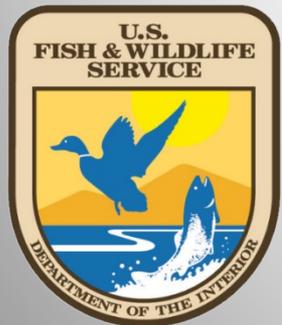


Yukon River Drainage Fall Chum and Coho Salmon Outlook



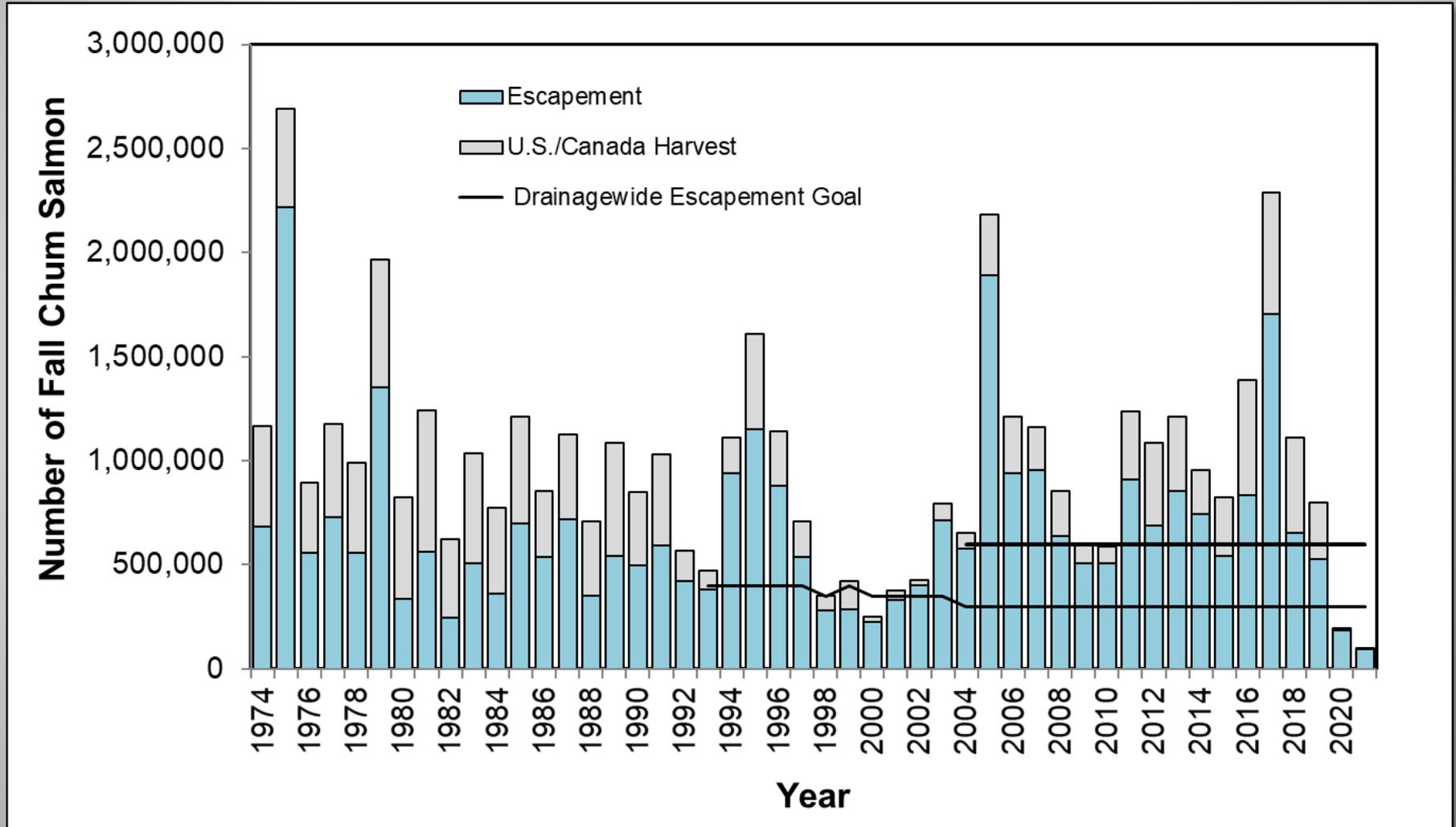
Photo by Christy Gleason



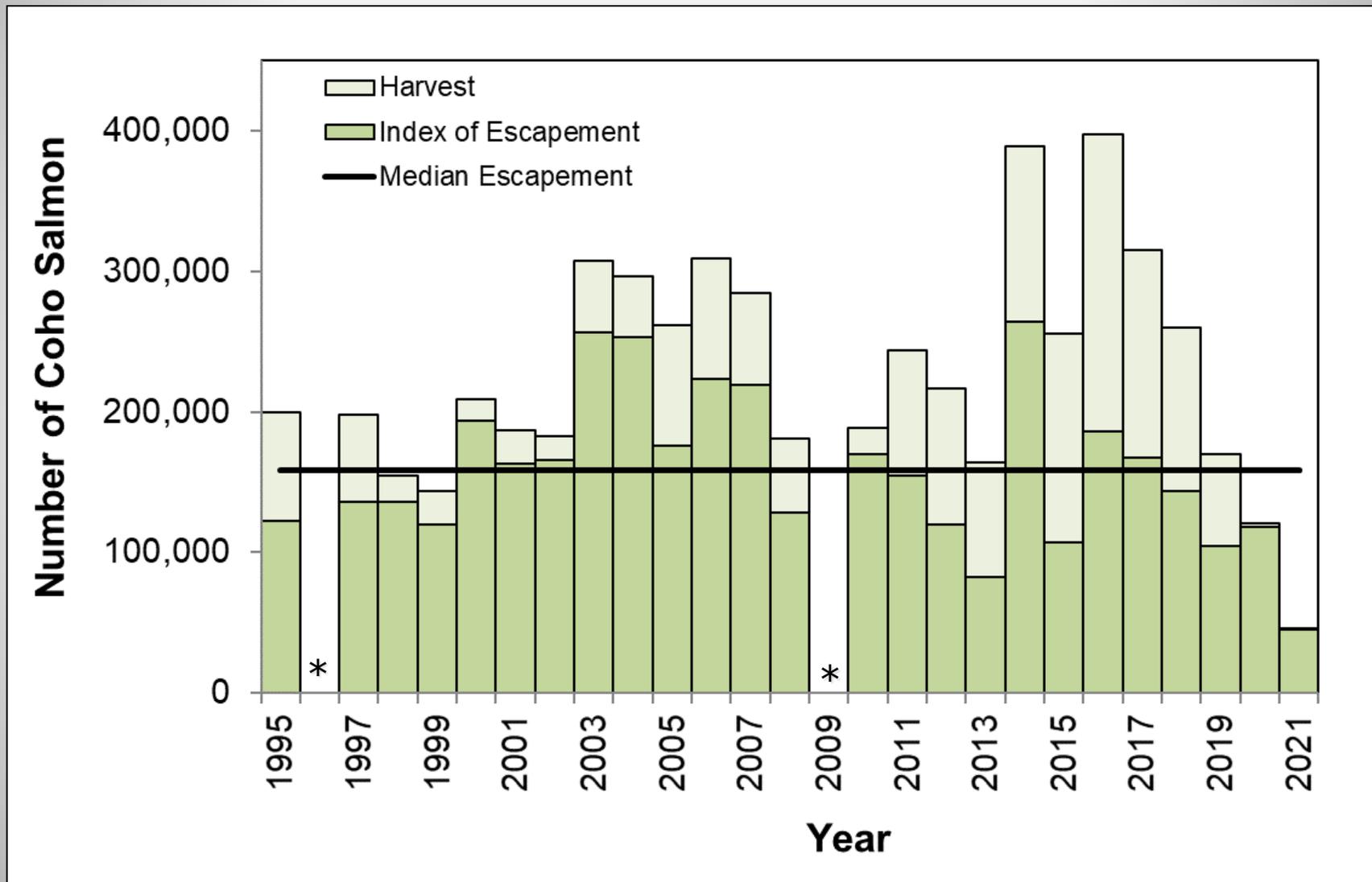
YRDFA Preseason Planning Meeting
March 24, 2022
Anchorage
Presentation By: Christy Gleason



Fall Chum Salmon Stock Status



Coho Salmon Stock Status



* Data unavailable

2022 Fall Season Outlook

Preliminary Forecast

- **110,000 fall chum salmon** (average 1 million).
 - Finalize at Yukon River Panel Meeting April 2-7.
- **Below average coho salmon run** (average 235,000).
- High uncertainty.

Preseason Projection

- Based on the summer/fall chum salmon run size relationship.
- Assess 2022 summer chum salmon run.
- Announce fall chum salmon projection in mid-July.



Fall Chum Salmon Management Plan

Management Actions Fall Chum Salmon Directed Fisheries		
Run Size	Subsistence	Commercial/Personal Use/Sport
300,000 or Less	Closed	Closed
300,000 to 550,000	Schedules	Closed
Greater than 550,000	Open	Open

- Drainagewide escapement goal 300,000-600,000 fish.
- 2022 outlook: anticipate to start season **closed** to all fall chum salmon fishing.

Other Yukon River Salmon

Coho Salmon



- **2022 outlook is below average, high uncertainty**
- Average run size: 235,000
- Run timing: mid-August to early September
- Range: Coastal District to Tanana River

Pink Salmon



- **Abundant in even years**
- Even-year average run size: 410,000
- Run timing: July to early August
- Range: Coastal District to Anvik River

Sockeye Salmon



- Less abundant

2022 Preseason Management Strategies

Subsistence fishing opportunities (similar to 2021)

- **Nonsalmon gear:**
 - 4 inch or smaller mesh gillnets (60 feet or shorter), hand line, longline, fyke net, dip net, jig, spear, and hook and line with a rod/pole (in some areas or seasons).
- **Potential selective gear for nonsalmon and pink, sockeye, and coho salmon:**
 - Dip nets, hook and line (up to Nulato River), beach seines, and manned fish wheels.
 - Release chum and Chinook salmon alive.
- **Start relaxing restrictions October 1**, transition date with fall chum salmon migration timing upriver.
- **Maintain salmon closures in important salmon spawning tributaries** (Koyukuk, Teedriinjik, Porcupine, and District 6 tributaries of Tanana River).

Yukon River Fall Chum and Coho Salmon Declines



Declines throughout Yukon River drainage:

- Similar chum salmon decline across North Pacific Ocean.
- 2016 glacier shift potentially affecting Canadian spawning area, Kluane River.

Run characteristics:

- Both species experiencing declines.
- Age class failures.
- Small body length.

Parent years:

- Met or exceeded escapement goals.
- Not due to overharvest in Yukon River.
- Freshwater conditions appeared normal during migration in-river.

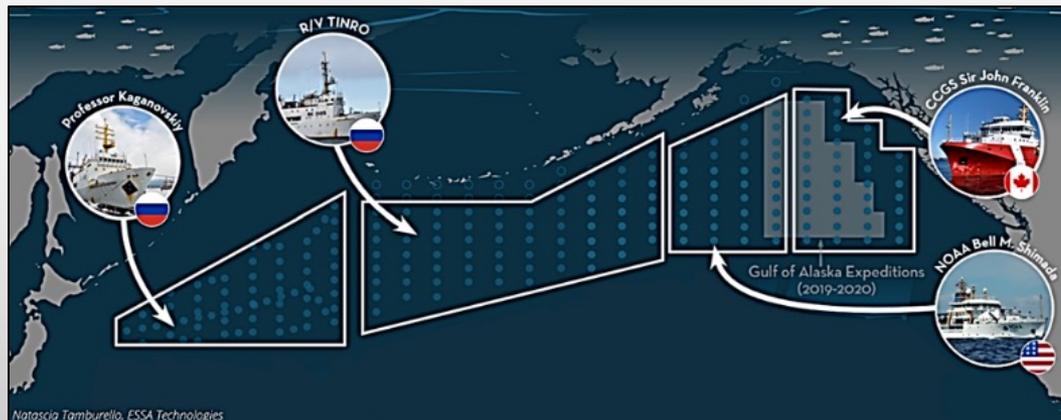
Reasons for decline are unknown:

- Initial thoughts marine environment.
- Observations of warmer ocean temperatures and poor juvenile chum salmon fitness (poor quality food, need to consume more food).

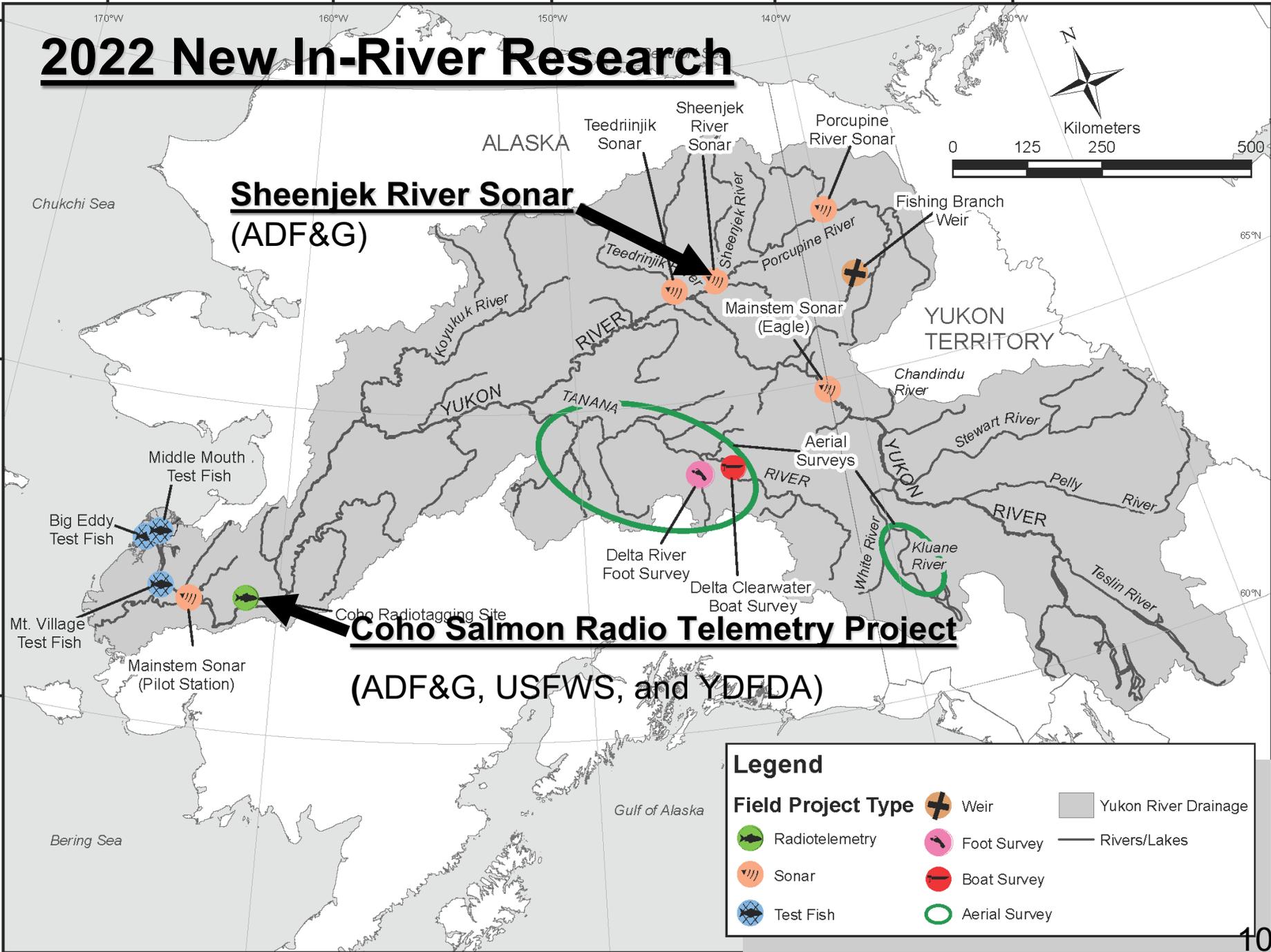
New and Continuing Marine Research

- ADF&G Salmon Ocean Ecology and NOAA:
 - Study juvenile salmon in Northern Bering Sea (~20 years).
 - Developing a fall chum salmon juvenile model to predict adult returns to the Yukon River.
- Several studies to examine how abundance and age/size are impacted by:
 - Climate change.
 - Competition at sea.
 - The role of predators at sea.
- Future research: Study marine life history of fall chum salmon such as year-specific growth, stress, and reproductive patterns (pursuing funding in 2022).

For more information, contact kathrine.howard@alaska.gov and sabrina.garcia@alaska.gov



2022 New In-River Research



Acknowledgements

Asa'carsarmiut Tribal Council

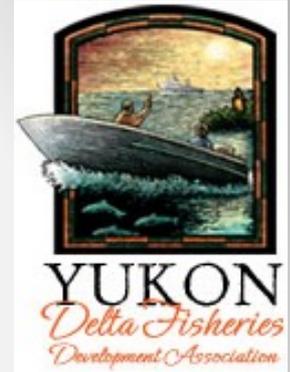
Tanana Chiefs Conference

U.S. Fish & Wildlife Service

Yukon Delta Fisheries Development
Association

Yukon River Drainage Fisheries
Association

Yukon River Intertribal Fish
Commission



Questions or comments?

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