YUKON RIVER DRAINAGE FISHERIES ASSOCIATION

PO Box 2618, Valdez, Alaska 99686♦Ph: 907-272-3141 Fax 907-272-3142♦www.yukonsalmon.org
Email: info@yukonsalmon.org

Report to the Yukon River Regional Advisory Councils
Spring 2025

FRMP PROJECTS

In-Season Salmon Management Teleconferences:

YRDFA has been facilitating the in-season salmon management teleconferences since 1999.The teleconference calls offer stakeholders the opportunity to get first-hand information during the fishing season, have their management questions addressed, and to share traditional ecological knowledge. In a rural and remote area as large as the Yukon River, the in-season salmon management teleconference calls offer a relatively inexpensive and efficient manner to bring together agency professionals with resource stakeholders across a large geographic area in a meaningful approach to prevent and mitigate conflict.

The calls include Canadian agency and community counterparts. While outside the jurisdiction of the U.S. federal subsistence management program, the in-season salmon management teleconferences promote international cooperation between organizations and individuals facing common salmon management conservation and management challenges.

We currently do not have funding secured for the 2025 Teleconference Season. Our executive director will be reaching out to several funding sources to secure funding to continue to facilitate this important platform. Our vision for the 2025 teleconference will be shifting to a more proactive format focusing around the Yukon Salmon Rebuilding Plan. We want to ensure the voices of the people along the river provide their comments and solutions.

In-Season Salmon Survey:

The In-season Subsistence Salmon Survey Program is a crucial communication tool that has helped managers ensure that Yukon River escapement targets are met and that, in typical years, subsistence fishers can achieve their harvest goals. YRDFA will be

hiring local representatives in ten Yukon River communities—from Alakanuk to Eagle, including Alakanuk, Mountain Village, Marshall, Russian Mission, Anvik, Ruby, Huslia, Tanana/Rapids, Fort Yukon, and Eagle. For six weeks during the salmon season, these local surveyors will collect observations from fishers in their communities. To protect anonymity, these observations are summarized and shared with Yukon River In-season Managers and the broader Yukon River community through the In-season Salmon Management Teleconferences. We are hoping that our funding comes through for the 2025 season and at the time of this writing we are waiting to hear from our potential funders. In 2024, the project was funded by the National Park Service.

YRDFA also collaborated with the Indigenous Sentinel Network (ISN) to create a digital version of the survey program. For the first time, surveyors were able to digitally submit their observations via phone or computer. The app streamlines the reporting process, making it easier for fishers to share what they are seeing on the river and provide information about their harvests. The ISN platform enables YRDFA staff to generate reports efficiently and communicate directly with surveyors through the app. This winter, YRDFA will host a training event in Anchorage to familiarize surveyors with the digital platform. Following the training, YRDFA will explore either incorporating this technology into the FRPM program for 2025, if funded, or securing alternative funding to continue the In-season Salmon Survey Program.

OTHER PROJECTS:

Federal Funding

Yukon River Watershed Ecosystem Action Plan (USFWS & NOAA)

The people of the Yukon River rely heavily on the watershed's natural resources to feed their families and support their culture. Annual Chinook and Chum salmon harvest is essential for the livelihood of the 76 small, rural villages scattered around the ~330,000 square mile watershed. Since 1997, Chinook salmon runs and harvest have declined. In recent years, both Chinook and Chum salmon runs failed completely with devastating consequences to the Yukon River watershed people, families, community and culture. Significant habitat alteration has occurred throughout portions of the Yukon River watershed in Alaska and Canada that could be impacting salmon recruitment. Yet, no comprehensive assessment of these alterations and their potential impact on wild salmon runs has been completed.

The Yukon River Drainage Fisheries Association (YRDFA) is consulting directly with Yukon River watershed communities and incorporating Indigenous Traditional Knowledge to complete a comprehensive assessment and identification of priority habitat restoration needs. Funding is also being used to employ residents of rural Yukon villages to carry out this effort to the greatest extent possible. This effort will result in a watershed ecosystem action plan (WEAP) that can be used to understand and develop actions to address the ongoing crisis of salmon declines.

YRDFA is accomplishing this project in three phases. The first phase will involve on-the-ground biological data gathering and assessment; phase two will include the collection of Indigenous Traditional Knowledge (ITK); and phase three will include drafting a watershed ecosystem action plan (WEAP) that prioritizes the most significant impacts and threats to the watershed. The WEAP will provide the basis for continuing watershed assessments and allow for focused efforts to pursue restoration funding for the highest-priority projects likely to improve the watershed's health. The US Fish and Wildlife Service (USFWS) Habitat Restoration Program provides technical support to create scopes of work and cost estimates for the highest-priority restoration projects that the WEAP identifies. Identifying specific, high-priority projects with scoping and cost documents will allow project partners to work with landowners to pursue funding from both public and private sources to improve the watershed's health.

The Ruby restoration project on the Poorman Highway near Ruby, Alaska, started in 2024. Sites identified included 13 Mile Creek and New York Creek. The design phase began in 2024 and will continue in the summer of 2025. Current funding will complete the design phase at 65%. We are looking for further funding sources to complete this project design to 100% completion.

In 2023, YRDFA hired an environmental specialist and a GIS company to help develop the watershed story map. In 2024, YRDFA hired another field technician to join our team. During July & August 2024, the Environmental Specialist and Field Technician collected field data for the WEAP project. Data collection comprised water quality sampling and culvert surveys of the Middle Yukon River and Tanana River watersheds. Using the USFWS's GIS database, the YRDFA team collected 64 culvert surveys and 50 water quality samples. Fieldwork locations this season consisted of the area surrounding Nulato and road-system accessible areas around Minto, Manley Hot Springs, Eureka, and the Tofty-Tanana Road. The field crew identified multiple additional culverts of potential concern for Yukon salmon fish passage, which were not previously listed in the USFWS database. Culvert survey data was entered into the USFWS Fish Barrier Hunter app, and water quality data was entered into a new Survey123 app designed by YRDFA contractor Michael Baker Inc. This fieldwork will continue into at least the Fall of 2025. YRDFA staff is working with USFWS to present the preliminary field data to the WEAP Steering Committee. The steering committee will meet in person February 25, 2025 from here the Steering Committee will suggest target areas for the following stages of this data collection. Eventually, this data will be utilized to achieve the overarching objective of WEAP - the cooperative drafting and finalization of YRDFA and USFWS's Water Ecosystem Management Action Plan. The TEK & Story Map data collection for WEAP began in October 2024 and will continue during the 2025 field season.

- End date: June 2026

North Pacific Research Board (NPRB):

Engaging Fishers in Research on Chinook and Chum Salmon:

This project, funded by the North Pacific Research Board, began in January 2023 and runs through Feb 2026. It has a goal of contributing to an understanding of the drivers of decline and collapse in Yukon Chinook and chum salmon. Through this project we are partnering with four Yukon River communities - Alakanuk, Emmonak, St. Mary's, and Huslia - and another NPRB funded project, Exploring Linkages of a Changing Climate and Productivity of Chinook Salmon led by Drs. Katie Howard and Vanessa von Biela. Local and Traditional Knowledge interviews on historical Chinook salmon health in Alakanuk and Emmonak will inform their biological research on drivers of salmon decline by learning about the historic health of Chinook salmon as they leave the marine environment and enter the freshwater environment. Our second objective is working with fishers in St. Marys and Huslia to monitor river water temperature, create a community response team to assess the damage if there is a salmon die-off and conduct annual salmon carcass surveys. Our third objective is to increase outreach and hold community meetings to share Yukon River salmon research.

Currently we are working on sharing our analysis with the participants and Tribal Council in Alakanuk. We hope to hold a community meeting in Alakanuk to share these results and bring other scientists to share their work during the same meeting. We are also creating a timeline of information shared about the health of Yukon River Chinook salmon from each community. This visual tool will help us share the results with various audiences. After the Alakanuk participants and Tribal Council have had a chance to review our results, they will be shared with our science partners to inform them of their research. We have already shared the results with the Emmonak community and participants. We thank the participants in both Emmonak and Alakanuk for sharing their knowledge and time.

Activities began in June in the communities of St. Mary's and Huslia to deploy temperature loggers on the Andreafski and Koyukuk rivers. A community meeting was held in both communities to discuss the project and begin drafting standard operating procedures during a heat response event. We are currently working on plans for the 2025 season.

We have found an intern to help with this project. This intern will begin in February 2025 part time and build to a full time position for the summer. Their primary tasks on this project would be to help capture the activities with our videographer and then help share the results through social media and other avenues. The intern would also have the opportunity to learn about salmon management on the Yukon River and travel to project sites.

- End Date Feb 2026

Exploring Linkages Between a Changing Climate and Productivity of Yukon River Chinook Salmon *in Partnership with ADF&G*

We worked with communities of St. Mary's and Huslia and identified individuals who have the local expertise and interest for participating in field sampling for this project. YRDFA contracted local stakeholders to collect samples alongside project biologists in the most effective and sensitive manner (no additional pre-spawn salmon mortality). YRDFA also facilitated bridging the gap between salmon stakeholders and project investigators through a variety of opportunities to join community and tribal meetings. Since much of the data collected under this proposal will be novel and lacks a pre-decline baseline, YRDFA is also leading a companion project (also submitted to NPRB, “Engaging Yukon River Fishers in Research on Chinook Salmon Declines”) that seeks to collect traditional ecological knowledge about historical changes to the health of Yukon River Chinook salmon from communities who observe these fish near river entry.

An aerial survey was conducted by ADF&G which reported 70 Chinook observed in the Andreafski river at the end of July 2024. We determined that we would not move forth with the carcass survey this season. A debrief meeting will be scheduled with the program team leads to determine and plan for the 2025 season.

- End date June 2026

<u>State of Alaska</u>

Yukon River Watershed Clearinghouse: A culturally responsive monitoring program.

The Clearinghouse project, funded by the State of Alaska, aims to identify data gaps along the Yukon River and serve as a central resource for documenting social and ecological changes throughout the watershed. This effort integrates both physical biological data and traditional ecological knowledge (TEK). To support this work, a TEK technician has been hired to conduct interviews with local knowledge holders, generating a historical timeline of observed changes on the Yukon River. Additionally, a physical biological science technician conducted fieldwork during the past season, including culvert assessments, stream evaluations, and water quality sampling.

The project team is collaborating with the Watershed Ecosystem Action Plan (WEAP) team to highlight how the TEK interviews complement WEAP project’s objectives in the ArcGIS StoryMap they are creating. Planning is currently underway for the 2025 field season.

- End Date 2027

Subsistence Assistants (ADF&G funded)

The Yukon Subsistence Salmon Harvest Survey is conducted by the Alaska Department of Fish and Game (ADF&G), Division of Commercial Fisheries. The data collected from this survey is

combined with in-season information to provide a comprehensive understanding of how salmon runs are progressing. This information is critical for making predictions about future salmon runs. The survey also serves as an important platform for community members to ask questions, share their local knowledge, learn about ongoing research, and communicate their subsistence needs to ADF&G, including whether those needs are being met. YRDFA plays a key role in this process by identifying and hiring local community assistants, facilitating introductions, administering our contracts, and ensuring local hires are paid accordingly. Our involvement ensures strong local participation and helps bridge the connection between communities and management agencies.

- End Date: February 2026

Upcoming Meetings:

- Yukon River Science Symposium -February 12, 2025 in Anchorage at the BP Energy Center. Virtual option available.
- YRDFA 35th Annual Mtg - April 22-23, 2025 in Fairbanks at Pike's Landing
- YRDFA 35th Anniversary Celebration - April 23, 2025 at Pike's Landing
- YRDFA In-season Surveyor Training Event - Apr 24, 2024 at Pike's Landing
- YRDFA Preseason mtg - April 24-25, 2025 in Fairbanks at Pike's Landing
- Bio-Technician Training Camp - Tentative June 23-27, 2025 - Lower River TBD
- Bio-Technician Training Camp - Tentative July 21-25, 2025 - Upper River TBD

We are excited to welcome and introduce our newest staff members:

- Brian McKenna - YRDFA Fisheries Biologist - YRDFA is excited to announce we've hired Brian McKenna to fill our fisheries biologist position. Brian has 13 years of experience serving the peoples and fishes in the Yukon River. He has worked with the USFWS (2012-2013) and the Tanana Chiefs Conference (2013-2024) prior to joining YRDFA in January, 2025. Please feel free to reach out and connect with Brian in his new role at YRDFA (brian@yukonsalmon.org).
- Alitha McCarthy - Executive Assistant - YRDFA is also excited to announce that we've hired Alitha McCarthy to be our Executive Assistant.
  Alitha is Koyukon Athabascan from Ruby and Hughes. She's lived in Ruby all her life with her family. Her life revolves around her son Sidney McCarty and furbaby Phoenix. Her parents are the late Esther McCarty (Hughes) and Patrick McCarty (Ruby). Her paternal grandparents were the late William and Marie McCarty. Her maternal grandparents were the late Arthur and Alice Ambrose.

  Alitha went straight to work after high school, working as a Teacher's Aide at M.A.K. School in Ruby for 5 years. She has been working at the Ruby Tribal Council for 20 years. During this time, she held the Education/Employment Director, Tribal Enrollment, and Administrative & Bookkeeping Assistant positions. While working, she received her Associates Degree in Tribal Management at the University of Alaska Fairbanks. Alitha completed and received certificates from the Doyon Leadership Training and the Tanana Chiefs Conference Leadership for Results

Training. Throughout her years of working, she took the opportunity to further her education by attending various trainings and conferences in education, human resources, bookkeeping and tribal enrollment.

Alitha and her family enjoy living a traditional, cultural and a subsistence lifestyle. Although Alitha isn't fluent in Denaakke language she can moderately read, write and speak it. She had written and sang her first Native song in honor of her late mother when her memorial potlatch was held. Her favorite times are spent hunting, beading, cooking and fishing along the Yukon river with her family. Edeyeedaaleelgots "hold on to your spirit, be calm within yourself"