FISHERIES RESOURCE MONITORING PROGRAM
KUSKOKWIM REGION OVERVIEW

Since the inception of the Fisheries Resource Monitoring Program (Monitoring Program) in 2000, a total of 110 projects have been funded in the Kuskokwim Region at a cost of $31.8 million (**Figure 1**). The State of Alaska has had the most projects funded in the region, followed by the U.S. Department of the Interior agencies, Alaska rural organizations, and other organizations (**Figure 2**). See **Appendix 1** for more information on Kuskokwim Region projects completed since 2000 and a list of all organizations that have received funding through the Monitoring Program.

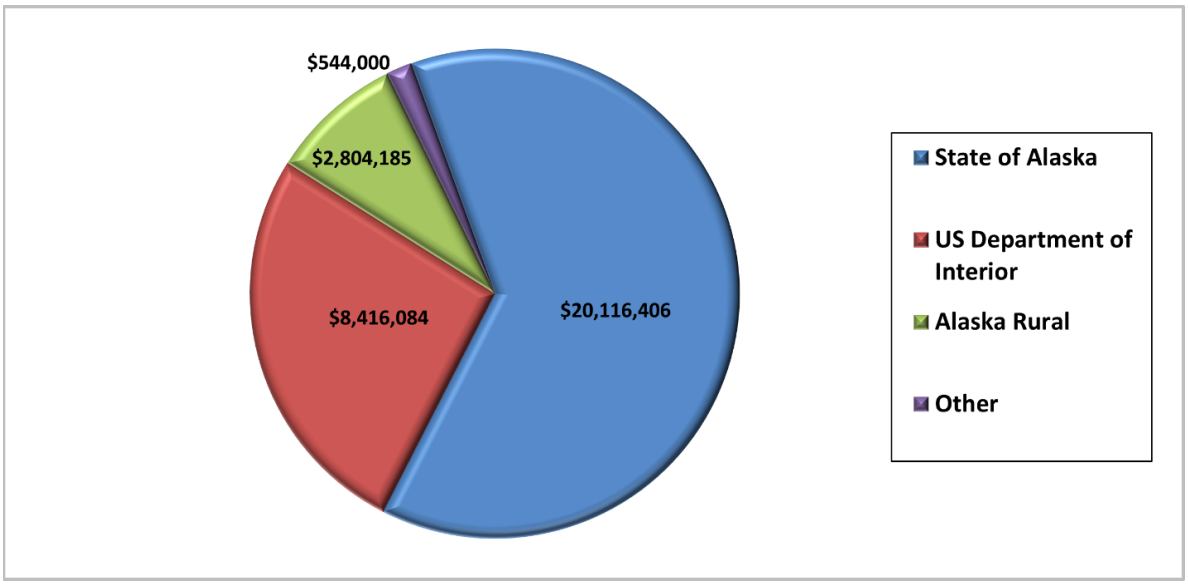

Figure 1. Monitoring Program fund distribution since 2000 in the Kuskokwim Region.

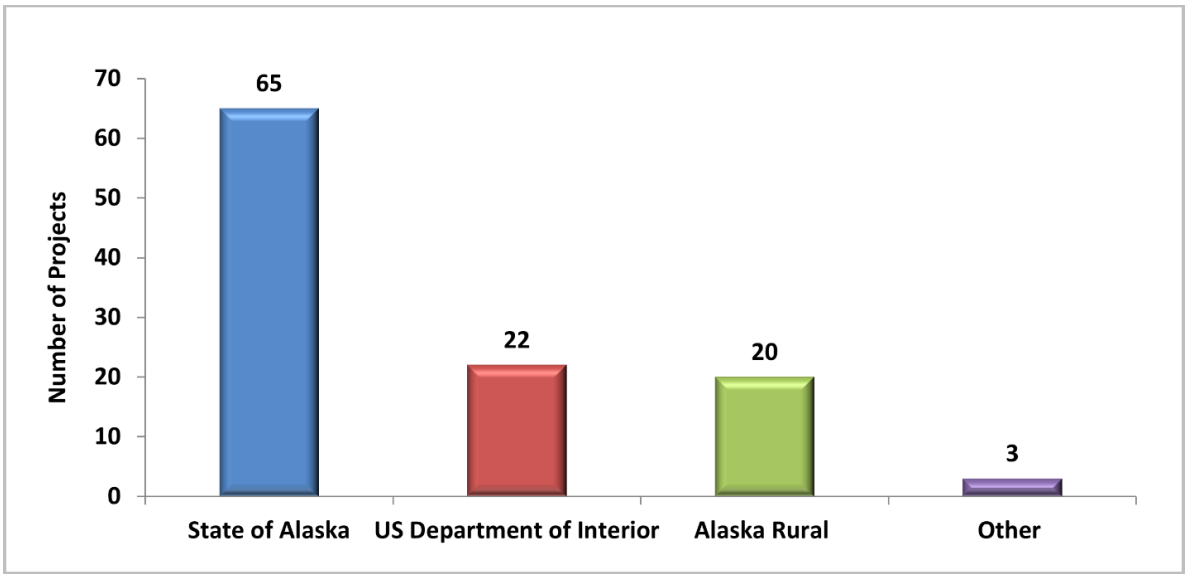

Figure 2. Number of Monitoring Program projects funded since 2000 in the Kuskokwim Region.

PRIORITY INFORMATION NEEDS

The 2026 Notice of Funding Opportunity for the Kuskokwim Region contained the following eight priority information needs developed by the Yukon-Kuskokwim Delta and Western Interior Regional Advisory Councils:

- Drivers of Chinook, Chum, Coho, and Sockeye salmon population declines in the Kuskokwim River drainage including Kuskokwim Bay tributaries.

- Chinook, Chum, Coho, Pink, and Sockeye salmon inter- and intraspecies specific competition for resources in freshwater and marine environments.

- Northern Pike distribution, abundance, habitat preferences, and predation patterns upon juvenile salmon and other fishes in the Kuskokwim River watershed including Kuskokwim Bay tributaries (e.g. Kanektok River).

- Establish, develop, maintain, and collect long-term data sets of watershed-scale environmental variables to better understand their effects upon Chinook, Chum, and Coho salmon productivity within the Kuskokwim River watershed including Kuskokwim Bay tributaries.

- Reliable quantitative and/or qualitative estimates of salmon run size, escapement, and harvest in the entire Kuskokwim River watershed including Kuskokwim Bay tributaries.

- Explore new and cost-effective methods for conducting in-season salmon run and harvest assessments in the Kuskokwim River drainage, with an emphasis on community-based monitoring.

- Distribution, abundance, condition, and survival of juvenile and out-migrating Chinook, Chum, Coho, and Sockeye salmon in the Kuskokwim River drainage.

- Impacts of environmental change in continued harvest and use of fish and impacts of climate change on fish, for example fish migration, spawning, and life cycle, and abundance.

2026 MONITORING PLAN DEVELOPMENT FOR THE KUSKOKWIM REGION

For the 2026 Monitoring Plan, eight proposals were submitted for the Kuskokwim Region (**Table 1**).

Table 1. Projects submitted for the Kuskokwim Region, 2026 Monitoring Plan, including project duration in years and total funds requested.

Project Number	Title	Project Duration (Years)	Total Project Request
26-300	Goodnews River Salmon Escapement Monitoring	4	$628,886
26-301	Kuskokwim Whitefish and Coho Sonar	4	$622,725
26-302	Salmon River of the Pitka Fork Chinook Salmon Escapement Monitoring	4	$431,960
26-303	Implementing Artificial Intelligence for Rural Alaskan Salmon Counts	4	$770,087
26-304	George River Salmon Weir	4	$867,884
26-350	Bethel Subsistence Harvest Surveys	4	$605,959
26-351	Kuskokwim Management Area Post-Season Subsistence Salmon Harvest Survey	4	$938,557
26-352	Local and Traditional Knowledge of Nonsalmon Fisheries Including Whitefishes, Sheefish, and Northern Pike in a Changing Climate in the Kuskokwim River, Alaska	4	$581,834
Total			**$5,447,894**

EXECUTIVE SUMMARIES AND TECHNICAL REVIEW COMMITTEE JUSTIFICATIONS

The following executive summaries were written by the principal investigators and submitted to the Office of Subsistence Management as part of a proposal package. It may not reflect the opinions of the Office of Subsistence Management or the Technical Review Committee. The executive summaries may have been altered for length.

Technical Review Committee justifications are a general description of the committee's assessment of proposals when examining them for strategic priority, technical and scientific merit, investigator ability and resources, partnership and capacity building, and cost/benefit. More in-depth reviews are provided to investigators following project selection.

Investigator Submitted Executive Summary:

Project Number:	26-300
Title:	Goodnews River Salmon Escapement Monitoring
Geographic Region:	Kuskokwim Region
Data Types:	Stock Status and Trends
Principal Investigator:	Madison Hardwig, Alaska Department of Fish and Game (ADF&G)
Co-investigator:	Sam Decker (ADF&G); Jonathan T. Cawlfield (U.S. Fish and Wildlife Servic Togiak National Wildlife Refuge)
Project Request:	**2026:** $226,281 **2027:** $151,105 **2028:** $149,446 **2029:** $102,054
Total Request:	$628,886

Issue: We propose to restore operations of a weir on the Middle Fork Goodnews River to index Chinook (*Oncorhynchus tshawytscha*), chum (*O. keta*), and sockeye salmon (*O. nerka*) escapement to the Goodnews River drainage, while also conducting a school outreach program to build local capacity and interest in fisheries. Our proposal is in response to the priority information needs identified in the 2026 FRMP request for proposals to obtain reliable quantitative and/or qualitative estimates of salmon run size, escapement, and harvest in the entire Kuskokwim River watershed including Kuskokwim Bay tributaries. This proposal would reinstate a 27-year dataset used to evaluate the size, composition and trends of Chinook, chum, and sockeye salmon to a tributary of the Goodnews River. Additionally, this proposal would also include a community outreach program with the Rocky Mountain School in the community of Goodnews Bay, AK, thus fostering community awareness, understating, interest, and involvement of students in the fisheries monitoring program on the Goodnews River.

Goals: To resume operations of a ground-based monitoring project that will adequately index escapement to the Goodnews River.

Objectives:

1. Estimate the daily and total annual Chinook, sockeye, and chum salmon escapements from 25 June to 15 August, annually from 2026–2029.

2. Collect age, sex, and length (ASL) data from Chinook, sockeye, chum, and coho salmon using weir traps, such that the number of samples collected will allow for future estimates of age composition with 95% confidence intervals no wider than ±10% (a=0.05, d=0.10).

3. Foster local interest in natural resource management, field biology, and expose students to employment and post-secondary education possibilities.

Methods: We propose to restore operations of a weir on the Middle Fork Goodnews River to index Chinook (*Oncorhynchus tshawytscha*), chum (*O. keta*), and sockeye (*O. nerka*) escapement to the Goodnews River drainage from 25 June – 15 August (2026, 2027, 2028, and 2029). Fish will be counted throughout the daytime by trained technicians. Visual counts will take place through a clear plastic viewing window placed on the stream surface. Age, sex, and length data will be collected in proportion to run timing using live fish trap that is integrated into the weir design. The crew will record daily fish passage numbers of each salmon species in field logs and report the information to ADF&G staff. Data will be made publicly available each day through the Arctic Yukon Kuskokwim Database Management System (AYKDBMS), and inseason data summaries will be provided to ADF&G, U.S. Fish and Wildlife Service (USFWS), and stakeholder fishery management advisory groups. We will estimate any missed escapement of salmon that occurs within the target operational period (generally due to high water or scouring) using hierarchical Bayesian estimation techniques. ADF&G staff will be responsible for maintaining the information physically and electronically in tabular and graphical formats for the use of various managers and advisory groups engaged in inseason management.

Partnerships/Collaboration: The Middle Fork Goodnews River weir project will be operated cooperatively by ADF&G and the USFWS Togiak National Wildlife Refuge (TNWR). The project will be staffed by two ADF&G Fish and Wildlife Technicians and one local hire USFWS Fisheries Technician throughout project operations. ADF&G is responsible for all aspects of weir operations, including staff support, logistical support, data processing, data analysis, and reporting. TNWR is responsible for providing staff to assist inseason at the project, logistical guidance and insight, and assist with community outreach. Working in collaboration will provide an avenue to improve community outreach and further engage Goodnews Bay communities. Planned outreach includes presentations on the purpose and operation of the weir at the Rocky Mountain School in Goodnews Bay, AK. In addition, an ADF&G biologist will present a hands-on exercise that walks students through the salmon life cycle. These presentations were first implemented in the winter of 2018-19 in the headwaters communities of the Kuskokwim River with funding from OSM FRMP project 20-302 and thus far has been very successful, in the opinion of the weir technicians, educators, and students that participated.

Technical Review Justification: The project resurrects the Goodnews River weir project that has not operated since 2019. Operation of the weir will benefit management of the salmon on the Goodnews River and serve as a regional monitoring site at a time of highly variable salmon returns along Western Alaska. This weir operation will assess run strength and escapement monitoring that have proven challenging or unattainable under the current aerial assessments. This project will also collect age, sex, and length data with the intent to further estimate future estimates of age compositions. This project directly addresses a Priority Information Need listed in the 2026 Notice of Funding Opportunity for the Kuskokwim Region. The investigators have the necessary background and experience operating weirs. A local hire will assist with the project on daily weir operation, as well as assist with educational and outreach efforts at the Rocky Mountain School. The cost of the project is reasonable considering the remoteness of the work to be conducted and staffing needed.

Investigator Submitted Executive Summary:

Project Number:	26-301			
Title:	Kuskokwim River coho salmon and whitefish abundance estimation using sonar and apportionment fishing			
Geographic Region:	Kuskokwim			
Data Types:	Stock Status and Trends			
Principal Investigator:	Keegan O. Birchfield (ADF&G)			
Co-investigator:	Mary Herrara-Mathias (ONC); Iris R. Fletcher, Sean D. Larson, and Carl T. Pfisterer (ADF&G)			
Project Request:	**2026:** $148,685	**2027:** $153,254	**2028:** $157,965	**2029:** $162,822
Total Request:	$622,725			

Issue: We propose to continue using sonar and drift gillnet apportionment methods to estimate daily abundance of upriver migrating coho salmon (*Oncorhynchus kisutch*) and whitefish species (*Coregonus spp.*) in the Kuskokwim River during the month of August. In addition, we propose continuing drift gillnet apportionment operations through mid-September to estimate the proportion of the coho salmon and whitefish run that passes through the lower river after sonar operations end. Coho salmon have

suffered poor returns in 5 of the last 7 years with drainage subsistence harvest falling short of amounts reasonably necessary for subsistence[1] in 2018, 2021, and 2022. Furthermore, 2022 marked one of the lowest coho salmon runs on record and triggered the first full river closure in August. Our proposal addresses multiple priority information needs identified for the Kuskokwim Region by providing reliable quantitative estimates of salmon run size and escapements and abundance estimates of whitefish species for the mainstem Kuskokwim River and is consistent with ADF&G's strategic plan towards integrating a sonar-based assessment program within the current suite of Kuskokwim River assessment projects. Toward that goal, ADF&G has secured long-term funding for sonar operations, but the existing budget is only adequate to operate the project through the overlapping Chinook (*O. tshawytscha*), chum (*O. keta*), and sockeye (*O. nerka*) salmon runs in June and July. Coho salmon enter the Kuskokwim River beginning in late July, after the migration of other salmon species has all but ended. By the end of July, only a small portion of the coho salmon run has passed through the lower river, where most harvest occurs. Whitefish species including least cisco (*Coregonus sardinella*), Bering cisco (*C. laurettae*), humpback whitefish (*C. pidschian*), broad whitefish (*C. nasus*), and inconnu (sheefish) navigate the mainstem from mid-May to late September. This project was previously awarded a 4-year grant to conduct August sonar operations beginning in 2020. During this time, it was clear an unknown portion of coho salmon returned after the August 26 operational end date. To address the issue, ADF&G considered multiple scenarios and determined extending apportionment fishing to provide context for total run estimates was the most thorough method to describe coho salmon and whitefish species runs while remaining cost-effective and safe. Our request would continue annual sonar operation through August 26 to enumerate the coho salmon and whitefish run through most of August, then continue the apportionment fishery through September 14 annually to provide context for total run estimates and identify the full extent of the coho salmon and whitefish runs through the lower river. Coho salmon escapement through August 26 is easily obtained by incorporating existing harvest estimate programs with sonar-based estimates of abundance.

[1]27,400–57,600 coho salmon in the Kuskokwim River drainage, per 5 AAC 01.286

Objectives:

1. Estimate the daily and total passage of Kuskokwim River coho salmon and whitefish species at rkm 130 between July 27 and August 26, 2026, 2027, 2028, and 2029 using sonar and an apportionment fishery.

2. Determine the proportion of coho salmon and whitefish species CPUE between August 27 and September 14, 2026, 2027, 2028, and 2029 using the apportionment fishery.

Methods: We propose to use sonar and drift gillnet apportionment methods on the mainstem Kuskokwim River just upriver from Bethel to estimate the daily number of adult coho salmon and whitefish species through August 26, then continue drift gillnet apportionment through September 14 to contextualize total passage estimates in 2026, 2027, 2028, and 2029. Sonar data files will be processed using software developed by ADF&G. A drift gillnet test fishery that overlaps the ensonified areas will be used to apportion abundance estimates to species and provide ongoing CPUE estimates at the site. ADF&G

Division of Commercial Fisheries staff will maintain all physical and electronic data to produce tabular and graphical summaries for use by State managers and the Kuskokwim River Salmon Management Working Group. Abundance estimates will be updated daily in the publicly accessible Arctic Yukon Kuskokwim Database Management System[2].

[2] Escapement Monitoring Inseason and Historical Data – Kuskokwim Management Area Commercial Salmon Fisheries. https://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareakuskokwim.emihd

Partnerships/Capacity Building: Staff from ADF&G and ONC will conduct this project in partnership.

ADF&G is responsible for staff support, logistical support, data processing, reporting, and assisting with outreach opportunities. ONC is responsible for providing staff to assist inseason at the project, logistical insight, and assist with community outreach. Working in collaboration will provide an avenue to improve community outreach and further engage Kuskokwim River communities in Kuskokwim Area salmon research and management issues. This proposal seeks salary funds to facilitate this capacity building effort. From 2020–2023, outreach efforts were hampered by COVID-19, ONC technician availability due to school obligations, and ONC Partners Biologist availability. Despite these challenges, ONC technicians were able to present at 2 KRSMWG meetings and 1 Regional Advisory Council meeting. In an attempt to improve ONC technician participation and presentation consistency, ONC technicians will be trained by ADF&G staff starting July 1 each year. ONC technicians will spend several days under the supervision of the PI or co-PI crew lead and joining ADF&G technicians to learn drift gillnet fishing, fish sampling, and sonar enumeration specific to this site. Once their training is complete, they will be incorporated into daily technician shifts to directly contribute to salmon and whitefish estimates of abundance. During the season, ADF&G staff will assist ONC technicians in adapting a sonar presentation to summarize their efforts for local stakeholder meetings. ONC will coordinate outreach opportunities and assist the technician to deliver a presentation.

Fish harvested in the sonar apportionment fishery will be donated to local communities. From 2017–2024, ADF&G coordinated directly with community members near the test fish site and in the communities of Kwethluk and Bethel to distribute approximately 2,000 fish in June and July annually. As a result of the previous OSM funding cycle, approximately 450 fish were distributed each August in 2020–2023.Volunteers from local communities, enforcement officers, cooperative agencies, and the ADF&G Subsistence Division have delivered fish as far upriver as Tuluksak and as far downriver as Atmauhluak but distant deliveries are extremely expensive and logistically difficult.

Technical Review Justification: Four years of funding are requested to continue operating the Kuskokwim River sonar project to provide a more complete assessment of Coho Salmon and whitefish in the drainage. Previous years of Monitoring Program funded sonar-based assessments have indicated the need for more coverage of the fall migrations of Coho Salmon and whitefish. This project extends the netting and apportionment methods beyond the time that the sonar is removed to provide a relative index of catch-per-unit-effort as well as run timing. This project directly addresses one Priority Information Needs listed in the 2026 Notice of Funding Opportunity for the Kuskokwim Region and is consistent with Alaska Department of Fish and Game's strategic plan towards integrating a sonar-based assessment program on the Kuskokwim River. The investigators have the necessary background, resources, and

experience to successfully run and complete this project. Capacity is built through partnering with Orutsararmiut Native Council, who will provide a field technician to assist with daily sonar operation and gillnet apportionment. Project costs are considerable given the short duration of the field season. This project received letters of support from the Bethel Fish & Game Advisory Committee and Yukon Delta National Wildlife Refuge.

Investigator Submitted Executive Summary:

Project Number:	26-302			
Title:	Salmon River of the Pitka Fork Chinook Salmon Escapement Monitoring			
Geographic Region:	Kuskokwim			
Data Types:	Stock Status and Trends			
Principal Investigator:	Bobbette R. Dickerson (ADF&G)			
Co-investigator:	Sean Larson (ADF&G); Michele Christiansen (MTNT Energy LLC.), Timothy (MTNT Energy Inc.)			
Project Request:	**2026:** $140,120	**2027:** $106,945	**2028:** $109,497	**2027:** $75,398
Total Request:	$431,960			

Issue: We propose to continue operations of a weir on the Salmon River of the Pitka Fork, hereafter referred to as Salmon (Pitka Fork) River, to index Chinook salmon (Oncorhynchus tshawytscha) escapement to the headwaters of the Kuskokwim River, upriver from McGrath. Our proposal is in response to the priority information needs identified in the 2026 FRMP request for proposals to obtain reliable quantitative and/or qualitative estimates of salmon run size, escapement and harvest in the entire Kuskokwim River watershed including Kuskokwim Bay tributaries. The Salmon (Pitka Fork) River weir is currently the only ground-based salmon assessment project operated in the Kuskokwim River that indexes genetically distinct headwaters Chinook salmon.
Goals: To continue operations of a ground-based monitoring project that will adequately index escapement to the headwaters of the Kuskokwim River.

Objectives:

1. Estimate daily and total annual Chinook salmon escapement to the Salmon (Pitka Fork) River using a fixed picket fish weir from 20 June – 15 August.
2. Collect age, sex, length (ASL) data from 250 Chinook salmon in proportion to abundance.
3. Coordinate with local schools in the communities of McGrath, Takotna and Nikolai to introduce salmon ecology concepts to rural students in grades K-12.

Methods: We propose to operate a weir on the Salmon River of the Pitka Fork to index Chinook salmon escapement to the headwaters of the Kuskokwim River from 20 June – 15 August (2026, 2027, 2028, and 2029). Fish will be counted throughout the daytime by trained technicians. Visual counts will take place through a clear plastic viewing window placed on the stream surface. Age, sex, and length data will be collected in proportion to run timing using live fish trap that is integrated into the weir design. The crew will record daily fish passage numbers of each salmon species in field logs and report the information to ADF&G staff in Bethel or Anchorage. We will estimate any missed escapement of Chinook salmon that

occurs within the target operational period (generally due to high water or scouring) using hierarchical Bayesian estimation technique. ADF&G staff will be responsible for maintaining the information physically and electronically in tabular and graphical formats for the use of various managers and advisory groups engaged in inseason management. In addition, escapement counts and estimates will be updated daily in the Arctic Yukon Kuskokwim Database Management System and ADF&G Fish Counts Page.

Partnerships/Capacity Building: Staff from ADF&G and MTNT will conduct this project in partnership. ADF&G will be responsible for staff support, logistical support, data processing, reporting, and assisting with outreach opportunities. MTNT will be responsible for providing staff to assist inseason at the project, logistical guidance and insight, and assist with community outreach. Working in collaboration will provide an avenue to improve community outreach and further engage headwaters communities of McGrath, Takotna, and Nikolai in Kuskokwim Area salmon research and management issues. Planned outreach includes presentations on the purpose and operation of the weir to the schools in McGrath, Nikolai, and Takotna. In addition, the weir crew presents a hands-on exercise that walks students through the salmon life cycle. These presentations were first implemented in the winter of 2018-19 and thus far has been very successful, in the opinion of the weir technicians, educators, and students.

Technical Review Justification: Four years of funding are requested to continue operating the Pitka Fork weir to index Chinook Salmon escapement to the upper Kuskokwim River drainage. The Federal nexus is clear, and the project addresses a 2026 Priority Information Need for the Kuskokwim Region. The weir monitors the most abundant headwater stock of Chinook Salmon, making it an important component of the tributary escapement monitoring program. Project data are not currently used in the run-reconstruction model but may be in the future if more years of data are collected. The project objectives are clear, measurable, and achievable, and the study design is technically sound. The investigators have the experience necessary to complete this project. Capacity will be built by hiring a local to help operate the weir and present about the project and salmon ecology to schools in McGrath, Nikolai, and Takotna. Project costs are reasonable for the proposed work. This project included letters of support from the Yukon Delta National Wildlife Refuge, Native Village of Napaimute, and Iditarod Area School District but are dated for the 2024 Monitoring Program cycle.

Investigator Submitted Executive Summary:

Project Number:	26-303			
Title:	Implementing Artificial Intelligence (AI) for Rural Alaskan Salmon Counts			
Geographic Region:	Kuskokwim			
Data Types:	Stock Status and Trends			
Principal Investigator:	Camille Kohler (neXus Data Solutions, LLC)			
Co-Investigator:	None			
Project Request:	**2026:** $220,570	**2027:** $180,400	**2028:** $183,154	**2029:** $185,963
Total Request:	$770,087			

Issue: The widely dispersed and remote locations of salmon habitats in Alaska make fisheries monitoring a difficult and costly undertaking. Required resource surveys can be prohibitive due to logistics, weather, and time constraints. This lack of timely and accurate data often leaves rural Indigenous communities

outside of routine management frameworks, resulting in misallocated quotas and threatening their ability to harvest salmon for subsistence, income, and cultural continuity. Surveys of the local salmon population are generally performed through surveys, interviews, and varying monitoring programs but due to lack of funding, aerial surveys are rarely completed. By combining Indigenous knowledge of the local tributaries, using unmanned aerial vehicles (UAV or drones), and capturing video and still images for analysis, neXus Data Solutions, LLC (neXus) will develop an open-source software (OSS) Artificial Intelligence (AI) toolchain to detect and classify salmon. AI-driven software development, and unmanned aerial vehicles (UAV or drones), this project aims to increase the collaborative monitoring capacity to supplement traditional surveys and reduce sampling costs for fisheries management.

Objectives: The goal of the year-one pilot project is to work collaboratively with the community of Quinhagak and the Alaskan Native-owned ANCSA 14(h) Qanirtuuq Incorporated subsidiary Nalaquq, LLC to provide knowledge workers with Indigenous subject matter experts (SME) in observing and annotating images. These images will be consumed by the neXus-developed toolchain to produce reports of estimated salmon counts by species. Deliverables for this project include:

1. AI-driven toolchain that makes use of computer vision models to detect and classify objects that produce salmon counts.
2. Metrics on model effectiveness (eg. Accuracy, F1, confusion matrix, etc.).
3. Metadata documentation of training datasets.
4. GitHub repository containing the open-source models and toolchain.
5. Detailed reports that summarize salmon counts and species composition collected at each survey site during the salmon run period, validated in collaboration with fisheries SMEs.
6. A prototype user-facing web application showcasing the software suite, designed for future expansion and broader community use.

Imagery, geospatial data, and knowledge pertaining to fishing grounds will remain the intellectual property of the local tribal organization and treated with confidentiality.

Methods: neXus Data Solutions, LLC data scientists work with our research partners and subcontractors at Nalaquq, LLC to develop an open-source AI software toolchain, leveraging computer vision (CV) models for object detection, tracking, and species identification. This software will consume existing still images of salmon tributaries to solidify a computer-vision model that detects the existence of salmon and classifies these into Chinook or sockeye species. This open-source modelling software will provide opportunities for Nalaquq, LLC's local knowledge experts to annotate and support model training to provide the very best results for object identification and classification.

Once the CV initial model is built, our subject matter experts (SME), with knowledge of the local geography and tributaries, will identify key observation sites along the Kanektok and Arolik rivers to locate commonly known resting areas for Chinook, sockeye, and chum salmon. The Nalaquq, LLC team will provide observers, who have the most intimate knowledge of the resource, to employ a hardware suite of UAV/drones, laptops, and StarLink mobile devices to capture still images of salmon. These images will then be uploaded to a Cloud-based location from which the neXus team may download, process, and potentially retrain the CV models to produce reports of salmon counts by location. Initial engagement with community members and fishers will map the local geography of the salmon environment and identify the start of key fishery runs by species.

A continuous feedback loop will be established where model outputs guide the local team's data collection and annotation efforts, which are then used to retrain and refine the CV models for improved accuracy and applicability.

Consultations: The success of this project is dependent upon close collaboration with the Indigenous community members from Quinhagak through Nalaquq, LLC. This AI toolchain will rely on their local area and fisheries knowledge to properly annotate advise model training to build a robust reporting tool.

Partnerships/Capacity Building: This project will empower the rural and Indigenous communities, like those of Quinhagak, to take an active role in monitoring and managing their salmon fisheries, while establishing an adaptable framework for computer vision enhanced fisheries monitoring. The methods, tools, and processes developed will provide a foundation for ongoing data collection, capacity building, and expanded research into other subsistence fisheries and remote regions of Alaska opening up opportunities to work with and empower other Indigenous communities in our state.

Technical Review Justification: The investigation plan requests four years of funding to count salmon species occurring within tributaries of the Kanektok and Arolik rivers using unmanned aerial vehicles and artificial intelligence software. The Federal nexus is clear, and the project addresses a 2026 Priority Information Need for the Kuskokwim Region. Currently, aerial survey monitoring efforts within the Kanektok River target Chinook and Sockeye salmon within mainstem areas only and do not survey tributary areas. Data collected from this project could contribute to monitoring Chinook and Sockeye salmon escapement within the region and if successful, could enhance collaborative monitoring capacity, supplement traditional survey techniques, and reduce costs associated with aspects of fisheries management. The project includes a partnership with Nalaquq, LLC., and relies heavily upon local knowledge to identify survey areas. Project costs are high relative to the described work and the proposal lacks clarity and detail that warrant consideration. The absence of a detailed work plan, clear deliverables timeline, and performance metrics raises concerns about project execution. Overall, the project could have long-term potential to contribute to salmon monitoring and management in the region.

Investigator Submitted Executive Summary:

Project Number:	26-304			
Title:	George River Salmon Weir			
Geographic Region:	Kuskokwim			
Data Types:	Stock Status and Trends			
Principal Investigator:	Bobbette Dickerson (ADF&G)			
Co-investigator:	Sean Larson (ADF&G) and Dan Gillikin Native Village of Napaimute (NVN)			
Project Request:	**2026:** $253,681	**2027:** $215,754	**2028:** $220,613	**2029:** $177,836
Total Request:	$867,884			

Issue: We propose to continue operations of a weir on the George River to index Chinook (*Oncorhynchus tshawytscha*), chum (*O. keta*), and coho (*O. kisutch*) salmon escapement to the middle portion of the Kuskokwim River drainage, as well as conduct a high school internship program as part of our long-term

efforts to build local capacity. Our proposal is in response to the priority information needs identified in the 2026 FRMP request for proposals to obtain reliable quantitative and/or qualitative estimates of salmon run size, escapement, and harvest in the Kuskokwim River drainage, including Kuskokwim Bay tributaries. This proposal would continue a 30-year dataset used to evaluate the size and composition of Chinook, chum, and coho salmon escapements to the middle Kuskokwim River. Annual monitoring is needed to evaluate if escapements are within the bounds of the established Chinook salmon escapement goal on the George River. In addition, escapement at the George River weir is used to inform a model that estimates total annual abundance and escapement for Kuskokwim River Chinook salmon. The success of the George River weir has made it an integral component of the broader salmon escapement monitoring program on the Kuskokwim River. Apart from its utility to the management of the Kuskokwim River subsistence fishery, the George River weir has been important in fostering community awareness, understanding, and direct involvement in fisheries assessment. Since 2005, the George River weir has been the site of high school mentorship and college internship programs sponsoring hundreds of high school age students and multiple college interns from throughout the Kuskokwim Region. The internship program has proven to be highly successful. In recent years, many of the fisheries technicians and crew leaders working on Kuskokwim River weir projects are past graduates of the high school and college internship programs. Several are currently pursuing degrees in fisheries science.

Objectives: Our overall project goals are to index escapement of Chinook, chum, and coho salmon to the middle portion of the Kuskokwim River drainage and provide capacity building and education opportunities for local stakeholders. Specific objectives of this project are to:

1. Estimate the daily and total annual Chinook, chum, and coho salmon escapements from 15 June to 20 September.

2. Collect age, sex, and length (ASL) data from Chinook, chum, and coho salmon using weir traps, such that the number of samples collected will allow for future estimates of age composition with 95% confidence intervals no wider than ±10% (a=0.05, d=0.10).

3. Operate a high school internship program for 10 students for 8 days to foster local interest in natural resource management and field biology and expose high school students to employment and post-secondary education possibilities.

Methods: We will conduct daily visual counts of salmon escapement to the George River from 15 June to 20 September (2026, 2027, 2028, and 2029) and collect ASL samples from 230 Chinook salmon, 400 chum salmon, and 400 coho salmon throughout the run, in proportion to run abundance. All data will be uploaded to a publicly accessible database and made available weekly at inseason meetings to inform fisheries management decisions. Final results will be published in the ADF&G Fishery Data Series. An 8-day internship will be provided for up to 10 students.

Partnerships/Capacity Building: Staff from ADF&G and NVN will conduct this project in partnership. Of particular interest is the internship program which provides students from communities in the area with the opportunity to interact with biologists, ADF&G staff, and professional educators acting as mentors. Throughout this project, ADF&G and NVN will work together to disseminate project results and

related fisheries management issues to middle river communities during quarterly stakeholder newsletters and community meetings in the middle river.

Technical Review Justification: The investigation plan requests four years of funding to continue weir operations on the George River to index Chinook, Chum, and Coho salmon escapement to the middle portion of the Kuskokwim River drainage and conduct a high school internship program to build local capacity. The Federal nexus is clear, and this project addresses a 2026 Priority Information Need for the Kuskokwim Region. Currently, the George River weir provides the only ground-based index of salmon escapement in the middle portion of the Kuskokwim River. Escapement data from this project are used as inputs in the reconstruction model, which estimates total annual abundance and escapement of Kuskokwim River Chinook Salmon. In addition, age-sex-length data are used to reconstruct brood year returns and monitor population production for Chinook and Coho salmon. The Native Village of Napaimute will conduct an internship program that provides high school students with experiences aimed at teaching watershed concepts, physical habitat assessment, biological sampling, and data analysis. Project costs are high compared to other weirs in the region and year one requested funds exceed the maximum allowable funding permitted under the Monitoring Program.

Investigator Submitted Executive Summary:

Project Number:	24-350			
Title:	Bethel Subsistence Harvest Surveys			
Geographic Region:	Kuskokwim			
Data Types:	Harvest Monitoring; Stock Status and Trends			
Principal Investigator:	Jacob Wade (ONC)			
Co-investigator:	Mary Herrera-Matthias (ONC); Sean Larson (ADF&G)			
Project Request:	**2026:** $144,151	**2027:** $148,882	**2028:** $153,852	**2029:** $159,074
Total Request:	$732,029			

Issue: The proposed project would collect detailed quantitative and qualitative subsistence harvest and age-sex-length (ASL) information in the Bethel area to quantify subsistence harvest effort and catch composition during the Chinook salmon (Oncorhynchus tshawytscha), chum salmon (O. keta), and sockeye salmon (O. nerka) runs. Data collected in this project addresses the 2026 priority information needs by 1) providing reliable quantitative and qualitative estimates of salmon harvests by conducting inseason harvest surveys in the Bethel area from late-May through mid-July and producing inseason harvest estimates and 2) sharing information between stakeholders and agencies concerning salmon conservation via various outreach methods. This project will also collect Chinook salmon ASL data to measure the composition of the harvest for which the state and Federal agencies can utilize for management of the subsistence fishery.

The overarching goal of this project is to provide state and Federal managers and stakeholders with relevant subsistence harvest effort, catch, and composition information collected from a representative subset of families who harvest salmon for subsistence purposes in the Bethel area. Continuous contact with subsistence fishing work groups during the fishing season provides a meaningful opportunity for subsistence users to share their perspectives on the annual salmon runs, harvest needs, and personal impacts of management decisions. This time also allows Orutsararmiut Native Council (ONC) staff to provide a communication channel between subsistence users and fishery management agencies, by sharing information about management decisions, conservation efforts, and other relevant information. Inseason subsistence harvest data that's collected will be utilized to inform inseason harvest models and decisions while also serving as a time-series that provide insight into trends in gear usage, fishing effort and subsistence fleet timing. These long-term datasets can ultimately improve our understanding of Chinook salmon subsistence harvest patterns and the resulting impact on escapement and run dynamics. All goals and outcomes will be achieved through a collaborative effort between ONC and Alaska Department of Fish & Game (ADF&G) to collect, process, and analyze all data.

Objectives:

1. Determine Bethel area subsistence users' relative change in salmon harvest goals for Chinook, chum, and sockeye salmon compared to the prior year, and monitor weekly progress towards achieving annual salmon harvest goals.
2. Document subsistence fishing activity in the Bethel area, including when families begin subsistence fishing, weekly participation, catch per unit effort by gear type, catch composition to provide reliable quantitative estimates of salmon harvests and utilize this data collected to produce inseason harvest estimates in collaboration with Kuskokwim River Intertribal Fish Commission (KRITFC).
3. Estimate the annual ASL composition of Chinook salmon harvested in the Bethel area subsistence fishery.
4. Improve information sharing between stakeholders and agencies concerning salmon conservation in the Kuskokwim River drainage.

Methods: Subsistence harvest information and comments made upon salmon conservation and/or management from fishers will be collected through weekly visits to surrounding Bethel fish camps and opportunistic encounters at the Bethel boat harbor in the months of June and July by trained ONC Fisheries Technicians. ONC Fisheries Technicians will also provide information updates from fisheries managers and an informational flyer to the fishers they survey to ensure there is two-way information sharing. The harvest data collected will be utilized to produce inseason harvest estimates in collaboration with KRITFC. Harvest data collected each week by ONC technicians in addition to any comments from fishers regarding conservation or management will be composed into weekly reports and presented at weekly Kuskokwim River Salmon Management Working Group (KRSMWG) meetings to promote information sharing between stakeholder and agencies. ASL information will be obtained through concerted recruitment efforts of fishers in the Bethel area that will voluntarily sample their Chinook salmon harvest and be compensated for their efforts. ADF&G and ONC will host preseason ASL training and train interested samplers in properly collecting samples.

Partnerships/Capacity Building: This project demonstrates capacity building and new leadership taken on by ONC, a tribal government organization. ADF&G and ONC have been partnering for over 20 years to conduct inseason harvest surveys, but it was not until 2018 that ONC became the principal investigator on this project. ONC has built the capacity to have the necessary equipment and staff to lead this project with support from ADF&G as the critical co-PI. ONC has increased capacity through developing professional staff to run the project, developing and educating local youth to move into leadership roles in fisheries management, and training local students with hands-on biological experience at the high school and university levels. ADF&G has the capacity and will continue to archive physical ASL data collected through this project and make the data publicly available via the Arctic Yukon Kuskokwim Database Management System.

In addition to the capacity that ONC has built, ONC and ADF&G collaborate with the KRITFC, Bering Sea Fishermen's Association (BSFA), and the Yukon Delta National Wildlife Refuge (YDNWR) to collect subsistence harvest data to produce inseason harvest estimates. Since the 2021 season, ONC and KRITFC have been expanding their collective capacity and leadership by having their biologists learn and utilize a new model with the program R, designed by a KRITFC contractor, to produce the inseason harvest estimates that were previously produced by staff at YDNWR. These harvest estimate models directly contribute to inseason fisheries management and are critically important as credible, near real-time indexes of fish harvests. This demonstrates strong tribal leadership in fisheries management and encourages ongoing capacity building.

This project has been well received by local residents in the past and is viewed as an important project supporting management by providing fundamental insights into issues such as the achievement of subsistence needs and the timing of subsistence activities. ONC has long standing ties with fish camp families in conducting the inseason subsistence harvest surveys. The survey instrument utilized in this project ensures protection of privacy, dignity, and confidentiality by all respondents. This project values and acknowledges local contributions in which all results are conveyed back to participants of the project on a weekly basis. Furthermore, local participation in ASL sampling provides an opportunity for education and outreach on salmon biology and management issues. These interactions are two-way; project participants receive timely fishery updates from agency staff and agency staff receive weekly reports on fishing activities and perspectives on the social effects of management decisions.

Technical Review Justification: This four-year project will rely on subsistence salmon fishers in the Bethel area to share reliable monitoring data on two components of the lower Kuskokwim subsistence fishery: (1) in-season subsistence harvest estimates for salmon and (2) Chinook Salmon age-sex-length sampling. This information is critical to achieve drainage and tributary escapement goals while also providing limited harvest opportunities. Since 2010, Chinook Salmon runs have been some of the lowest on record and unprecedented harvest restrictions have resulted. Recently, Chum Salmon runs have also declined. Funding would continue work that began in the 1990s; similar research has been funded by the Monitoring Program since 2001. The proposal addresses a Priority Information Need in the Kuskokwim Region identified in the 2026 Notice of Funding. There is a clear Federal nexus as the research takes place in the Yukon Delta National Wildlife Refuge. Salmon is critical for food security and cultural continuity in this region. This project has successfully adapted to changes in the environment and

comments received from the Technical Review Committee. The project makes near real-time harvest estimates for the Bethel area available to Federal and State fishery managers, contributing to better in-season management of the Chinook and Chum salmon runs. It facilitates the intricate and effective partnership between ONC, ADF&G, KRITFC, YKDNWR and KRSMWG.

Investigator Submitted Executive Summary:

Project Number:	26-351			
Title:	Kuskokwim Management Area Postseason Subsistence Salmon Harvest Survey (continuation of FRMP #18-351)			
Geographic Region:	Kuskokwim			
Data Types:	Harvest Monitoring, Stock Status and Trends			
Principal Investigator:	Timothy Bembenic (ADF&G)			
Co-investigator:	David Koster (ADF&G), Mary Herrera-Matthias (ONC)			
Project Request:	**2026:** $234,454	**2027:** $234,995	**2028:** $234,427	**2029:** $234,681
Total Request:	$938,557			

Issue: Residents of the Kuskokwim Management Area (KMA) harvest 5 species of salmon in addition to many other species of freshwater and marine fishes, for subsistence uses within the boundaries of the Yukon Delta and the Togiak National Wildlife Refuges and surrounding areas. The KMA subsistence salmon fishery is one of the largest in the state in terms of user participation and amounts harvested. Currently there are no annually required subsistence harvest permits or reporting requirements for salmon harvest in either federal conservation unit. This project provides the only estimate of the total subsistence salmon harvest in these areas. Since 1988 ADF&G has monitored subsistence salmon harvests, primarily through household surveys and to a lesser extent harvest calendars and postcard surveys. Beginning in 1999, ADF&G has partnered with Orutsararmiut Native Council (ONC) to provide this information. This project allows for the development of productivity models of salmon species that are then used in every aspect of salmon resource management, including preseason forecasting, inseason management, postseason assessment, and the definition of escapement goals.

Objectives:

1. Annually administer harvest surveys to 15% of Bethel households to estimate the number of Chinook, chum, sockeye, coho, and pink salmon harvested for subsistence by residents of Bethel.

2. Administer harvest surveys to estimate the number of Chinook, chum, sockeye, coho, and pink salmon harvested for subsistence by residents of at least 27 remaining KMA communities by sampling the top third of harvesting communities annually and sampling the remaining communities on a rotational schedule (every other year).

3. Analyze harvest data to produce community estimates of salmon harvest by species.

Methods: The project area will be defined in 2 distinct segments: 1) the community of Bethel and 2) the remaining 27 communities of the Kuskokwim River drainage, including the 3 villages of South Kuskokwim Bay. Bethel and the top third of harvesting communities will be sampled annually, while the remaining KMA communities will be sampled on a rotational schedule (every other year). ADF&G will administer surveys to those communities selected as part of the annual rotation within each of the 4 KMA regions (South Kuskokwim Bay, the lower, middle and upper portions of the river). To accommodate increasing project costs without compromising the viability of annual sampling estimates, a review of subsistence salmon harvest trends and variability among all 28 participating communities was conducted. Each schedule is anticipated to cover 80–85% of expected harvests within the sample. Households in the sample are selected from ADF&G's Kuskokwim community household lists which are maintained and updated yearly by using previous years' survey information.

The Division of Subsistence will utilize a consistent harvest estimation methodology for all communities except Bethel. The survey design in each community will be either census (100% survey) or stratified sampling design, depending on community size. When the total number of households in a community is less than or equal to 40, all households in the community will be surveyed and the survey method will become a census (100% surveyed). In this stratified random survey method, households will be stratified by five user-types: "High Harvester," "Medium Harvester," "Low Harvester," "usually do not fish," and "unknown." From each stratum, survey households will be selected randomly in the following percentages: Heavy Harvester—100%; Medium Harvester—100%; Light Harvester—50%; usually do not fish—30%; unknown—100%. When the number of households in each stratum is fewer than five households, all households in the stratum will be surveyed. Prior to survey season, each household will be re-classified based on past 3 years of harvests, and survey sampling households will be randomly selected. Subsistence harvest of Bethel residents will be estimated by employing a simple random sample harvest survey method. Surveys will begin in mid-September and conclude by late November of each year of the study to ensure that the majority of the subsistence salmon harvest has been completed by the time of the survey. Survey crews will contact community officials prior to arriving in the community to conduct surveys.

In all study communities, surveys will be reviewed for consistency, missing data will be coded, and complex situations will be addressed. On completion of fieldwork, surveys will be transported to Fairbanks with the field crew and delivered to Anchorage for final processing. Subsistence salmon harvest reported by sampled households will be expanded to estimate community harvest for each species using a stratified random sampling expansion technique except in Bethel where a simple random sample will be used. The stratified expansion procedure will be performed for a community only if a sufficient number of households were sampled. For communities not selected for survey as well as instances when minimum sample requirements are not met for individual communities, statistical expansion will not be performed. Instead, community-based harvest will be estimated using Bayesian methods.

Partnerships/Capacity Building: ADF&G and ONC will partner to complete the Bethel portion of the project. This relationship represents close collaboration as principal investigators and has been in place since 1999. ADF&G and ONC staff will continue to collaborate frequently on project planning, inseason project support, staff selection, staff performance and scheduling, data interpretation, and in discussion of

fishery management implications. ADF&G and ONC staff have built a mutually productive partnership grounded in trust, dialogue, and collaboration that benefits each organization and the public. Formal and informal discussions between project staff and associated communities have helped to create public awareness about salmon management and subsistence harvests. Through operation of this project and sharing of the resulting information at management and research forums, ONC and the community of Bethel have gained ownership and meaningful involvement in terms of their participation in management decision making processes as they relate to the subsistence salmon fishery.

Technical Review Justification: The purpose of this project is to provide the subsistence salmon harvest estimates of 27 communities within the Kuskokwim Management Area to Federal and State fishery managers so they can manage the fisheries to ensure their continuation for future subsistence harvests. This project represents a twenty-year partnership between ADF&G and ONC. Hiring local researchers to conduct harvest surveys provides a unique capacity building opportunity for community outreach and engaging subsistence fishers in understanding why data is collected, where it will go and what it means for them. The Federal nexus and strategic priority are clear. The investigation plan is straightforward, and investigators have the experience and training to conduct the research. Project costs are reasonable for the work proposed. This partnership ensures that the people of the region, who depend on salmon for food and cultural continuity, have an active voice in Federal subsistence fisheries management equation of Kuskokwim salmon.

Investigator Submitted Executive Summary:

Project Number:	26-352			
Title:	Local and Traditional Knowledge of Nonsalmon Fisheries Including Whitefishes, Sheefish, and Northern Pike in a Changing Climate in the Kuskokwim River, Alaska			
Geographic Region:	Kuskokwim			
Data Types:	Harvest Monitoring, Traditional Ecological Monitoring			
Principal Investigators:	Timothy Bembenic (ADF&G)			
Co-investigator:	David Koster (ADF&G)			
Project Request:	**2026:** $199,492	**2027:** $232,134	**2028:** $107,967	**2029:** $42,241
Total Request:	$581,834			

Issue: The 2026 Fisheries Monitoring Program request for proposal priority information needs include examination of "the impacts of environmental change in continued harvest and use of fish and impacts of climate change on fish, for example fish migration, spawning, and life cycle, and abundance." Public comments provided at Yukon-Kuskokwim Subsistence Regional Advisory Council (RAC) and Arctic-Yukon-Kuskokwim Board of Fisheries (BOF) meetings and from Kuskokwim Management Area (KMA) subsistence users, identify a suite of environmental changes attributed to changing climate that impact nonsalmon fish, nonsalmon fish habitats, and fishing activities related to nonsalmon species. In recent years, members of the Yukon-Kuskokwim Subsistence RAC and the public have expressed concern

regarding the effects of changing climate on the fish and wildlife populations throughout the Yukon-Kuskokwim Delta that they rely on for subsistence harvests and cultural connection. Changing climate effects can impact subsistence in many ways, including the ability to access, harvest, and properly preserve harvested meat and fish for the winter. Yukon-Kuskokwim Delta Subsistence RAC members have shared observations of dead whitefish and smolt that they attributed to the warm and low water levels in 2019.

Whitefishes and other nonsalmon fishes such as northern pike are extremely important in subsistence fisheries throughout the Kuskokwim River drainage. The Alaska Board of Fisheries has determined that finfish, including northern pike, sheefish and whitefishes in the Kuskokwim River are customary and traditionally used in the Kuskokwim Area (5 AAC 01.286(a)(2)). Despite their prolific subsistence use, there is limited information about their stock statuses, life histories, and annual subsistence harvests. This lack of information makes managing nonsalmon fisheries extremely difficult for both federal and state managers.

Arctic freshwater ecosystems are characterized by delicately balanced relationships between temperature, precipitation, and permafrost that are particularly sensitive to changes in climate. A directed, systematic, drainage wide effort to collect information is needed to better understand changes occurring and their effects on nonsalmon fish resources in the KMA.

Objectives:

1. Document local and traditional knowledge related to whitefishes, sheefish, and northern pike abundance and distribution by conducting in-depth ethnographic interviews, spatial mapping, and participant observation with local residents from Quinhagak, Aniak, and McGrath
2. Document subsistence harvest levels as follows:
    a. Estimate subsistence harvest levels of whitefish species, sheefish, and northern pike for the calendar years 2026 and 2027 by species and season by Quinhagak, Aniak, and McGrath.
3. Describe how observations of environmental change may relate to or inform management priorities or actions.
4. Contribute to local capacity building by utilizing a framework of community involvement in research.

Methods: This project will combine quantitative and qualitative research methods, including household surveys, semi-structured interviews, and participant observation. The documentation of traditional ecological knowledge (TEK) and harvest data collection will occur in two phases: the first phase will occur between January and April 2027, and a second follow-up set of interviews and harvest data collection will occur between January 2028 and April 2028 to address questions about TEK information gathered or questions raised during the harvest survey. Individuals will be interviewed using a semi-structured interview format outlining identified areas of information and developed in advance by the Alaska Department of Fish and Game (ADF&G) and tribal personnel. All interviews will be audio-recorded. Interview data will be downloaded into a qualitative data analysis software, coded, and analyzed. During interviews, photographs and maps will be used as prompts and relevant information (e.g., significant habitats, traditional harvesting areas) will be mapped using the ESRI Collector

application on iPads or on paper and then transferred to the iPad afterward. Harvest data will be collected during face-to-face interviews using a standardized survey form and will last approximately 15 minutes. Respondents will be asked to provide specific information on numbers and species harvested during the calendar year prior to the date of the survey. Household surveys will be administered by teams of two including one ADF&G researcher and a local research assistant (LRA). Prior to data collection, project staff will train the LRAs, familiarizing them with the project and methodological protocols. Local research assistants will be compensated for each completed survey form. Confidentiality of harvest data will be maintained by using identification codes instead of residents' names or addresses; the codes will be assigned before surveys begin.

Partnerships/Capacity Building: The principal investigator (PI) received letters of support from all three communities for this proposal, which includes the Kwinhagak (Quinhagak) Tribal Council, the Aniak Tribal Council, and the McGrath Native Village Council. This work will build on earlier research efforts to contribute capacity building in the study communities through research partnerships with local tribal or village councils and will seek to hire LRAs to help select key respondents, assist in all aspects of fieldwork, and administer the mapping protocol.

Technical Review Justification: This project is strategically important because as salmon populations decline (at least partially due to climate change), federally qualified subsistence users are turning to non-salmon fish to meet their subsistence needs. Rural residents anticipate the need for increased management of non-salmon fish so that they are not depleted. This project will expand, and update baseline data collected by ADF&G almost twenty years ago. This data will provide Federal and State managers with data they need to steward non-salmon subsistence fisheries to ensure their continuation for future subsistence harvests. Both the Kuskokwim and Yukon Councils have expressed concerns about increasing non-salmon fish harvests and the three survey communities in this proposal have already provided letters of support for the project.

APPENDIX 1
PROJECTS FUNDED IN THE KUSKOKWIM REGION SINCE 2000

Project Number	Project Title	Investigators
	Salmon Projects	
00-007	Tatlawiksuk River Salmon Weir	ADF&G, KNA
00-008	Bethel Inseason Subsistence Harvest Data	ONC
00-009	Bethel Postseason Harvest Monitoring	ADF&G, ONC
00-019	Kwethluk River Salmon Weir	USFWS, OVK
00-027	Goodnews River Salmon Weir	ADF&G
00-028	Kanektok River Salmon Weir	ADF&G, USFWS
00-029	Documentation/Communication on Floating Weirs	AVCP
00-030	Kuskokwim Salmon Project Site Surveys	ADF&G, USFWS
01-019	Planning Meetings in AVCP Region	AVCP, KNA
01-023	Upper Kuskokwim River Inseason Data	ADF&G, MNVC
01-024	Bethel Postseason Fishery Household Surveys	ADF&G, ONC
01-053	Tuluksak River Salmon Weir	USFWS, TNC
01-070	Kuskokwim River Chinook Salmon Genetic Diversity	ADF&G, USFWS
01-086	Kuskokwim River Escapement Project Technician	ONC
01-088	Natural Resource Internship Program	KNA
01-116	Kuskokwim River Salmon Work Group support	ADF&G
01-117	Kuskokwim Salmon Age-Sex-Length Assessment	ADF&G
01-118	Kanektok River Salmon Weir	ADF&G, BSFA
01-132	Bethel Inseason Subsistence Salmon Harvest Data	ONC, ADF&G
01-141	Holitna River Chinook, Chum, and Coho Telemetry	ADF&G
01-147	Aniak River Sport Fisheries Survey	ADF&G, KNA
01-225	Middle Kuskokwim River Inseason Salmon Harvest	KNA, ADF&G, USFWS
01-226	Subsistence Fisheries Research Capacity Building	ADF&G
02-036	Aniak Postseason Subsistence Fishery Surveys	ADF&G, KNA
02-046	Kuskokwim River Chinook Salmon Inriver Abundance	ADF&G
03-030	Kuskokwim River Salmon Mark-Recapture	ADF&G, KNA
03-041	Kuskokwim Coho Salmon Genetics	ADF&G, USFWS
03-931	Kuskokwim Science Plan	BSFA
04-301	Kwethluk River Salmon Weir	USFWS, OVK
04-302	Tuluksak River Salmon Weir	USFWS, TNC
04-305	Kanektok River Salmon Weir	ADF&G, BSFA
04-310	Tatlawiksuk River Salmon Weir	ADF&G, KNA
04-311	Kuskokwim Coho Salmon Genetic Mixed Stock Assessment	USFWS
04-312	Goodnews River Coho Salmon Weir	ADF&G
04-351	Kuskokwim Bay Traditional Ecological Knowledge and Oral History	USFWS

Project Number	Project Title	Investigators
04-353	Bethel Inseason Subsistence Salmon Data Collection	ADF&G, ONC
04-359	Kuskokwim Postseason Salmon Subsistence Harvest Surveys	ADF&G, KNA, ONC
05-302	Kuskokwim River Chinook Salmon Inriver Abundance	ADF&G
05-304	George and Takotna River Salmon Weirs	ADF&G
05-305	Kuskokwim Chinook Salmon Genetic Stock Identification	ADF&G
05-306	Kuskokwim River Inseason Subsistence Harvest Data Collection	ADF&G, ONC
05-307	Lower Kuskokwim Subsistence Fisheries Catch Monitoring	ONC
05-353	Nunivak Island Subsistence Cod Fisheries	NPT
05-356	Kuskokwim Area Postseason Subsistence Salmon Harvest Survey	ADF&G
06-306	Lower Kuskokwim Salmon Inseason Subsistence Catch Monitoring	ADF&G
06-307	Kuskokwim River Salmon Management Working Group	ADF&G
07-302	Kuskokwim River Chum Salmon Run Reconstruction	ADF&G, BC
07-303	Kuskokwim River Salmon Age-Sex-Length Assessment	ADF&G
07-304	Tatlawiksuk River Salmon Weir	ADF&G, KNA
07-305	Kanektok-Goodnews River Salmon and Dolly Varden Weirs	ADF&G
07-306	Kwethluk River Salmon Weir	USFWS, OVK
07-307	Tuluksak River Salmon Weir	USFWS, TNC
08-302	Lower Kuskokwim Subsistence Chinook Salmon Age-Sex-Length	ADF&G
08-303	George River Salmon Weir	ADF&G
08-304	Takotna River Salmon Weir	ADF&G
08-351	Tuluksak River Subsistence Chinook Salmon Age-Sex-Length	USFWS
08-352	Bethel and Aniak Postseason Subsistence Salmon Harvest Surveys	ADF&G
10-300	Kanektok and Goodnews River Salmon Assessment	ADF&G
10-303	Kuskokwim River Salmon Age Sex Length Assessment	ADF&G
10-304	Tatlawiksuk River Salmon Assessment	ADF&G
10-306	Kwethluk River Salmon Assessment	USFWS
10-307	Tuluksak River Salmon Assessment	USFWS
10-352	Kuskokwim Salmon Postseason Harvest Monitoring	ADF&G
10-353	Kuskokwim Salmon Working Group Support	ADF&G
10-354	Kuskokwim Salmon Inseason Harvest Monitoring	ADF&G
12-302	Lower Kuskokwim River Subsistence Chinook Salmon Harvest ASL	ADF&G, ONC
12-303	George River Salmon Weir	ADF&G, KNA
12-304	Takotna River Salmon Weir	ADF&G, TCA
12-309	Kwethluk River Salmon Weir	USFWS
14-302	Tatlawiksuk River Salmon Weir	ADF&G
14-303	George River Salmon Weir	ADF&G

Project Number	Project Title	Investigators
14-306	Tuluksak River Salmon Weir	USFWS
14-308	Kwethluk River Salmon Weir	USFWS
14-351	Kuskokwim Delta Chinook Salmon Non-local Harvesters	USDA
14-352	Kuskokwim Area Salmon Post-season Subsistence Harvest Surveys	ADF&G
14-353	Kuskokwim River Salmon Inseason Subsistence Survey	ADF&G
14-354	Kuskokwim River Support for Cooperative Management	ADF&G
16-301	Lower Kuskokwim River Subsistence Chinook Salmon Harvest ASL	ADF&G, ONC
16-302	Salmon River of the Pitka Fork Weir	ADF&G, MTNT
16-351	Middle Kuskokwim River In-season Subsistence Salmon Harvest Monitoring and estimation	ADF&G, NVN
18-304	George River Salmon Weir	ADF&G
18-350	Bethel Subsistence Harvest Surveys	ONC, ADF&G
18-351	Kuskokwim Area Salmon Post Season Subsistence Harvest Surveys	ADF&G, ONC
20-301	Kuskokwim River Coho Abundance Estimation and Whitefish Indices using Sonar	ADF&G, ONC
20-302	Salmon River of the Pitka Fork Chinook Salmon Escapement Monitoring	ADF&G, MTNT
20-303	Middle Kuskokwim River Chinook and Chum Salmon Inseason Assessment	NVN
20-308	Kwethluk River Salmon Run Timing and Abundance	USFWS, OVK, KRITFC, BSFA
22-300	Takotna River Salmon Run Timing and Abundance	KRITFC
22-304	George River Salmon Weir	ADF&G, NVN
22-350	Bethel Subsistence Harvest Survey	ONC
22-351	Kuskokwim Management Area Postseason Subsistence Salmon Harvest Survey (continuation of FRMP14-352)	ADF&G
22-352	Local and Traditional Knowledge of Subsistence Salmon Use in the Lower Kuskokwim River	ADF&G
22-353	Natural Indicators of Salmon in the Upper Kuskokwim River	ADF&G
22-354	Community-Based Harvest Monitoring Network for Kuskokwim River Chinook Salmon	KRITFC, Bechtol Research, USFWS
	Resident Species	
01-052	Whitefish Lake Humpback & Broad Whitefish	USFWS, KNA
01-112	Aniak River Subsistence Fisheries Study	ADF&G, KNA
01-235	Upper Kuskokwim Community Use Profiles	ADF&G
04-304	Whitefish Lake Whitefish Telemetry	USFWS
05-301	Whitefish PIT Tags	USFWS
06-303	Kuskokwim River Whitefish Migratory Behavior	USFWS, KNA
06-305	Kuskokwim River Inconnu Spawning Distribution	ADF&G
06-351	Lower Kuskokwim Non-salmon Harvest and TEK	ADF&G, AVCP

Project Number	Project Title	Investigators
08-300	Aniak River Rainbow Trout Seasonal Distribution	ADF&G
10-305	Kuskokwim River Sheefish Spawning, Distribution and Timing	ADF&G
12-312	Status of Sheefish in Highpower Creek and Upper Kuskokwim River	ADF&G
12-313	Location, Migration Timing, and Description of Kuskokwim River Bering Cisco Spawning Origins	KNA, USFWS
12-352	Whitefish Trends on the Upper Kuskokwim, Alaska	ADF&G
14-301	Kuskokwim River Broad Whitefish Spawning above McGrath	USFWS
14-307	Upper Kuskokwim River Sheefish Enumeration	USFWS
14-356	Lower Kuskokwim Villages Whitefish	CEC
16-303	Enumeration and Spawning Area Characterization of Sheefish in the Upper Kuskokwim River	ADF&G
22-301	Kuskokwim River Broad Whitefish Subsistence Harvest and Spawning Abundance	USFWS, NVN, ONC

Abbreviations: ADF&G = Alaska Department of Fish and Game, AVCP = Association of Village Council Presidents, BSFA = Bering Sea Fisherman's Association, CEC = Calista Education and Culture, KNA = Kuskokwim Native Association, KRIFTC = Kuskokwim River Inter Tribal Fish Commission, NVN = Native Village of Napaimute, ONC = Orutsararmiut Native Council, OVK = Organized Village of Kwethluk, USDA = U.S. Department of Agriculture, USFWS = U.S. Fish and Wildlife Service