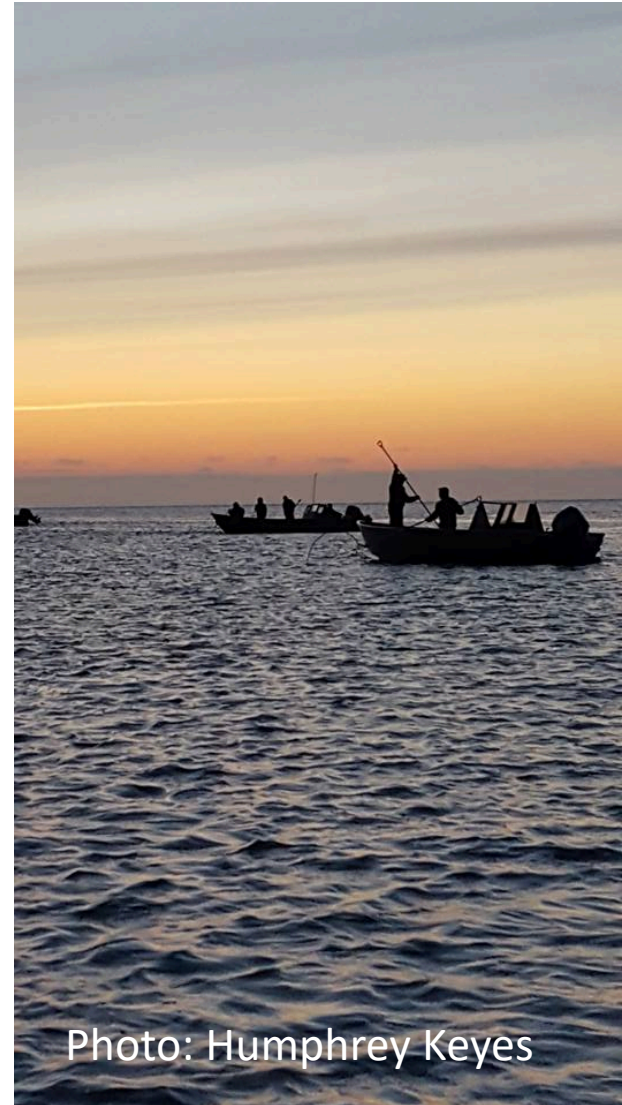


Photo: Humphrey Keyes

# Summer Chum Commercial Management Strategy

---



- Selective gear types to start: dip nets, beach seines (live release of Chinook)
- 6" or smaller mesh gillnets (once confident Chinook run strength is adequate)
- Possible sale of Chinook salmon late in the summer or fall season, dependent on inseason run strength and subsistence harvest opportunity

# Responsibility of Commercial Fishermen

- Developing or maintaining your market (working with buyers)
- Quality of the product is very important
- Reporting all fish kept and/or released on fish tickets for each opening
- Compliance with all regulations



# How Do We Assess run size INSEASON?

---

Based on all assessment data and reports from fishermen

- Chinook run size is primarily measured at Pilot Station sonar
- Counts are compared to years of similar run timing and full season total is projected
- Canadian run size is also projected at Pilot Station sonar using genetic analysis
- Actual Canadian passage measured at Eagle sonar, well after most fish have passed all districts
- Our projections get more reliable around the midpoint

# How Do We Assess Run Size INSEASON?

---

Because of the data uncertainty of projecting run sizes inseason, we start with a cautious approach and find ways to spread harvest opportunity across run



[www.allfreedownload.com](http://www.allfreedownload.com)



# How Big Do Chinook Runs Need To Be?

---

Drainage-wide Run sizes less than 150,000 require heavy harvest restrictions to meet escapement needs :

- Potential Actions: maintaining the reduced subsistence schedule all season, or possible closure and use of selective gear only

Run sizes between ~150,000 to 200,000:

- should provide some level of subsistence harvest with restrictions in place during low assessment certainty period (could be up thru midpoint of run)
- cautious approach early in season in case run is at lower end of forecast

Run sizes above ~200,000:

- should provide average (40,000-50,000) subsistence harvest
- All subsistence fishing restrictions would be relaxed
- possibility for sale of incidentally-caught Chinook in commercial chum fishery
  - this would likely occur at tail end of the run when most Chinook have passed District 2 and have been provided upriver for escapement and subsistence harvest

# 2018 Potential Management Actions

---

## **Early season once kings arrive:**

- Subsistence fishing: Reduced (half time) regulatory schedule with 7.5" and smaller gear
- Commercial fishing: Selective gear for summer chum (Chinook released)

## **Once confident run above lower end of forecast:**

- Regulatory subsistence fishing schedule
- Commercial: gillnets (6" and smaller) for chum salmon with Chinook retained for personal use

## **Once indicated run at upper end of forecast:**

- Commercial fishermen may have option to sell or retain incidentally-caught Chinook salmon

# Responsibility of Fishermen

- Stay informed about the runs- comply with the restrictions and closures for the sake of future salmon runs
- Report your harvest accurately
- Take only what you need
- Pass on your fishing traditions and knowledge



# Your Input Ensures Successful Management

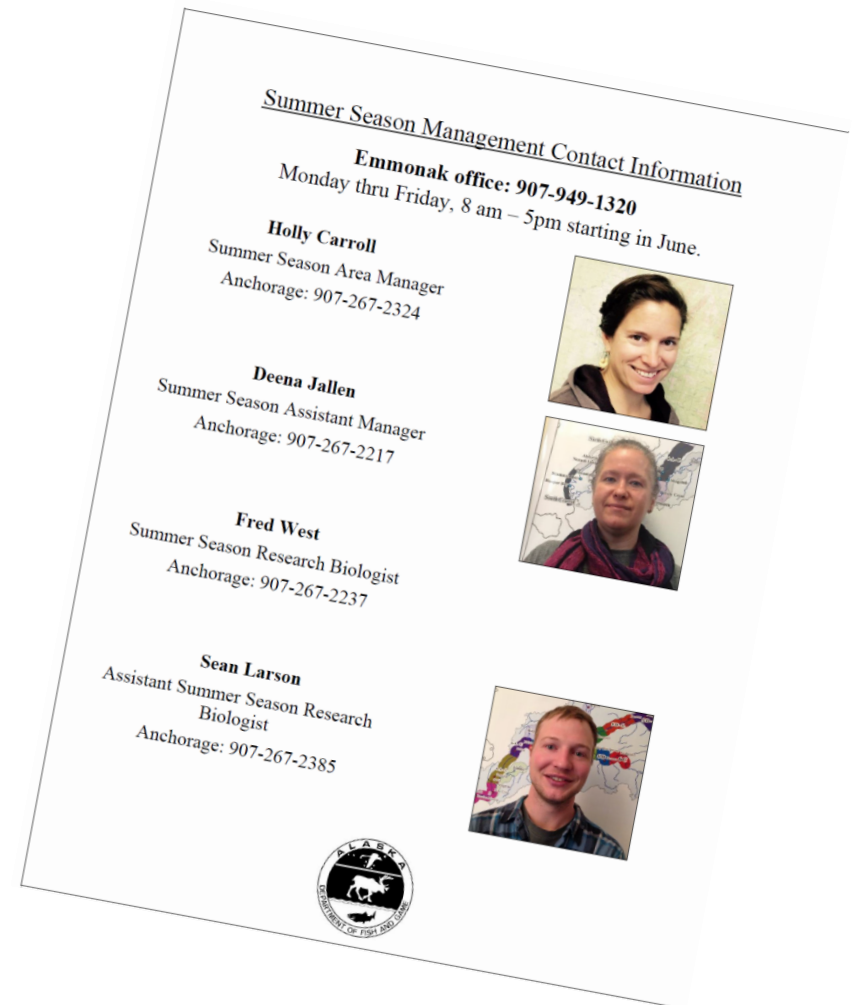
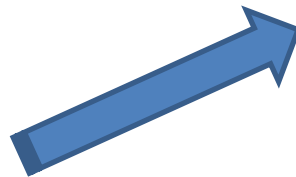
---

- Join the weekly YRDFA teleconferences
- Like our Facebook page and check it frequently
- Read News Releases –know what gear is legal and when you can fish
- Call the hotline for daily counts and fishing schedules



# Engage with the ADF&G Management Team

- How is your fishing going?
- Ask us your questions!
- Share your concerns!



# Management Strategy for Group Discussion

# Not All Fishing Districts Created Equal

- Further upriver: less fish, more spread out, harder to catch, thus need more fishing time
- Quality and quantity of chums and kings declines the further upriver they go
- Managers may not be able to make the districts equal, but they try to make fishing opportunity equitable





# 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

# Reduced Regulatory Subsistence Schedule- Pros and Cons

---

- Set schedule people can plan around
- Naturally spreads harvest across run
- Length of openings accounts for different fishing efficiency for each district
- Presence of high numbers of kings or chums cannot be predicted- luck of the draw
- Openings not always ideal for weather, personal schedules
- Unrestricted schedule could allow too much harvest

# Gillnet mesh sizes- Effects on the Harvest

---

## 6" gillnet mesh:

- Better for targeting summer chum salmon
- Chinook can be retained but will likely be smaller males
- If many chum are present, numbers of Chinook caught will be low

## 7.5" gillnet mesh:

- More efficient mesh size for catching Chinook
- Harvest of Chinook spread across all ages, sexes, and stocks
- If folks are finished harvesting summer chum, they can harvest Chinook and get what they need in a shorter amount of time

# 2017 Management Actions for Subsistence Fishery

	Windows with 6" mesh	First pulse closure/ Selective gear	½ windows with 6" mesh	Surgical opening with 7.5" mesh	Windows with 7.5" mesh
South Coastal	Started early				Just before midpoint
District 1 and 2					
District 3					
4- A B C					
5- ABC					
5-D and Koyukuk, and Innoko Rivers					
District 6					

# 2018 Proposed Actions for Subsistence Fishery

	Windows with 6"	First pulse closure/ Self	½ windows with 6"mesh	Summer opening 7.5" mesh	Windows with 7.5" mesh
South Coastal	Start early				Just before midpoint
Kotlik, District 1 and 2	early	first pulse present	10-hr daily openings around commercial	12 hr opening Prior to midpoint	By midpoint: open except for commercial
District 3	early	first pulse present	Before midpoint	24 hr opening prior to midpoint	By midpoint
4- A B C		first pulse present			Earlier than midpoint
5- ABC	Early	first pulse present			Earlier than midpoint
5-D and Koyukuk, and Innoko Rivers					All season
District 6					Earlier than midpoint

# 2018 Proposed Actions for Subsistence Fishery

	<b>½ windows with 7.5" mesh</b>	<b>Windows with 7.5" mesh</b>
<b>South Coastal</b>		All season
<b>District 1 and 2</b>	openings around commercial	Once confident in run strength
<b>District 3</b>	Early season thru first pulse	Once confident in run strength
<b>4- A B C</b>	Early season thru first pulse	Once confident in run strength
<b>5- ABC</b>	Early season thru first pulse	Once confident in run strength
<b>5-D and Koyukuk, and Innoko Rivers</b>	Only if necessary	All season
<b>District 6</b>		All season

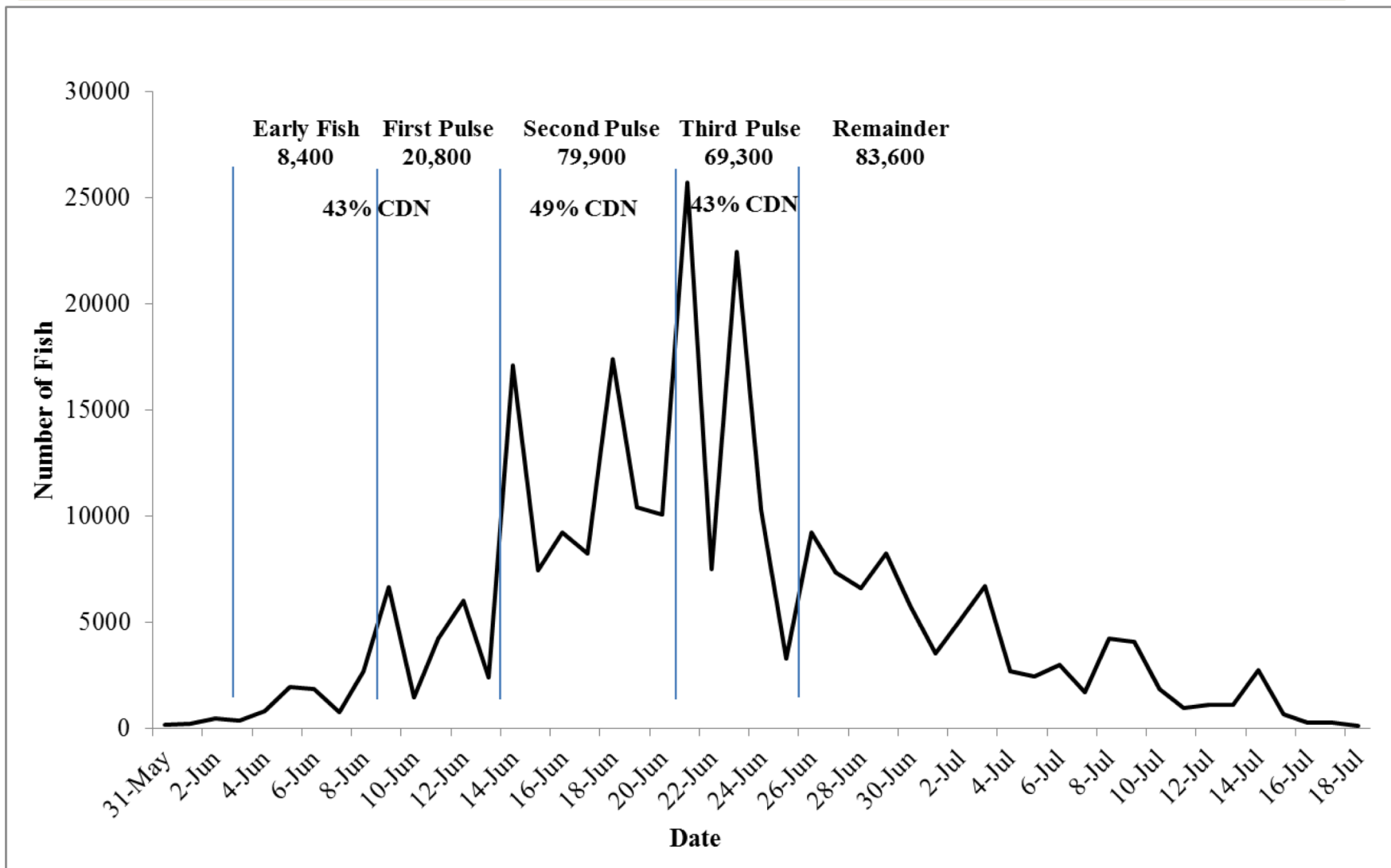
\*Based on run sizes within and above forecast, action specifics and dates determined by assessment data 24

# DISCUSS





# Backpocket



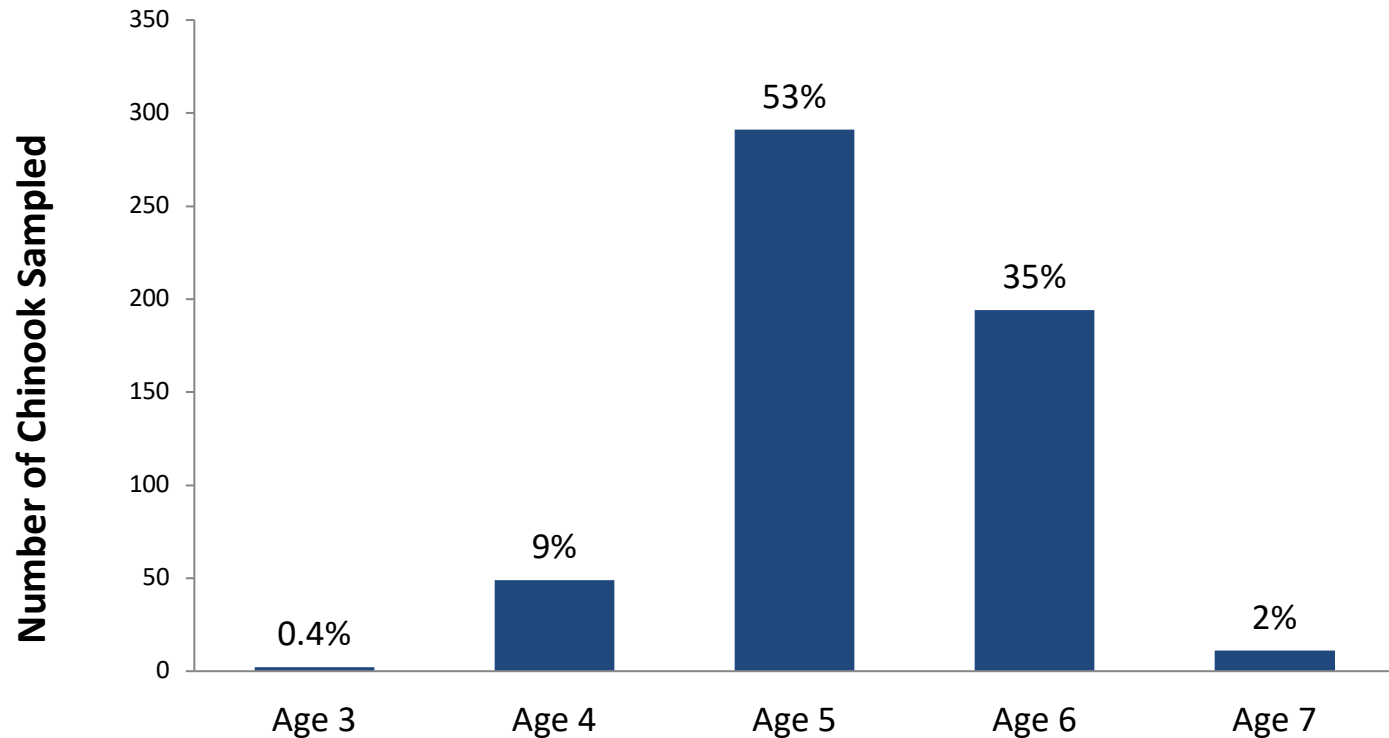
# Preliminary Alaska Subsistence Harvest

(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%

# Chinook Age Composition Pilot Station

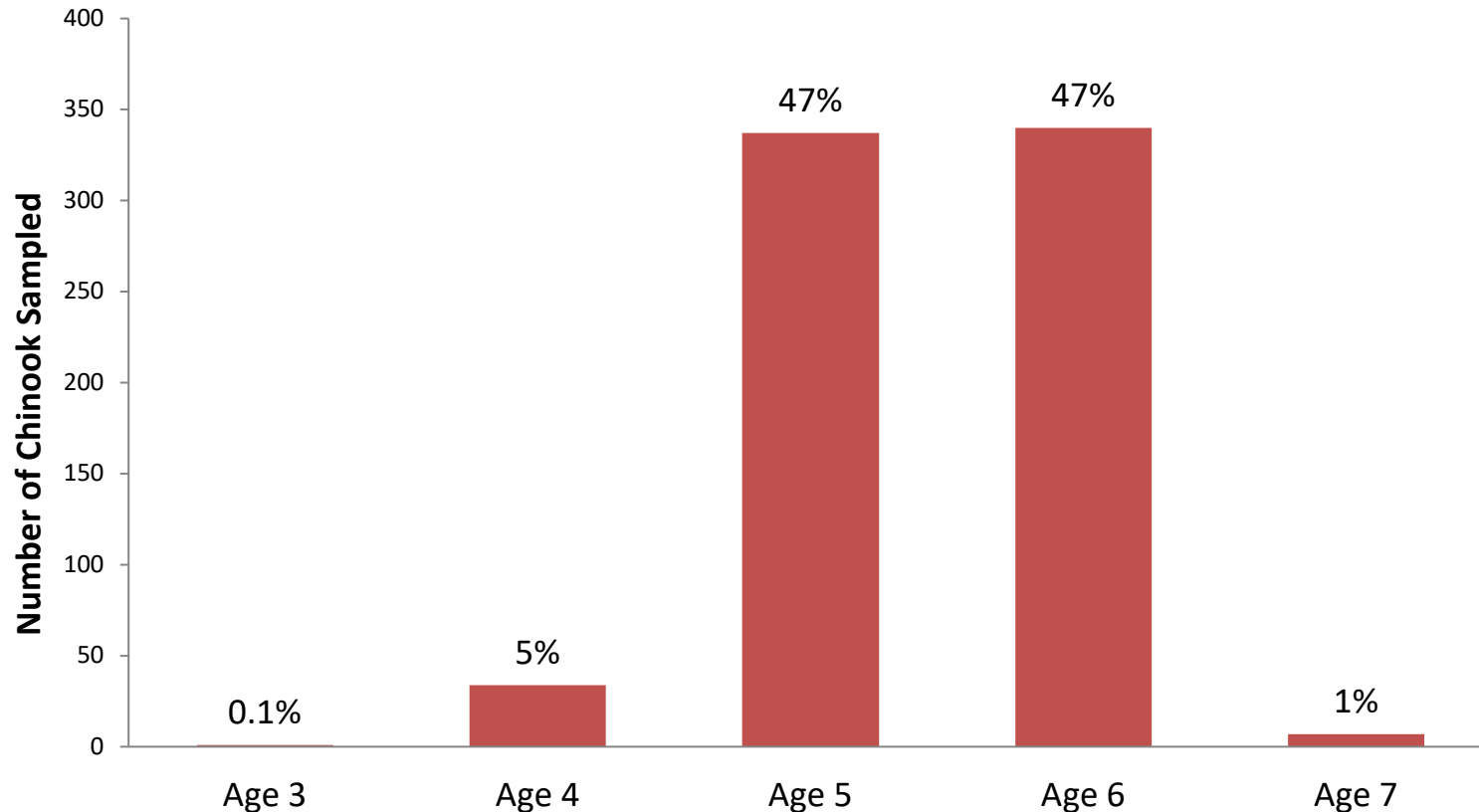
---



- 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

District or Subdistrict	Regulatory schedule with 6-inch mesh	Selective gear <sup>a</sup>	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 <sup>b</sup>
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 <sup>c</sup>
District 3	June 6	June 11	June 18 <sup>c</sup>	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-A and 4-B		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 <sup>d</sup>

# Pilot Station Post-Season Genetic MSA

Though each pulse (or stratum) may have a different mixture of stocks, at season end, the samples at Pilot Station sonar are measured for total % Canadian-origin.

Year	Weighted Proportion CDN
2005	0.47
2006	0.40
2007	0.37
2008	0.35
2009	0.36
2010	0.40
2011	0.34
2012	0.43
2013	0.52
2014	0.39
2015	0.38
2016	0.43
2017	0.44
Mean	0.41



# 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.**

# 2018 Relevant Board of Fisheries Changes

---

## Proposal 231:

### Mandatory closure of first pulse in districts 1 and 2

5 AAC 05.360 is amended to read:

(j) Notwithstanding the provisions of this section, the department shall manage the king salmon subsistence fishery in Districts 1 – 6 during the first pulse of the historical three distinctive pulses of king salmon that enter the Yukon River drainage, as follows:

- (1) In Districts 1 and 2, to account for the uncertainty in the preseason king salmon run projections **if the preseason king salmon forecast indicates insufficient abundance to meet escapement goal objectives and subsistence harvest needs**, the department shall manage the king salmon subsistence fishery conservatively and not open any **salmon** subsistence fishing periods during the first pulse of king salmon entering the districts;