#### Yukon River Summer Season Management Strategy 2024

Deena Jallen ADF&G Summer Season Management Biologist <u>Fred West</u> ADF&G Summer Season Research Biologist YRDFA Preseason Meeting – Anchorage May 2, 2024







### 7-Year Agreement – Brief overview

Fishery managers previously had an Interim Management Escapement goal (IMEG) of 42,500 – 55,000 Chinook salmon (plus harvest shares) at the U.S.-Canada border. This goal expired, and the Yukon River Panel had not come to agreement for a goal for Chinook salmon border passage.

- The Pacific Salmon Treaty Parties (ADF&G and DFO) developed the 7-Year Agreement to address low Chinook salmon runs for one lifecycle (7 years; from 2024 through 2030) and set a border passage objective.
- The border passage objective of 71,000 fish seeks to address concerns about fish health and fecundity and rebuild the run.
- The 7-Year Agreement was finalized on April 1, 2024 and presented to the Yukon River Panel meeting in Anchorage.
- Commissioner Doug Vincent-Lang will be here Friday afternoon to talk more about the Agreement, so please hold your questions for him.



## 2024 management planning outlooks

- Outlooks tell us what run sizes to expect this year and give fishermen, processors, agencies, etc. an idea of how to prepare for the season.
- Run size outlooks are based on previous years information and trends.
- Transitioning from the outlook to inseason run size is based on observations and information collected at assessment projects.
- Information about the actual run size is refined as the run develops and is used to guide management inseason.

#### Chinook salmon outook

	Canadian-origin Chinook salmon	Chinook salmon drainagewide	
Objective:	71,000 U.S-Canada border passage	No goal, but runs below 150,000 tend to not meet tributary goals	
Outlook:	19,000 to 28,000 fish * Very Poor	45,000 to 68,000 fish Very Poor	
Escapement:	Forecast range well below border passage objective	Forecast range well below average, unlikely to meet goals	
Subsistence:	Fishing closures	Fishing closures	
Commercial/ Sport/PU:	None	None	

Outlook is based on the JTC method that combines the Bering Sea juvenile trawl survey, previous year run sizes, sibling, and Ricker models (numbers rounded).

\* Using a new model based on recent difference between estimates trends (DBE), the projected border passage could be as low as 9,000 to 19,000 fish.

#### Summer chum salmon outlook

Objective:	Drainagewide goal 500,000 to 1,200,000 fish		
Outlook:	Lower end of forecast 550,000 fish	Midpoint of forecast 1,100,000 fish	Upper end of forecast 1,800,000 fish
Escapement:	Likely to meet lower end of goal	Near upper end of goal	Exceed upper end of goal by 600,000 fish
Subsistence:	Fishing restricted – limited subsistence harvest with selective gear	Fishing restricted to selective gear to protect Chinook salmon	Fishing restricted to selective gear to protect Chinook salmon
Sport/PU:	None	Open with considerations for subsistence and tributary goals	Open with considerations for subsistence and tributary goals
Commercial:	None	Above Management plan threshold of 750,000 fish	Above Management plan threshold of 750,000 fish

# Management planning – Chinook salmon

- Right now, fishing is open 24 hours a day, 7 days a week with gillnets up to 7.5-inch mesh and all other gear types
- To protect Chinook salmon as they enter the river, each district will close based on the expected arrival date of early Chinook salmon.
  - District 1 and Coastal Area: likely close early June based on historic run arrival
  - Continue closures upriver based on Chinook salmon travel time
- When the closures start, all gillnets larger than 4-inch mesh must be removed from the water.



### Management planning - nonsalmon

- During the salmon closures, fishing will still be open for nonsalmon species:
  - Nonsalmon gillnets will be restricted to 4-inch or smaller mesh setnets up to 60-feet in length.
  - Gillnets should be operated close to shore within 100 feet of the ordinary high-water mark.
  - Nets should be set where they will not catch Chinook salmon. If you catch Chinook salmon, you should move your gear.
  - Other nonsalmon gear types including longline, jigging gear, hand line, beach seine, fyke net, spear, or lead may be used, and all Chinook salmon must be released alive.



#### Management planning – summer chum salmon

- Anticipate summer chum salmon subsistence opportunity when the run is projected to exceed 500,000 fish.
  - Openings may start after the quarter point of the summer chum salmon run to assess the size of the run.
  - Fishing will open with selective gear types; dip nets, beach seines, manned fish wheels, hook and line.
  - Chinook salmon must be released alive.
  - Pink and sockeye salmon may also be retained from selective gear types.

#### **Support or Oppose**

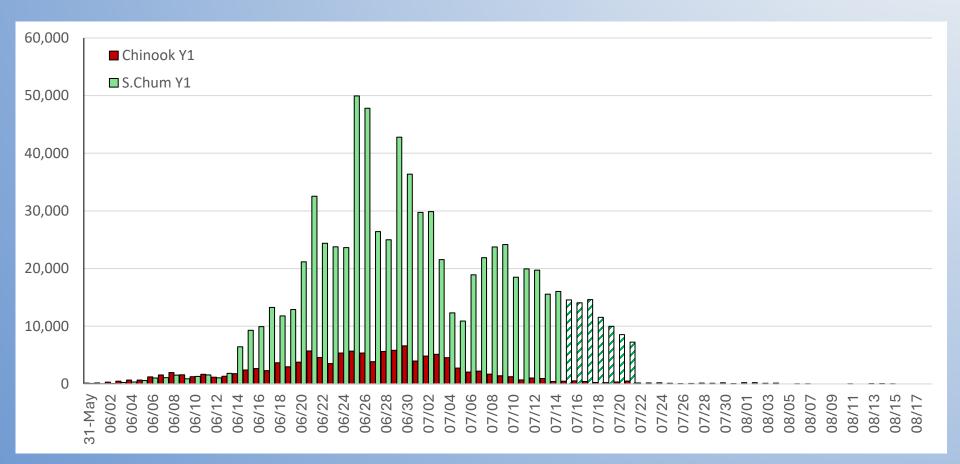
- Fishery managers have heard a few management options from different parts of the river. This meeting is unique in that it broadly incorporates fishermen from the entire drainage and we want to hear your discussions. Some proposed actions for this season:
  - Restrict dip net and fish wheel gear for summer chum salmon due to conservation concerns for Chinook salmon.
    - People have seen videos of Chinook salmon being injured in dip nets and not everyone uses 'fish friendly' wheels.
    - Chinook salmon are required to be released alive immediately from dip nets and other selective gear types.
  - Close 4-inch nonsalmon gillnets during part of the Chinook salmon run
    - Some people target Chinook salmon with 4-inch nets, closing this gear might help reduce 'incidental' harvest of Chinook salmon.
    - What nonsalmon species are folks targeting during the Chinook salmon run?
    - Would short closures to protect Chinook salmon in the mainstem river affect nonsalmon harvests?

#### Support or Oppose - continued

- Keep 6-inch mesh gillnet opportunity closed during the entire summer season to protect Chinook salmon
  - Concern for protecting every Chinook salmon in all parts of the run.
  - Based on recent years run timing, there could be a small window of time when the Chinook salmon run is more than 95% complete and before the start of the fall chum salmon run when gill net opportunities with 6-inch mesh could target summer chum salmon.
- Open tributaries, lakes, and parts of the Coast for 6-inch mesh for summer chum, sheefish, and large whitefish.
  - The drainagewide Chinook salmon run is very low, and there are concerns for protecting salmon in their spawning streams throughout the drainage.
  - Enforcement concerns; from the air, a 4-inch net and a 6-inch net look the same.
  - Are there times of year when this would be most effective and nonsalmon fish quality would be most desirable?

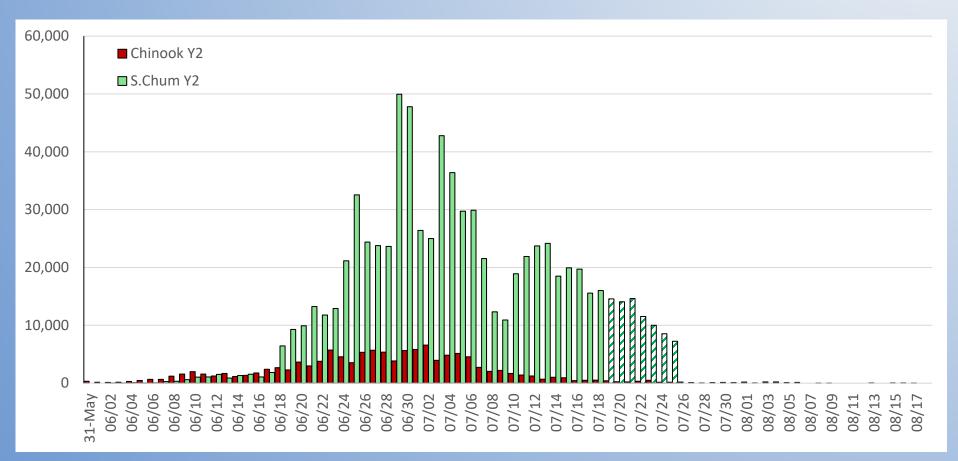
#### District 1 salmon run timing (Emmonak – river entry)

Chinook and summer chum salmon in District 1, based on travel time to Pilot Station sonar. Counts are average of daily Pilot Station counts from recent 5 years (2019-2023) The last 7 days of summer chum passage (shaded) are after the cutoff date for fall season



#### Salmon run timing – District 2 (Pilot Station sonar)

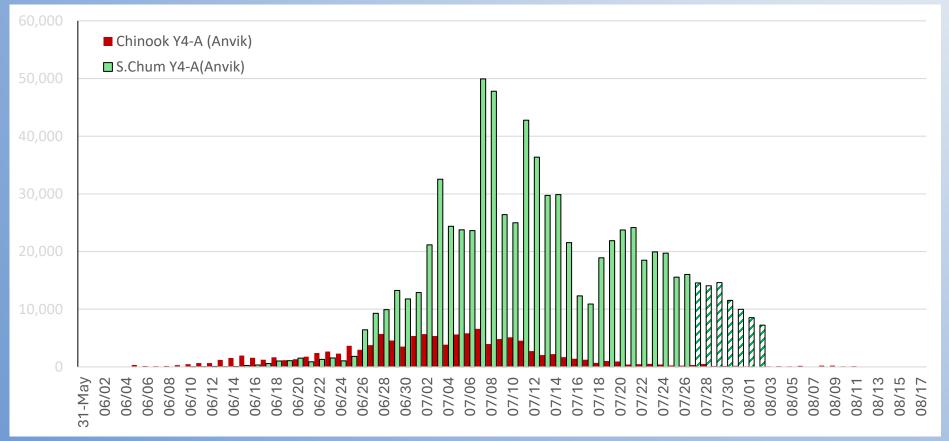
Average daily Pilot Station sonar counts from recent 5 years (2019-2023) Chinook salmon travel about 40 miles per day, and summer chum salmon travel about 25 miles per day.



#### Salmon run timing – District 4-A (Anvik, Anvik River)

This chart represents Pilot Station counts moved forward in time based on salmon swim speed, and does not account for fish that have already moved into tributaries to spawn.

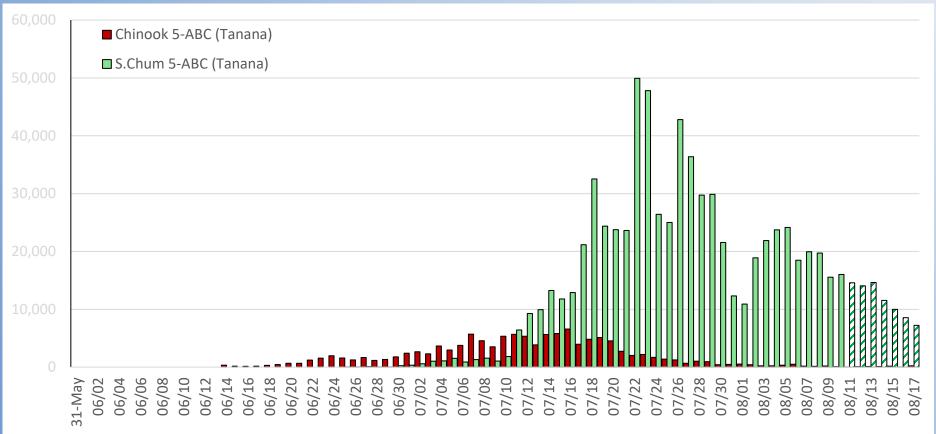
As the runs go upriver, they gets smaller, so these bars represent rough proportions.



#### Salmon run timing – 5-ABC (Tanana, Tanana River)

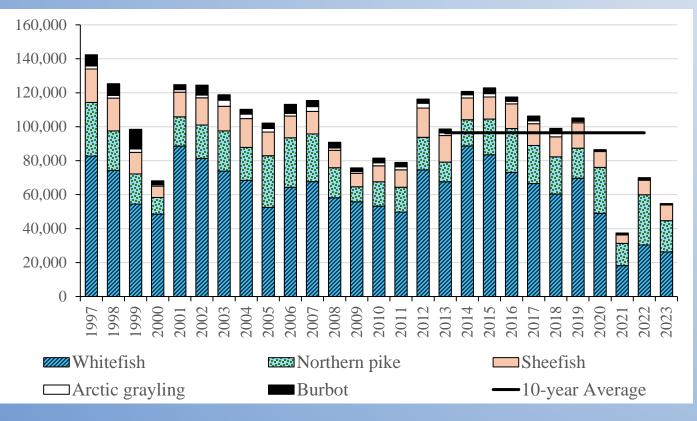
Based on travel time, the bulk of the runs get further apart. Summer chum tend to not arrive around Tanana/Tanana River until mid-July.

Any salmon caught in 4-inch mesh in June-early July are more likely to be Chinook salmon

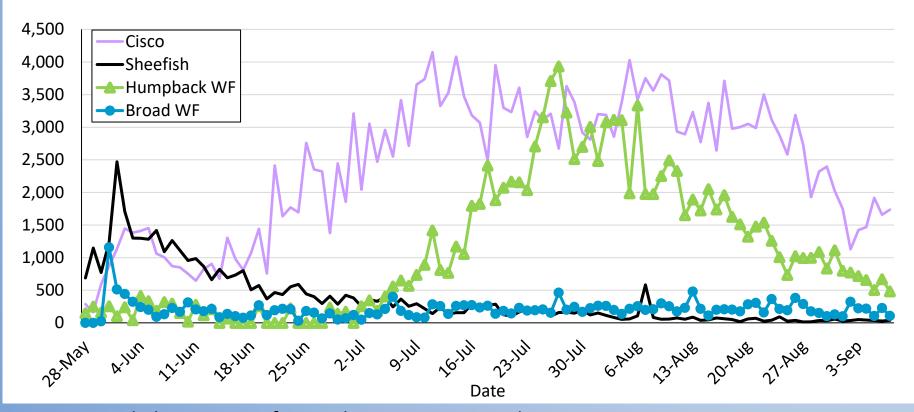


#### Nonsalmon harvest

- Nonsalmon are important traditional subsistence resources.
- Salmon closures impact nonsalmon harvests as well.
- Sheefish and pike harvests have been pretty steady and close to average.



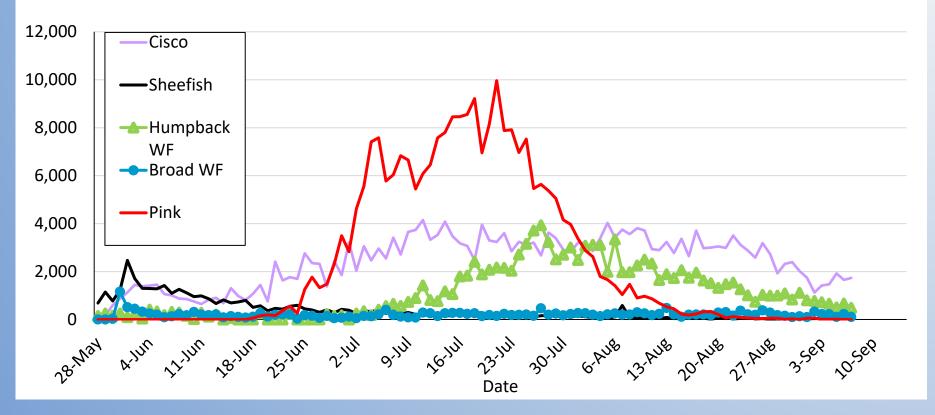
### **Pilot Station nonsalmon timing**



Average daily passage of nonsalmon species at Pilot Station sonar Sheefish peak in early June Cisco numbers are similar from late June to late August Humpback whitefish peak around late July and early August Broad whitefish numbers are typically similar all season

16

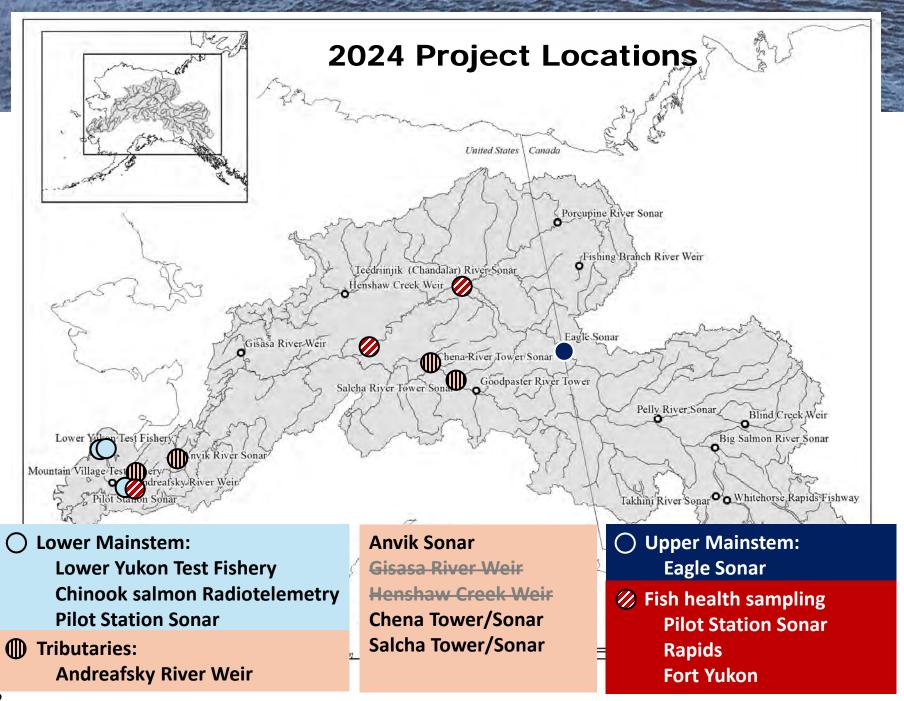
#### **Pilot Station with Pink salmon timing**



Average daily passage of nonsalmon species and Pink salmon at Pilot Station sonar

Pink salmon typically pass Pilot Station sonar from late June to early August and overlap the transition between summer and fall chum salmon.

2024 is an even year, should be lots of pink salmon.



#### **Research and monitoring**

- Radiotelemetry tagging and *Ichthyophonus* projects for Chinook salmon.
- Chinook salmon fishing effort based out of Emmonak will focus on radio tagging and live release.
- Emmonak LYTF will operate normal drifts for summer chum salmon for age, sex, size (ASL), run timing, and abundance information.
- Continuation of sample collections at various sites for body condition, stress markers, diseases, etc. by ADF&G SOEP program and other groups.
- Ongoing measurements of salmon counts, ASL, water levels and temperatures at projects.



#### **Reducing assessment mortality**

- Efforts are being taken to minimize Chinook salmon mortalities in research and assessment projects. Any salmon mortalities will be donated to local communities.
  - All projects operating in 2024 are critical for inseason escapement and fish health assessment.
  - Suspension of Lower Yukon Test Fishery (LYTF) set and drift gillnet sites for Chinook salmon to reduce mortalities.
    - Chinook salmon fishing effort based out of Emmonak will focus on radio tagging and live release.
  - Sharing data broadly to coordinate research projects and minimize number of samples being taken.

#### Management outreach

- Outlooks and management strategies will be sent households in mid-May (Outlook flier)
- For questions about fishing in your district please call the tollfree number: 1-866-479-7387 (grab a magnet)
  - Updated whenever fishing schedules change
  - Daily sonar and test fish numbers when projects start
- Fishery announcements will be published as Advisory Announcements, linked on Facebook, and broadcast on local radio stations.
- Daily email updates with assessment data
  - Handout with subscription info.
- Weekly YRDFA Inseason management teleconference
- Emmonak ADF&G office will be open June August
- Fairbanks and Anchorage offices open year round

## Thank you!

#### **Contact information - Acknowledgements**

#### **ADF&G Summer Season**

Deena Jallen Area Manager Office: 907-459-7309 Cell: 907-328-8646 deena.jallen@alaska.gov

Fred West Research Biologist Office: 907-267-2237 fred.west@alaska.gov

Josh Clark Assistant Research Biologist Office: 907-267-2217 joshua.clark@alaska.gov

#### **USFWS**

Holly Carroll Yukon Subsistence Fishery manager Cell: 907-351-3029 holly\_carroll@fws.gov

Keith Herron Assistant Fishery manager & Tribal Liaison Cell: 907-312-3397 keith\_herron@fws.gov

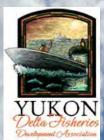
Shane Ransbury Yukon Assessment Biologist Office: 907-456-0550 shane\_ransbury@fws.gov

<u>Fish and Wildlife Safeguard</u> 1-800-478-3377 Anonymous reporting of fish and wildlife concerns











Fisheries Association

23