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Joint Technical Committee (JTC) Report to Yukon River Panel



Yukon River Panel

April 10, 2024

Agenda item #5

Zachary Liller and Marc Ross



- March 5-7, 2024
- Whitehorse, Canada
- Hybrid meeting

JTC Meeting Overview

JTC Meeting: Day 1

Introductions, agenda review, and meeting coordination

- The JTC meeting attendees:

United States

Bonnie Borba (ADF&G)
Charles Brazil (ADF&G)
Randy Brown (USFWS)
Zachary Liller (co-chair, ADF&G)
Brian Mckenna (TCC - virtual)
Jim Murphy (NOAA)
Chris Stark (BSFA - virtual)
Alida Trainor (ADF&G)
Scott Walter (USFWS)
Fred West (ADF&G)

Alternates:

Nicole Farnham (TCC)
Kevin Fraley (BSFA – virtual)
Christy Gleason (ADF&G)
Deena Jallen (ADF&G)

Canada

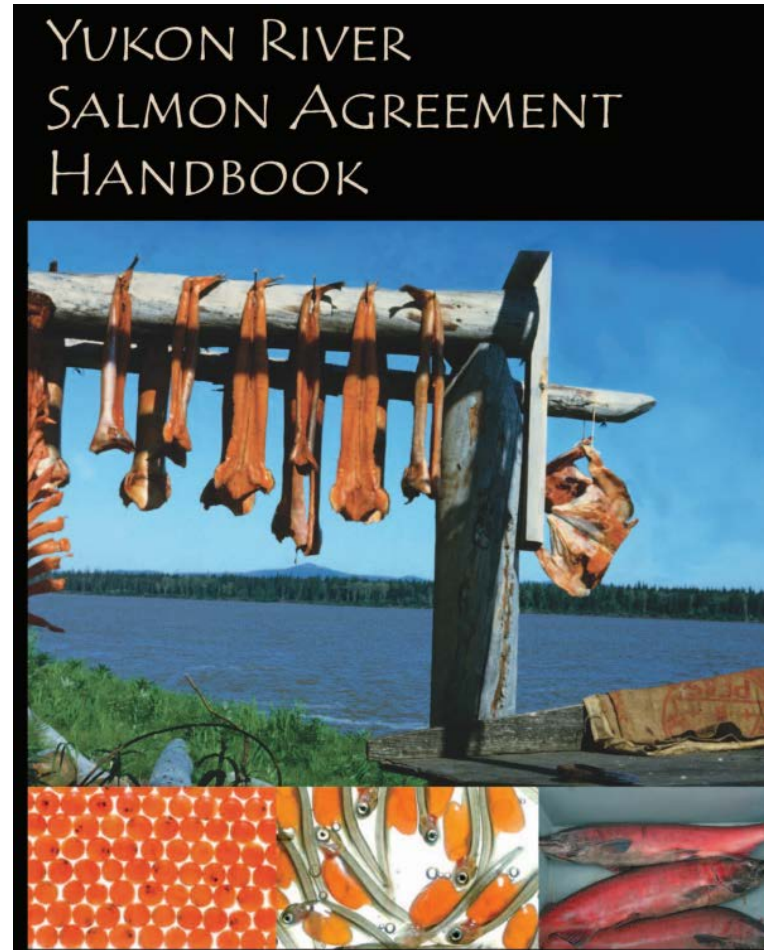
Luc Glover (DFO)
Jaclyn Kendall (DFO, virtual)
Cathy Merkel (DFO)
Marina Milligan (CYFN/YFNSSA)
Adam O'Dell (DFO)
Marc Ross (co-chair, DFO)
Steve Smith (DFO, virtual)



JTC Meeting: Day 1

Discussion of JTC responsibilities as outlined in the

Yukon River
Salmon Agreement



YUKON RIVER JOINT TECHNICAL COMMITTEE

The JTC was established as an international advisory committee responsible for providing the best science, fishery management and technical expertise possible to support the YR Panel. It is comprised of technical representatives from Canadian federal, U.S. federal and State of Alaska government agencies, and other non-governmental organizations from the U.S. Additional technical expertise may be requested and/or provided through invitation by the JTC. The JTC meets twice a year and is charged with various tasks related primarily to Yukon River salmon stock assessment and management, including but not limited to:

EVALUATING AND RECOMMENDING escapement targets;

DEVELOPING AND REPORTING on run outlooks and proposed in-season management strategies to the YR Panel;

EXAMINING stock and habitat management regimes and recommending how they may be improved to achieve stock escapement and habitat management objectives;

EVALUATING AND REPORTING the status of Canadian-origin salmon stocks, annual fishery performance and making recommendations for adjustments to rebuilding programs;

REVIEWING AND EVALUATING proposals submitted to the R&E Fund for technical merit; and

DEVELOPING STOCK and habitat research plans and coordinating the delivery of special research projects.

Providing technical support to the YR Panel, the JTC prepares standard season summary reports, including a review of all Yukon River fisheries, marine fisheries information, status of spawning escapements, and provides technical review of R&E Fund project proposals.



JTC Meeting: Day 1



Discussion of draft seven-year agreement between ADF&G and DFO for the rebuilding of Canadian-origin Chinook salmon.

- Recognition that additional clarification will be needed to understand the implications for JTC responsibilities.

Example JTC implications:

- IMEG recommendations,
 - rebuilding plans, and
 - bilateral run projections models.
- Recognition that recently-completed JTC analyses could be helpful in informing the Panel about the biological and harvest implications associated with rebuilding targets.

JTC Meeting: Day 1

Review of 2024 escapement targets

- Chinook salmon: **no JTC recommendation** given the that the Parties agreed to a border passage rebuilding target of 71,000 fish.
- Fall chum salmon 2023 – 2025 IMEGs
 - Mainstem fall chum salmon: 70,000 – 104,000
 - Porcupine River fall chum salmon: 22,000 – 49,000

JTC Meeting: Day 1

The Fall Chum Salmon Escapement Goal Subcommittee has been finalized.

Current membership is:

- Zachary Liller – ADF&G, co-chair
- Bonnie Borba – ADF&G, data specialist
- Hamachan Hamazaki – ADF&G, analyst
- Curry Cunningham – UAF, analyst



- Marc Ross – DFO, co-chair
- Adam O'Dell – DFO, data specialist
- Marina Milligan – CYFN/YFNSSA, data
- Brendan Connors – DFO, analyst
- Dylan Glasser – DFO, analyst



JTC Meeting: Day 1 – Fall Chum Escapement Goal Review Subcommittee - timeline

Activity	2023				2024				2025				2026			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Notify YRP of intent to review goals																
Form sub-committee																
Sub-committee inperson meeting																
Sub-committee bi-monthly meeting																
Sub-committee terms of reference ^a																
Data acquisition and review																
Draft data review report																
YRP escapement goal workshop ^b																
Define analysis objectives and plan																
Conduct analyses																
Draft model report ^c																
Confirm CSAP placeholder ^d																
Develop CSAP terms of reference ^d																
Coordinate reviews of working papers ^e																
CSAP review meeting ^d																
CSAP Science Advise Report ^d																
JTC develops recommendation																
JTC delivers recommendation to YRP																
Potential implementation of escapement goal																
Sub-committee updates to JTC																
JTC updates to YRP																

Funding for JTC meeting travel is required to facilitate effective bilateral collaboration between analysts and consultation with the Panel and Panel committees (e.g., Traditional Knowledge Committee).

Unless the Panel can provide funding assistance, the agencies will explore options to support JTC activities and reduce the likelihood of delays, due to funding limitations

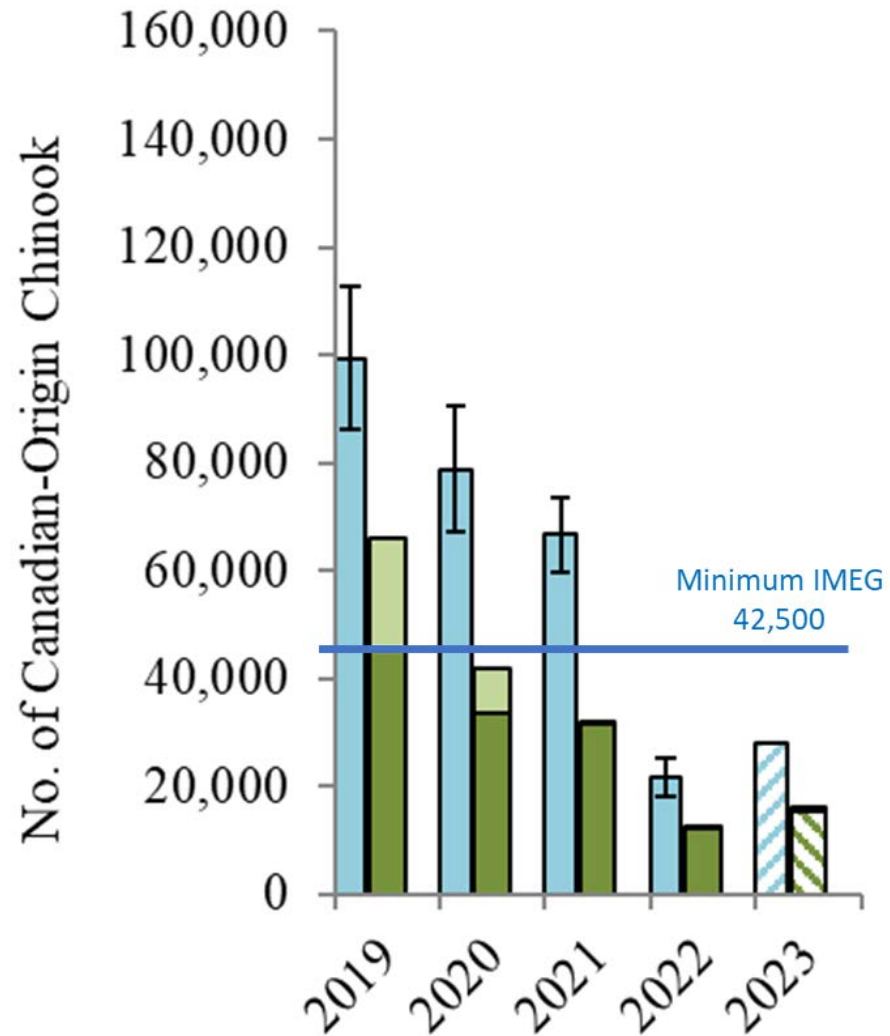
JTC Meeting: Day 1

Yukon River Panel Action Items:

1. The JTC will develop specific requirements for publicly available data sets to be factored in the 2024 project funding decisions and the PSC Secretariat will provide complementary recommendations related to data management at the PSC for YRP consideration at the April 2024 Pre-Season meeting. (Tuesday, January 23 – agenda item 1)
2. The YRP Co-Chairs, JTC, Traditional Knowledge and Communication Committees will work with the PSC Secretariat to develop the scope of services and projected costs to be incorporated into a renewed R&E Fund administrative services agreement. The document will be presented to the YRP for their consideration at the April 2024 Pre-Season meeting. (Tuesday, January 23 – agenda item 6)
3. The Pacific Salmon Commission Secretariat will work with the Panel Chairs to develop a description of the process for the Panel to provide feed back to Restoration and Enhancement Fund project proponents, based on consideration of advice from the Joint Technical, Traditional Knowledge, and Communication Committees, in a cohesive manner. The new process will be presented to the Panel for their consideration and decision at the April 2024 Pre-Season meeting. (Monday, January 22 -agenda item 5.b)

Recommendations sent to Pacific Salmon Commission for consideration and discussion during closed session on April 8, 2024.

JTC Meeting: Day 2



Discussion of natural *en route* mortality, research planning, implications for 2024, and Panel recommendations:

- 2024 Ichthyophonus study plans (ADF&G, USFWS)
- 2024 Chinook tagging study plans (ADF&G, DFO)
- JTC agreement to incorporate recent-year DBE into the 2024 Chinook salmon forecast
- Recommendation that the Panel update R&E near-term priorities to support *en route* mortality research, specifically tagging and tracking in Canada

JTC Meeting: Day 2

- Forecast subcommittee reports
- Full presentations will be provided during Public Session, April 10, 2024

Canadian-origin Yukon River Fall Chum Salmon Forecast

U.S./Canada
Joint Technical Committee
March 5-7, 2024
Whitehorse, YT/Virtual

Presented by: Bonnie Borba and Adam O'Dell



Fisheries and Oceans
Canada

Yukon River Canadian-origin 2024 Forecast

**Spring JTC Meeting
March 2024**

JTC Forecast subcommittee:

Curry Cunningham (UAF)
Zachary Liller (ADF&G)
Jim Murphy (NOAA)

Adam O'Dell (DFO)
Fred West (ADF&G)

JTC Meeting: Day 2

Agency Management Plans

Full presentations will be provided during Public Session, April 10, 2024



2024 Canadian Yukon River Chinook Salmon Management Outlook

Presented to:

Joint Technical Committee

March 6, 2024



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Canada

2024 Canadian-Origin Fall Chum Salmon Management Outlook: Yukon River and Fishing Branch

Presented to:

Joint Technical Committee

March 6, 2024



Canada

Alaska Summer season 2024 Assessment and Management Planning

Deena Jallen - Summer Season Management Biologist

Fred West – Summer Season Research Biologist

ADF&G

JTC meeting – Whitehorse/Virtual

March 6, 2024



JTC Meeting: Day 3

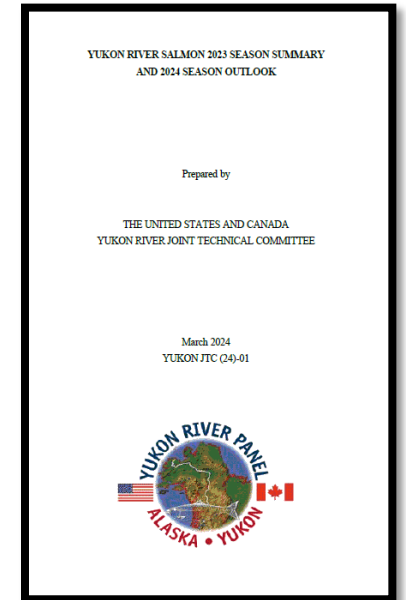
Subcommittee Reports

Administrative Subcommittee

- Continuing to populate the JTC SharePoint site with historical meeting materials, such that documents are secure and equally accessible by JTC members.
- Plan to send Pacific Salmon Commission the full set of JTC annual reports 1985+ with request to post on Panel website.
- Developed a list of priority administrative support needs and submitted to Pacific Salmon Commission for Panel consideration.

Report Subcommittee

- 2023 JTC report has been finalized.
- No major changes to the report scope or organization.
- Sent to Pacific Salmon Commission on 3/27/24 with a request to post to the Panel website.



JTC Meeting: Day 3

Restoration & Enhancement Subcommittee Report:

- The JTC 2024 R&E review was completed on Dec. 11, 2023.
- The JTC reviewed proponent's follow-up responses to Panel questions and provided input on March 14, 2024.
- The JTC agreed that January 15 will be the deadline for providing JTC R&E review scores and technical comments, unless directed otherwise by both Panel co-Chairs. *A revised timeline is needed to accommodate:*
 - Panel's decision to change the proposal submission deadline to Nov. 1 annually,
 - Anticipated workload to accommodate JTC input on Panel feedback to proponents, and
 - Coordination with Traditional Knowledge Committee on select R&E reviews.

JTC Meeting: Day 3

Options for JTC and Traditional Knowledge Committee engagement

- The JTC is eager to engage with the TK Committee
- The JTC can envision numerous options for productive engagement and co-development of Panel recommendations.

Primary discussion topic was how to facilitate these coordination's.

- The JTC does not think that email or virtual coordination will be sufficient.
- Annual in person meetings will be most productive.
- Funding support for JTC and TK Committee members will be needed.

JTC Meeting: Day 3

JTC Roundtable: a forum to share ideas

Canadian Journal of
Fisheries and
Aquatic Sciences

OPEN ACCESS | Article

Multiple environmental drivers across life stages influence Yukon River Chinook salmon productivity

A. Murdoch^{a,b}, B.M. Connors^c, N.W.R. Lapointe^d, J. Mills Flemming^e, S.J. Cooke^f, and C. Mantyka-Pringle^{g,h}

^aDepartment of Biology and Canadian Centre for Evidence-Based Conservation, Carleton University, 1125 Colonel By Drive, Ottawa, ON K1S 5B6, Canada; ^bWildlife Conservation Society Canada, 169 Titanium Way, Whitehorse, YT Y1A 0E9, Canada; ^cInstitute of Ocean Sciences, Fisheries and Oceans, Sidney, BC V8L 5T5, Canada; ^dCanadian Wildlife Federation, Ottawa, ON K2M 2W1, Canada; ^eDepartment of Mathematics and Statistics, Dalhousie University, Halifax, NS B3H 4R2, Canada; ^fSchool of Environment and Sustainability, University of Saskatchewan, Saskatoon, SK S7N 5B3, Canada

Corresponding author: A. Murdoch (email: alyssamurdoch@gmail.com)



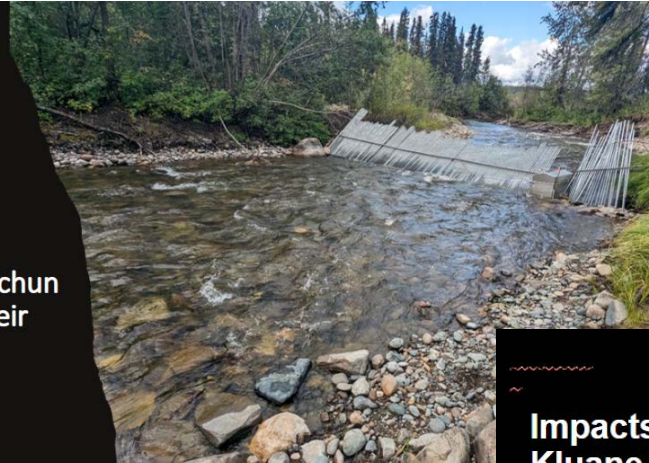
Review of the 2023 operations, counts of salmon swimming up and downriver, and discussion of project design ideas.



New research that links productivity of Canadian-origin stocks to environmental conditions.

2023 Tatchun Creek Weir Count

Marina Milligan
CYFN/YFNSSA



Impacts to Kluane Chum Salmon from a Major Hydrological Change



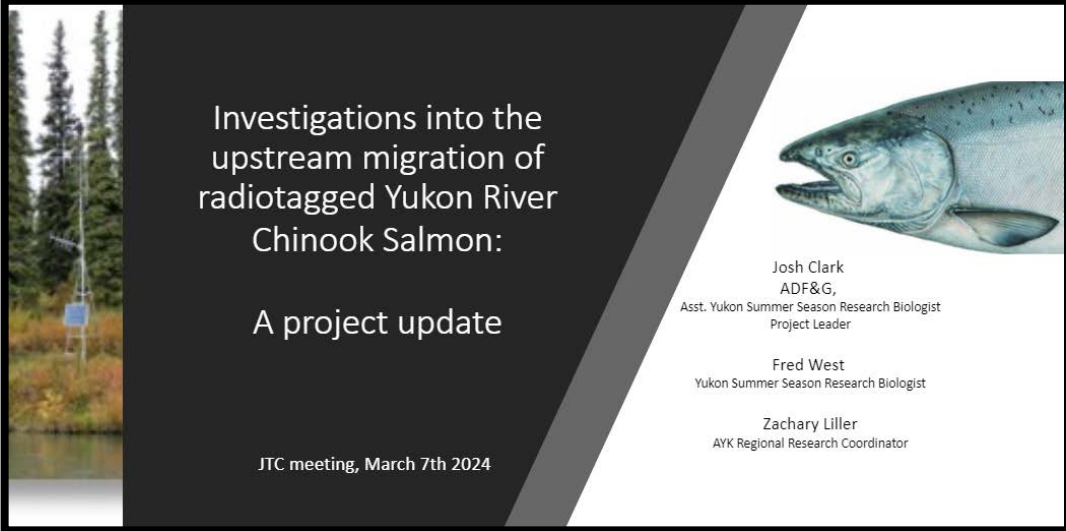
Summary of the pertinent hydrologic issue and available data for exploring the impact on fall chum spawning and productivity.



JTC Meeting: Day 3

Coordination of Chinook salmon telemetry activities in Canada with invited First Nation Government representatives.

- Project plan updates by ADF&G, DFO, and participating FN governments.
- Goal was to provide a forum for open discussion and collaboration of 2024 tagging and tracking plans.
- A full presentation will be provided by the project leads during public session, April 11.



Investigations into the upstream migration of radiotagged Yukon River Chinook Salmon:

A project update

JTC meeting, March 7th 2024

Josh Clark
ADF&G,
Asst. Yukon Summer Season Research Biologist
Project Leader

Fred West
Yukon Summer Season Research Biologist

Zachary Liller
AYK Regional Research Coordinator



 Fisheries and Oceans Canada Pêches et Océans Canada

**Yukon River
Chinook Salmon Radio
Telemetry Program –
Project Update**

2024 Spring Meeting: Yukon River Joint Technical Committee

Luc Glover
Aquatic Science Biologist

Adam O'Dell
Senior Aquatic Science Biologist

Marc Ross
Yukon River Manager



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Canada

JTC Meeting: Day 3

Next meeting:

- U.S. will host
- Week of November 18, 2024
- Tentative location is TBD

Other meeting considerations:

- JTC would like to schedule an in-person meeting with the Traditional Knowledge Committee during the fall/winter of 2024, to develop a regular coordination process.
- Long term the JTC plans to prioritize in-person meeting during the Spring to coordinate preseason forecasts, IMEG recommendations, and management recommendations.
- Traditional Knowledge Committee participation during spring JTC meetings may be beneficial to co-develop Panel recommendations.
- In-person meetings benefit bilateral JTC coordination and JTC engagement with other Panel committees. Additional travel support for JTC and other Panel committees will likely be needed.

Recognition of JTC Member: **Randy Brown**

Randy announced his retirement from the JTC during our recent March meeting

- Years of service to the JTC in support of the Yukon River Panel process
- U.S. Fish and Wildlife Service, Fish Biologist
- Substantial contributions to the JTC and scientific community
- Cultural and educational contributions
- Mentor and friend

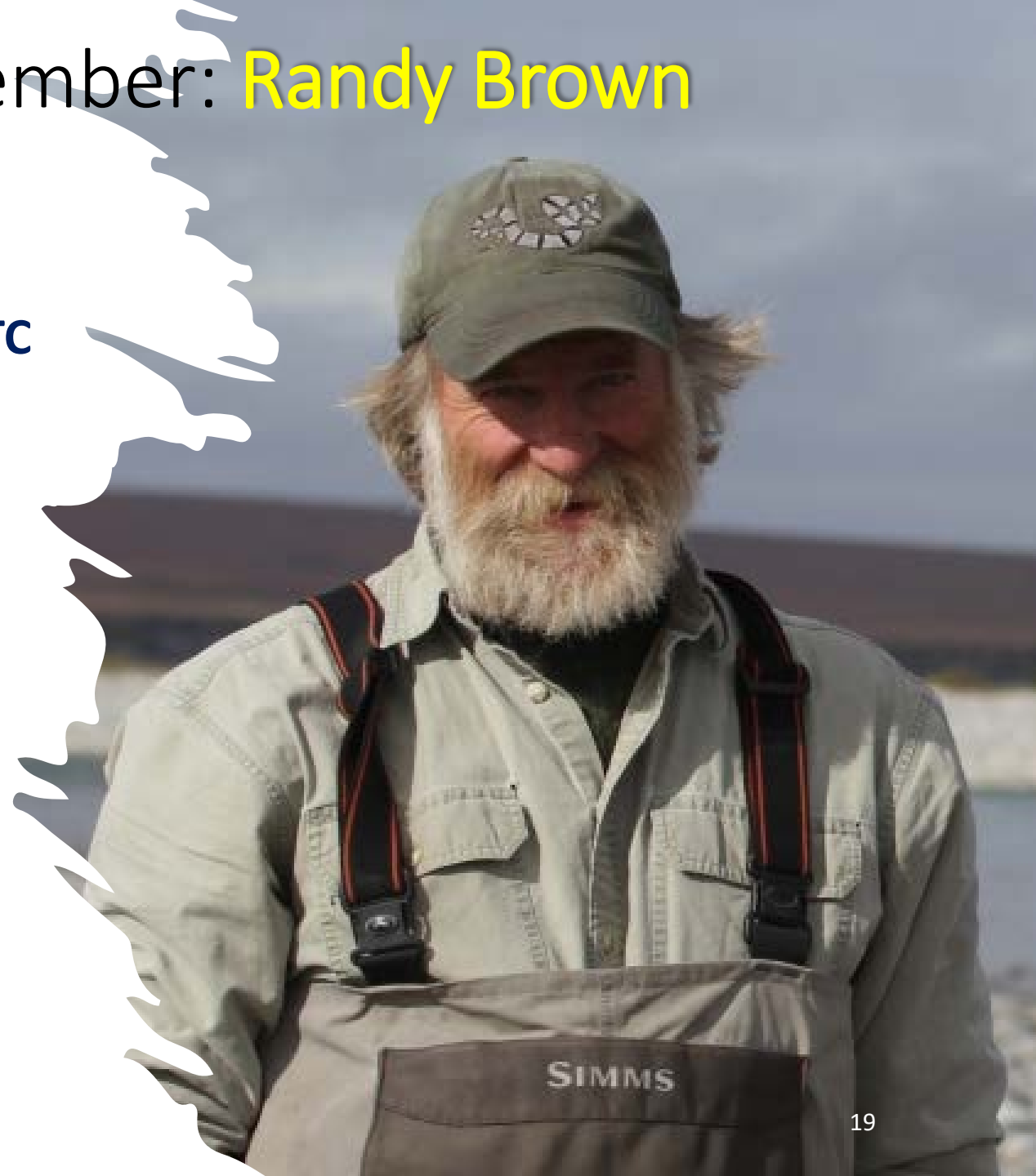




Photo credit: Madeleine Czechowski



Comments or Questions?

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