Federal Subsistence Board
Work Session Materials
January 24-25, 2018

Anchorage, Alaska

FEDERAL SUBSISTENCE BOARD
WORK SESSION

USFWS Regional Office
Gordon Watson Conference Room
1011 East Tudor Road
Anchorage, Alaska 99503
Wednesday, January 24, 2018 – 10:30 a.m. to 5:30 p.m.
Thursday, January 25, 2018 – 8:30 a.m. to Finish

WORK SESSION AGENDA
*** Asterisk Indicates Action Item**

1. Review and Adopt Agenda*

2. Information Exchange

3. Recommendations on 2018 Fisheries Resource Monitoring Program (Jennifer Hardin and Karen Hyer)*[Section 1 in meeting materials]

    a. Northern Region
    b. Yukon Region
    c. Kuskokwim Region
    d. Southwest Region
    e. Southcentral Region
    f. Southeast Region
    g. Multi Regional

4. Federal Subsistence Board Delegation of Authority to Federal Officials [Section 2 in meeting materials]

    a. Discussion Item: Delegating Board authority to restrict the taking of fish and wildlife on public lands for nonsubsistence uses or close public lands to the take of fish and wildlife for nonsubsistence uses (Jennifer Hardin)
    b. Federal Subsistence Fisheries Draft Revised Delegation of Authority Letters

        i. Kuskokwim Area – Yukon-Kuskokwim Delta Subsistence Regional Advisory Council , Western Interior Alaska Subsistence Regional Advisory Council, Kuskokwim River Inter-Tribal Fish Commission and Yukon Delta National Wildlife Refuge Inseason Manager comments and suggestions (Gary Decossas)*
        ii. Cook Inlet Area – Ninilchik Traditional Council and Southcentral Subsistence Regional Advisory Council comments and suggestions (Scott Ayers)*

5. Regulatory Issues [Section 3 in meeting materials]

    a. Cook Inlet Area Federal Subsistence Fisheries Regulation Revision Proposed Rule (Theo Matuskowitz and Scott Ayers)*

6. Policy Issues [Section 4 in meeting materials]

    a. Potential Revisions to the *Federal Subsistence Board Policy On Closures To Hunting, Trapping And Fishing On Federal Public Lands In Alaska* (Chris McKee)*

7. 2017 Regional Advisory Council Appointment Vetting & Charter Revisions Update (Carl Johnson) [Section 5 in meeting materials]

8. Tribal Engagement Presentation (Orville Lind)

9. Future meeting dates*

    a. April 10-13, 2018: Federal Subsistence Wildlife Regulatory Public Meeting
    b. TBD: July 2018 Federal Subsistence Board Work Session
    c. TBD: January 2019 Federal Subsistence Fish and Shellfish Regulatory Meeting

10. Other Business

11. Adjourn

Work Session Audio Access Information:
Toll-Free: 1-888-455-5897
Pass Code: 3344290

Section 1: Fisheries Resource Monitoring Program (FRMP)

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DRAFT 2018 FISHERIES RESOURCE MONITORING PLAN

OVERVIEW

The mission of the Fisheries Resource Monitoring Program (Monitoring Program) is to identify and provide information needed to sustain subsistence fisheries on Federal public lands for rural Alaskans through a multidisciplinary and collaborative program. It is the responsibility of the Technical Review Committee (TRC) to develop the strongest possible Monitoring Plan for each region and across the entire state.

The Monitoring Program Technical Review Committee evaluated and ranked 53 project proposals for Strategic Priority, Technical and Scientific Merit, Investigator Ability and Resources, Partnership and Capacity Building, and Cost/Benefit. Of these proposals, 29 were for continuing projects currently funded through the Monitoring Program. The final score determined the ranking of each proposal within the region (**Tables 1–7**). High ranking projects comprise a strong Monitoring Plan for the region by addressing strategically important information needs based on sound science and promoting cooperative partnerships and capacity building. The highest ranking projects listed are currently being considered for funding in the 2018 Fisheries Resource Monitoring Program.

Background

Beginning in 1999, the Federal Subsistence Management Program assumed expanded management responsibility for subsistence fisheries on Federal public lands in Alaska under the authority of Title VIII of the Alaska National Interest Lands Conservation Act (ANILCA). Expanded subsistence fisheries management introduced substantial new informational needs for the Federal system. Section 812 of ANILCA directs the Departments of the Interior and Agriculture, cooperating with the State of Alaska and other Federal agencies, to undertake research on fish and wildlife and subsistence uses on Federal public lands. To increase the quantity and quality of information available for management of subsistence fisheries, the Fisheries Resource Monitoring Program was established within the Office of Subsistence Management (OSM). The Monitoring Program was envisioned as a collaborative interagency, interdisciplinary approach to enhance existing fisheries research, and effectively communicate information needed for subsistence fisheries management on Federal public lands.

Biennially, the Office of Subsistence Management announces a funding opportunity for investigation plans addressing subsistence fisheries on Federal public lands. The 2018 Notice of Funding Opportunity focused on priority information needs developed by the Federal Subsistence Regional Advisory Councils with input from strategic plans and subject matter specialists. The Monitoring Program is administered through regions, which were developed to match subsistence management regulations, as well as stock, harvest, and community issues common to a geographic area. The six Monitoring Program regions are shown in **Figure 1**.

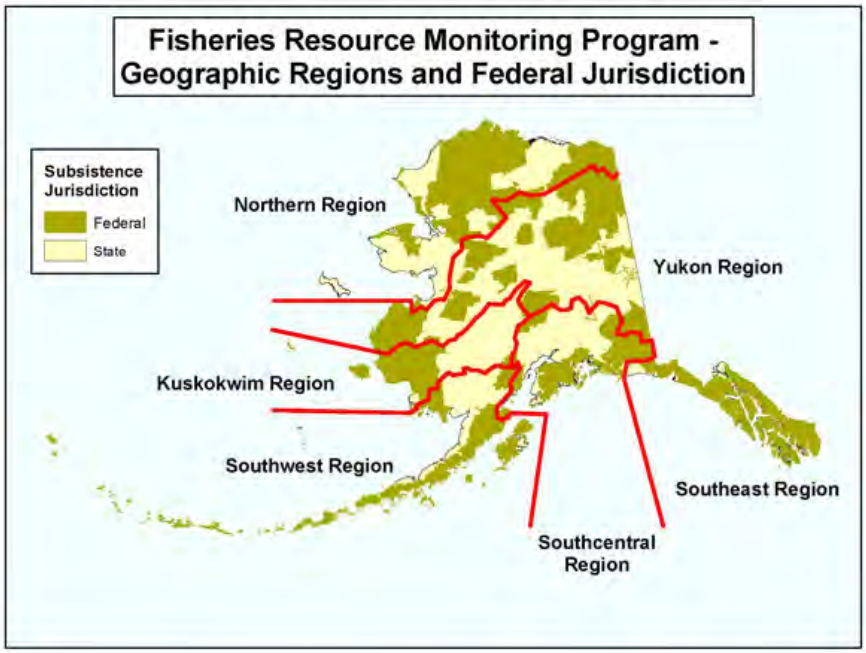

Figure 1. Geographic Regions for the Fisheries Resource Monitoring Program.

Strategic plans sponsored by the Monitoring Program have been developed by workgroups of fisheries managers, researchers, Federal Subsistence Regional Advisory Councils, and by other stakeholders for three of the six regions: Southeast, Southcentral (excluding Cook Inlet Area), and Southwest Alaska. These plans identify prioritized information needs for each major subsistence fishery and are available for viewing on the Federal Subsistence Management Program website (http://www.doi.gov/subsistence/index.cfm. For the Northern Region and the Cook Inlet Area, assessments of priority information needs were developed from experts on the Federal Subsistence Regional Advisory Councils, the Technical Review Committee, Federal and State managers, and staff from the Office of Subsistence Management.

To implement the Monitoring Program, a collaborative approach is utilized in which five Federal agencies (U.S. Fish and Wildlife Service, Bureau of Land Management, National Park Service, Bureau of Indian Affairs, and U.S. Forest Service) work with the Alaska Department of Fish and Game, Federal Subsistence Regional Advisory Councils, Alaska Native and rural organizations, and other organizations. Projects are selected for funding through an evaluation and review process that is designed to advance projects that are strategically important for the Federal Subsistence Management Program, technically sound, administratively competent, promote partnerships and capacity building, and are cost effective.

Projects are evaluated by a panel called the Technical Review Committee. The Technical Review Committee provides scientific evaluation of investigation plans submitted for funding consideration. This committee is a standing interagency committee of senior technical experts that is foundational to the credibility and scientific integrity of the evaluation process for projects funded by the Monitoring

Program. The Technical Review Committee reviews, evaluates, and makes recommendations about proposed projects, consistent with the mission of the Monitoring Program. Fisheries and Anthropology staff from OSM provide support for the Technical Review Committee. Recommendations from the Technical Review Committee provide the basis for further comments from Councils, the public, the Interagency Staff Committee, and the Federal Subsistence Board, with final approval of the Monitoring Plan by the Assistant Regional Director of OSM.

Three broad categories of information are solicited for the Monitoring Program: 1) harvest monitoring, 2) traditional ecological knowledge, and 3) stock status and trends.

Harvest monitoring studies provide information on numbers and species of fish harvested, locations of harvests, and gear types used. Methods used to gather information on subsistence harvest patterns may include harvest calendars, mail-in questionnaires, household interviews, subsistence permit reports and telephone interviews.

Traditional ecological knowledge studies are studies of local knowledge directed at collecting and analyzing information on a variety of topics, including: the sociocultural aspects of subsistence, fish ecology, species identification, local names, life history, taxonomy, seasonal movements, harvests, spawning and rearing areas, population trends, environmental observations, and traditional management systems. Some methods used to document traditional ecological knowledge include ethnographic fieldwork, key informant interviews with local experts, place name mapping, and open-ended surveys.

Stock status and trends studies provide information on abundance and run timing; age, size and sex composition; migration and geographic distribution; survival of juveniles or adults; stock production; genetic stock identification and mixed stock analyses. Methods used to gather information on stock status and trends include aerial and ground surveys, test fishing, towers, weirs, sonar, video, genetics, mark-recapture, and telemetry.

Available Funds

Federal Subsistence Management Program guidelines direct initial distribution of funds among regions and data types. While regional budget guidelines provide an initial target for planning, they are not final allocations. Prior commitments to the 2016 Monitoring Program are approximately $1.5 million. The anticipated funding available for the 2018 Monitoring Program is up to $1.5 million from the Department of the Interior and approximately $600,000 from the U.S. Department of Agriculture.

Interagency Staff Committee Comments on the 2018 Draft Fisheries Resource Monitoring Plan

The Interagency Staff Committee supports the evaluation approach described in the Fisheries Resource Monitoring Program overview, which states that proposal submissions must be complete and address five specific criteria in order to be considered competitive and quality projects. We also agree that in light of declining revenues, only high quality projects should be funded. While some project proposals

address priority information needs identified by the Regional Advisory Councils (details below), projects still need to adequately address the remaining criteria to better ensure success in meeting their proposed objectives. In situations where criteria are not adequately addressed, we agree with the Technical Review Committee that those projects should not be funded. Because of continuing reduced Fisheries Resource Monitoring Program project funding, allocative decisions may necessarily result in increasingly conservative management of important subsistence resources.

NORTHERN REGION

Priority Information Needs

The 2018 Notice of Funding Opportunity identified 11 Priority Information Needs for the Northern Region:

- An inventory and survey of fish species in the Bering Land Bridge National Preserve utilizing traditional ecological knowledge from the communities of Shishmaref, Deering and Wales.

- Unalakleet River Chinook Salmon escapement assessment.

- Salmon migration patterns in Norton Sound (between the Bering Sea and terminal rivers and streams).

- Differences in cultural knowledge, beliefs, and perceptions of subsistence resources between fishery managers and subsistence users in Northwestern Alaska. Of specific interest: rural residents' beliefs, attitudes, and knowledge about beavers and perceptions of changes to fish habitat and access to subsistence resources.

- Traditional ecological knowledge of fish harvested in subsistence fisheries, for example identifying critical habitat, refining range maps, and shedding light on ecological relationships. Of specific interest is knowledge of Dolly Varden in the communities of Noatak, Kivalina, and the Kobuk River.

- Genetic diversity of Dolly Varden stocks harvested for subsistence use in Northwest Alaska.

- Dispersal, distribution, abundance, and life history of Dolly Varden.

- Baseline harvest assessment and traditional ecological knowledge of Broad Whitefish subsistence fisheries in tributaries of Smith Bay, for example identifying critical habitat, refining range maps, and understanding ecological relationships.

- Baseline information on Humpback, Broad and Least Cisco whitefishes as it relates to spawning areas. Of specific interest is Selawik Lake.

- Baseline information including abundance, distribution, movement, and health of Arctic Grayling in the Lower Colville River and its tributaries in the context of climate change.

- Baseline information on Broad Whitefish health in Northern Alaska. Of specific interest is a comparison between Colville and Ikpikpuk river populations in the context of climate change.

Technical Review Committee Proposal Ranking

For the 2018 Monitoring Program, seven proposals were submitted for the Northern Region. The Technical Review Committee evaluated and scored each proposal for Strategic Priority, Technical and Scientific Merit, Investigator Ability and Resources, Partnership and Capacity Building, and Cost/Benefit, and ranked them as follows:

Table 1. Technical Review Committee ranking for projects in the Northern Region. Projects are listed by the Technical Review Committee ranking and include the total funds requested and the average annual request for each project submitted to the 2018 Monitoring Program within the Northern Region.

TRC Ranking	Project Number	Title	Total Project Request	Average Annual Request
1	18-103	Unalakleet River Weir	$662,645	$155,661
2 (tied)*	18-101	Kobuk River Dolly Varden Genetics	$55,800	$27,900
2 (tied)*	18-100	Lower Colville River Arctic Grayling-Nuiqst Subsistence Fishery	$246,503	$82,168
2 (tied)*	18-151	Priority Knowledge Dolly Varden of the South Chukchi Sea	$644,228	$214,743
5	18-150	Bering Land Bridge National Preserve TEK & Scientific Surveys	$421,282	$105,321
6	18-102	Dolly Varden Life History-North Slope Alaska	$313,579	$156,790
7	18-104	Broad Whitefish Health in Northern Alaska	$137,950	$45,983
		TOTAL	**$2,481,987**	**$788,566**

* Proposals with identical scores during the rating process may be further assessed by comparing the average annual cost. Proposals with a lower average annual cost may be scored above a similar rated proposal that has a higher annual average cost.

In addition to the above proposed projects, there are six continuing Monitoring Plan projects in the Northern Region (**Appendix A.1**.).

Regional Advisory Council Comments

North Slope Subsistence Regional Advisory Council

Several Council members said Proposal 18-104 (Broad Whitefish health in northern Alaska) is one of its priorities, and they were discouraged to see it ranked in fifth place, at the bottom of the list, by the Technical Review Committee. They said this project should be moved up the list, and expeditious funding of this project is critical. The Council recognized the shortcomings of the proposal and suggested that Office of Subsistence Management staff work with the applicant to improve it. One Council member explained that the proposal was likely deficient because of the applicant's workload and that the proposal is not reflective of the applicant's capacity to undertake quality research. The Council explained that given the importance of Broad Whitefish in the region, understanding the health of this species in light of industrial development and recent fish mold observations in some systems is essential to protecting the resource and human health. The Council also said that, because Broad Whitefish are harvested in greater quantities than Grayling, improving scientific understanding of Broad Whitefish should be highly prioritized.

The Council said that Project 18-100 (Lower Colville Arctic Grayling) is its next priority because Arctic Graying is important to North Slope communities, and currently there is a lack of information on this species in the region. The Council said the proposed industrial development in the National Petroleum Reserve Alaska and ongoing development in the vicinity of Nuiqsut make Project 18-100 very important. The Council said that Projects 18-101 and 18-151 address topics related to Dolly Varden, another important subsistence resource. The Council said that between these projects, Project 18-151 addresses information that is applicable to a broader geographic area and therefore should be prioritized above Project 18-101.

Northwest Arctic Subsistence Regional Advisory Council

The Council had no comments on the Northern Region projects.

Seward Peninsula Subsistence Regional Advisory Council

The majority of Council members said that Project 18-103 (Unalakleet River weir) is its priority in the Northern Region, as did the Technical Review Committee, because local people rely on Chinook Salmon runs into the Unalakleet River, and these runs have been smaller than average in recent years. One Council member said that elders from his community are concerned that fish are being harmed at the weir, but since visiting the weir and observing project methods he supports the weir project.

Regarding the Monitoring Program process, the Council expressed concern that projects of greatest interest to the Council have not been funded through the Monitoring Program because of a lack of nexus to Federal public lands.

Interagency Staff Committee Comments

The Interagency Staff Committee supports the Technical Review Committee ranking of the 2018 Northern Region proposals. Of the three tied proposals (18-100, 18-101 and 18-151) 18-151 should be ranked the lowest because of the need to fully develop the social science component and because of the high cost of the project. The North Slope Council expressed continued concern over the effect of changing conditions on Broad Whitefish health. While the Technical Review Committee ranked the proposal (18-104) addressing this issue low on the list, the Interagency Staff Committee recommends continued efforts be made to address the Council's concerns.

Project Summaries and Technical Review Committee Justification for Project Ranking

Technical Review Committee Ranking: 1
Project Number: 18-103
Project Title: Unalakleet River Chinook Salmon Escapement Assessment

Project Summary: The Unalakleet River supports the largest Chinook Salmon subsistence fishery in the Norton Sound-Port Clarence Area. Chinook Salmon returns to this area remain some of the lowest on record resulting in continued restrictions on subsistence harvest. Funding for this project would be used to continue operation of a floating weir on the Unalakleet River to monitor Chinook Salmon passage. Results from this project will provide Chinook Salmon in-season daily passage estimates and run timing. This weir has been funded since 2010: (2010–2013, Project 10-102) and (2014–2017, Project 14-101).

Technical Review Committee Justification: Unalakleet River Chinook Salmon stocks began a downturn in productivity and abundance in 2000 and have been a concern of local subsistence users and the Seward Peninsula Subsistence Regional Advisory Council. This proposal addresses a 2018 Priority Information Need. This proposal is for continuation funds for a technically sound and fully successful project. Two of the three investigators have been involved with the Unalakleet River weir since its inception. While the Principal Investigator is new to the project, her agency, the Alaska Department of Fish and Game, has been involved with the project since its inception in 2010. Investigators have established a working a partnership between State and Federal agencies and local community-based organizations. Effort to increase capacity includes incorporating both an Alaska Native Science and Engineering Program Bridge student and a local fisheries technician from Unalakleet into the fieldwork to train these young professionals in fisheries resource management. This project represents a partnership between Alaska Department of Fish and Game, Norton Sound Economic Development Corporation, Bureau of Land Management, Native Village of Unalakleet, and the Alaska Native Science and Engineering Program. The cost is reasonable give the size of the weir.

Technical Review Committee Ranking: 2 (tied)
Project Number: 18-101
Project Title: Genetic Diversity of Dolly Varden Populations in Kobuk River

Project Summary: The Principal Investigator proposes collecting Dolly Varden genetic stock information from three known spawning streams in the Kobuk River drainage to add to the northwest Alaska genetic baseline for mixed-stock subsistence harvest analysis. This information will improve the established baseline advancing the mixed-stock analysis of this important subsistence fishery and allow managers to assess the impacts of harvest on Dolly Varden stocks. This project was previously funded with the Monitoring Program funding in 2016 (Project 16-103)

Technical Review Committee Justification: This project fully addresses two of the 2018 Priority Information Needs identified by the Northwestern Arctic Subsistence Regional Advisory Council. Dolly Varden of the Wulik River are considered the most important subsistence fish resource for the residents of Kivalina (up to 90% of subsistence fish harvested by Kivalina residents is Dolly Varden). The project builds upon past work using established and scientifically sound methods. Both the Alaska Department of Fish and Game and the U.S. Fish and Wildlife Service have extensive resources available to ensure the project's completion including expert personnel, laboratories, software, and analytical experience and the equipment needed for sampling in remote locations. Capacity building consists of mentoring one or more Alaska Native Science and Engineering Program student(s) from either the Summer Bridge Program or the University Success Program. The cost of the project is $55,800 with a match of $30,000 from the Alaska Department of Fish and Game. The cost is reasonable for the work being proposed for the remoteness of this location.

Technical Review Committee Ranking: 2 (tied)
Project Number: 18-100
Project Title: Seasonal Habitats and Migrations of Arctic Grayling of the Lower Colville River Relative to the Nuiqsut Subsistence Fishery Area

Project Summary: Investigators propose a three-year study using radiotelemetry to describe the seasonal movements and locations of mature Arctic Grayling that inhabit the lower Colville River drainage between the Killik River and the village of Nuiqsut from August 2018 through December 2019. This research will help fisheries managers begin to better understand the movement patterns that were previously thought to be unknown for the Colville River.

Technical Review Committee Justification: This proposal addresses a need for monitoring grayling in a potentially very vulnerable area of northern Alaska. It fully addresses a 2018 Priority Information Need that was defined by the North Slope Subsistence Regional Advisory Council. It proposes using well-developed and scientifically sound radiotelemetry methods to investigate the distribution and movement patterns of Arctic Grayling. While Mr. Gryska is the sole investigator and is new to the Monitoring Program, his organization, Alaska Department of Fish and Game, has been involved with several successful Monitoring Program projects, and ADF&G has substantial resources available to

complete the project including personnel, lab, software, equipment, and local knowledge of the area. Technical capacity is being built by partnering with the local communities of Umiat and Nuiqsut for gathering local knowledge of the lower Colville River. The investigator has put forward plans to hire an Alaska Native Science and Engineering Program student to work with the project.

Technical Review Committee Ranking: 2(tied)
Project Number: 18-151
Project Title: Addressing Priority Knowledge Needs for Stocks of Dolly Varden Along the Southern Chukchi Sea Coastline.

Project Summary: Dolly Varden is an important subsistence resource to communities in the vicinity of the Chukchi Sea, though substantial information on life history characteristics, genetics, and critical habitat remains unknown. This project seeks to rectify the data gap by collecting data on these variables through the use of traditional ecological knowledge and laboratory genetic analysis. These methods will be used to provide a comprehensive picture of the variation in life history strategies of Dolly Varden, including how that variation relates to the ecology of Dolly Varden, the subsistence fisheries for these stocks, and the management of important stocks in the face of climate change and coastal oil spills.

Technical Review Committee Justification: This ambitious project involves a subsistence resource, Dolly Varden, that is harvested by Federally qualified subsistence users, and it directly addresses three 2018 Priority Information Needs. Investigators will use both traditional ecological knowledge and biological methods, although details on ethnographic work are underdeveloped in the proposal. The biological methods are appropriate and rigorous. Principal investigators have a demonstrated record of successful completion of similar projects, and they provided several letters they received in support of the project. The project includes a meaningful partnership with the Native Village of Kotzebue and the Native Village of Kivalina. Total costs are reasonable for the proposed scope of work.

Technical Review Committee Rank: 5
Project Number: 18-150
Project Title: Bering Land Bridge National Preserve: Combining Traditional Ecological Knowledge and Scientific Surveys for a Contemporary Baseline

Project Summary: Bering Land Bridge National Preserve is home to several important species of used for subsistence by residents of Wales, Shishmaref, and Deering. Information on stock status, species distribution, and population age structure are lacking for this area with many of the major rivers and lakes having been surveyed sporadically or not at all. This project will collect traditional ecological knowledge on subsistence use areas and harvested fish species. This knowledge will then help to inform fish surveys and field observations intended to formally document these fish, their habitats, and associated environmental variables.

Technical Review Committee Justification: This project seeks to document the presence and distribution of fish species that utilize the Bering Land Bridge National Preserve and that are harvested

by nearby residents for subsistence. The project directly addresses a 2018 Priority Information Need. Investigators will use both traditional ecological knowledge and biological methods to identify and survey for fish species, however, the proposal lacks a clear plan for the social science component of the work, and no anthropologist is specifically identified to assist with this project. Investigators will train local student interns. The cost of the project is reasonable for the work described. Investigators provided letters they received supporting the project.

Technical Review Committee Ranking: 6
Project Number: 18-102
Project Title: Life History and Movement of an Important Subsistence Species, the Dolly Varden Char

Project Summary: This two-year project proposes to understand the variability in biology and ecology of Dolly Varden that spawn in the major river systems of the North Slope of Alaska and integrate the findings with similar research conducted in Canadian rivers to provide a landscape-wide description of this species in Alaska and Canada. To do this, the investigators propose using three techniques: 1) pop-up satellite tagging, 2) gathering genetic baseline data, and 3) analyzing of stable isotope chemistry of strontium:calcium molar ratios in otoliths of Dolly Varden to determine years of freshwater and marine residency times. This project was previously funded with the Monitoring Program funding in 2014 (Project 14-103).

Technical Review Committee Justification: This project addresses the 2018 Priority Information Need defined by the North Slope Subsistence Regional Advisory Council. The Principal Investigator, Doctor Andrew Seitz, is a Professor of Fisheries at the College of Fisheries and Ocean Sciences at the University of Alaska Fairbanks. Project management has technical capacity due to the partnerships built between University of Alaska Fairbanks, U.S. Fish and Wildlife Service, and the Department of Fisheries and Oceans which makes this project a multi-agency collaboration. There was mention of hiring an Alaska Native Science and Engineering Program student in the project proposal to help fulfill fieldwork requirements; however, no funding was indicated for such a student in the proposed project budget. This project is asking for two years of funding. The first year (2018) $214,963 and second year (2019) $98,616 funding is requested. The first year requested funding is very high due to the immense costs of 15 tags and personnel to travel to the field and work 1–4 months. The pop-up tag data only provides insight into a short 30–45 day window during the 2018 summer.

Technical Review Committee Ranking: 7
Project Number: 18-104
Project Title: Broad Whitefish Health of Northern Alaska

Project Summary: This proposal addresses the growing concern over Broad Whitefish health of the Colville and Ikpikpuk Rivers in relation to climate change. In 2013, Broad Whitefish have been observed to have a disease (fungi) called *Saprolegniosis sp*., which is a freshwater mold that infects the fish and is thought to negatively affect the fish's condition and ultimately survival. The investigator proposes to work with the community of Ikpikpuk fishermen to opportunistically sample fish caught in

the subsistence fishery. Subsistence fishermen will collect and record fisheries data to be submitted and analyzed in an attempt to correlate environmental parameters with the presence of *Saprolegniosis* in Broad Whitefish.

Technical Review Committee Justification: The North Slope Subsistence Regional Advisory Council has discussed concern of *Saprolegnia* on Broad Whitefish since 2016 and this project is responsive to those community concerns. Both stock status and trends and traditional ecological knowledge are the stated as data types, but the latter is not well developed in the proposal, (e.g., no information provided about the kinds of information to be collected, how it will be recorded, analyzed, integrated with other information, other than a statement that data on condition of fish will be collected). In addition, the project proposal does not adequately address how gaining knowledge of changing health of Broad Whitefish in the Colville and Ikpikpuk Rivers can aid fisheries managers in terms of changing environmental conditions. The investigator's education, training, experience, and publications indicate the expertise to complete the proposed work**.** Local resident fishermen will be responsible only for the field work component of the study, which includes all aspects of sampling, data collection, and preparation of samples to be sent off to laboratory. The average annual cost of the project is reasonable to the remoteness of the project, and there is a substantial match comprising 66% of the total project cost.

YUKON REGION

Priority Information Needs

The 2018 Notice of Funding Opportunity for the Yukon Region identified 10 Priority Information Needs:

- Reliable qualitative and/or quantitative estimates of salmon escapements and/or harvests.
- Salmon run timing and run strength from Yukon River District 5.
- Geographic distribution of salmon and whitefish species based on traditional ecological knowledge or other knowledge, and incorporation of anadromous information into the Anadromous Waters Catalog.
- A spatially robust indexing method for estimating species-specific whitefish harvest on an annual basis for the Yukon drainage.
- Methods for including "quality of escapement" measures (for example, potential egg deposition, sex and size composition of spawners, or spawning habitat utilization) in establishing Chinook Salmon spawning goals and determining the reproductive potential and genetic diversity of spawning escapements.
- A review of escapement data collection methods throughout the Yukon drainage to ensure that test fisheries are accurately accounting for size distribution and abundance of fishes (for example, are smaller Chinook Salmon being counted accurately).
- Assessment of incidental mortality with gillnets, with particular consideration for delayed mortality from entanglement or direct mortality from drop-outs (for example, loss of Chinook Salmon from 6-inch mesh net Chum Salmon fisheries).
- Harvest and spawning escapement changes through time in relation to changes in gillnet construction and use (for example, set versus drift fishing, mesh size changes) for Chinook Salmon subsistence harvests in the mainstem Yukon River.
- Incorporation of traditional ecological knowledge into fishery management processes.
- The effects of beaver dams on salmon spawning.

Technical Review Committee Proposal Ranking

Nine proposals were submitted for consideration in the 2018 Monitoring Program for the Yukon Region. The Technical Review Committee evaluated and scored each proposal for Strategic Priority, Technical and Scientific Merit, Investigator Ability and Resources, Partnership and Capacity Building, and Cost/Benefit, and ranked them as follows:

Table 2. Technical Review Committee ranking for projects in the Yukon Region. Projects are listed by the Technical Review Committee ranking and include the total funds requested and the average annual request for each project submitted to the 2018 Monitoring Program within the Yukon Region.

TRC Ranking	Project Number	Title	Total Project Request	Average Annual Request
1	18-251	Traditional knowledge of anadromous fish in the Yukon Flats with a focus on the Draanjik Basin	$190,086	$63,362
2	18-250	Documentation of salmon spawning and rearing in the upper Tanana River drainage	$160,584	$53,528
3	18-252	Subsistence salmon networks in Yukon River communities	$331,742	$110,581
4	18-202	Gisasa River Chinook and summer Chum Salmon abundance and run timing assessment	$583,676	$145,919
5 (tied)*	18-205	Yukon River Coho Salmon radio telemetry	$429,910	$214,955
5 (tied)*	18-203	Application of mixed-stock analysis for Yukon River Chum Salmon	$501,212	$125,303
5 (tied)*	18-201	East Fork Andreafsky River Chinook and summer Chum Salmon abundance and run timing	$678,485	$169,621
8	18-204	Yukon River Coho Salmon mixed-stock analysis	$96,000	$24,000
9	18-200	Identification and protection of habitat for Chena River Chinook Salmon	$46,661	$15,554
		Total	**$3,018,356**	**$922,823**

* Proposals with identical scores during the rating process may be further assessed by comparing the average annual cost. Proposals with a lower average annual cost may be ranked above a similar rated proposal that has a higher annual average cost.

In addition to the above proposed projects, there are six continuing Monitoring Plan projects in the Yukon Region (**Appendix A.1**.).

Regional Advisory Council Comments

Yukon-Kuskokwim Delta Subsistence Regional Advisory Council

Regarding the Monitoring Program process, a Council member said that in the lower Yukon River area, tribal councils, elders, and other subsistence users should be informed of these studies and should provide comments concerning funding. He suggested that some lower river projects be prioritized over other proposed projects in the Yukon Region to ensure that some funding is allocated to lower river projects. He also said that those projects that aim to conduct studies in upper Yukon River areas and that collect in-season salmon run information are important because the information can affect management decisions concerning whether or not to provide harvesting opportunities in the lower river.

One Council member stated that Project 18-252 (salmon networks in Yukon River communities) is his last priority in the Yukon Region, and that this information is already collected during house-to-house harvest surveys conducted annually at Yukon River communities.

Western Interior Alaska Subsistence Regional Advisory Council

The Council said that Projects 18-203 (mixed stock analysis of Yukon River Chum Salmon), 18-205 (Yukon River Coho Salmon radio telemetry), and 18-201 (the East Fork Andreafsky River weir) are more important in the Yukon Region than other projects ranked higher by the Technical Review Committee. Specifically, the Council said that (1) salmon enumeration and run-timing tools produce information critical for in-season management, and (2) descriptive projects that were ranked higher by the Technical Review Committee, while potentially valuable, are comparatively not as critical for in-season fishery management. One member considered Project 18-201 very important personally, but acknowledged that Project 18-203 is likely to have broader positive effects on salmon fishery management.

Eastern Interior Alaska Subsistence Regional Advisory Council

Several Council members said that weir projects (Projects 18-202 Gisasa River and 18-201 East Fork Andreafsky River) are priorities in the Yukon Region because these long-term data sets, including age-sex-length measurements of salmon, are important to fisheries management now and in the future. They said information from these weirs contain the two longest data sets in the Yukon River drainage, and a weir is a “canary in a coal mine” that allows us to identify a weak salmon population early. The Technical Review Committee ranked the Gisasa River weir fourth place and the East Fork Andreafsky River weir tied for fifth place in the Yukon Region. One Council member said Project 18-203 (mixed-stock analysis of Yukon River Chum Salmon) is a priority. The Technical Review Committee ranked this project tied for fifth place in the Yukon Region.

Interagency Staff Committee Comments

The Interagency Staff Committee supports the Technical Review Committee ranking of the 2018 Yukon Region proposals. We acknowledge that with declining budgets, not all high ranking and strategically important projects can be funded. The Interagency Staff Committee recognizes the importance of proposals 18-250 and 18-251 in filling critical information gaps in the region. The Interagency Staff Committee emphasizes the investigator of proposal 18-252 needs to address the lack of rural involvement before the project is funded. Of the three tied proposals (18-203, 18-205 and 18-201) the Interagency Staff Committee concurs with Western Interior Subsistence Regional Advisory Council's comments about their potential valuable contribution to fisheries management.

Project Summaries and Technical Review Committee Justification for Project Ranking

Technical Review Committee Ranking: 1
Project Number: 18-251
Project Title: Traditional knowledge of anadromous fish in the Yukon Flats with a focus on the Draanjik Basin

Project Summary: The Draanjik (Black River) sub-basin is located within and adjacent to the Yukon Flats National Wildlife Refuge. Despite supporting various life stages of multiple salmon and whitefish species, the anadromous geographic distribution of these species in the Draanjik River has not been fully identified and documented within the Anadromous Waters Catalog. This project proposes using traditional ecological knowledge, environmental DNA, minnow traps, and aerial surveys to document anadromous waters used for spawning and rearing of salmon and whitefish. The Principal Investigators will use their findings to submit nominations to the AWC for all waterbodies in which salmon and whitefish are documented in this drainage.

Technical Review Committee Justification: This project is needed to document the presence and life history characteristics of several fish species in the Draanjik (Black River) sub-basin. It addresses a 2018 Priority Information Need defined by the Eastern Interior Subsistence Regional Advisory Council. Investigators are qualified to conduct the project. The investigation plan is well-written and complete. The project includes meaningful partnerships with a variety of Alaska rural organizations including their consultation in hiring, project design, and timing of fieldwork. The budget request is reasonable. Investigators provided multiple letters of support for the project.

Technical Review Committee Ranking: 2
Project Number: 18-250
Project Title: Documentation of salmon spawning and rearing in the upper Tanana River drainage

Project Summary: During this three-year project, researchers will investigate the presence of Chinook, Chum, and Coho Salmon in upper Tanana River tributaries of Chisana and Nebesna drainages. This project will utilize a combination of social science and biological science methods. Documentation and

verification of salmon spawning and rearing areas will be conducted over two open-water seasons. Sampling during the first season will include minnow trapping and water sampling to test for environmental DNA in areas previously identified as potential salmon spawning or rearing areas. Sampling during the second season will include minnow trapping in areas identified during interviews with local knowledgeable residents and areas with positive environmental DNA results. Findings will be submitted to the Anadromous Waters Catalog.

Technical Review Committee Justification: Evidence suggests a much wider distribution of salmon in the Chisana and Nebesna drainages than is documented in the Anadromous Waters Catalog. This study addresses a 2018 Priority Information Need defined by the Eastern Interior Alaska Subsistence Regional Advisory Council. Investigators are qualified to conduct the project. The investigation plan is generally well-written and complete. The partnership and capacity building aspects of the project are strong. If funded, investigators would work closely with investigators from a similar project (18-251), the Yukon River Drainage Fisheries Association and Tanana Chiefs Conference. The budget request is reasonable. Investigators provided multiple letters of support for the project.

Technical Review Committee Ranking: 3
Project Number: 18-252
Project Title: Subsistence salmon networks in Yukon River communities

Project Summary: This project proposes to describe how salmon are shared within, between, and beyond the communities of Pilot Station, Nulato, and Beaver. Building upon recent subsistence surveys and using social network analysis, investigators hope to increase understanding of subsistence resource distribution in social, cultural, and economic contexts, especially during times of resource decline as is currently being experienced with Chinook Salmon on the Yukon River. Describing and documenting the sharing networks will provide insight into how, when, and why salmon are distributed across Alaska and what individual, household, and community characteristics shape or contribute to these exchanges. A similar project with Dr. Gerkey is currently under way in Southwest Alaska for Monitoring Program Project 16-451.

Technical Review Committee Justification: This project generally addresses a Yukon Region 2018 Priority Information Need identified by the Council, has a strong Federal nexus, and involves all species of salmon. The technical and scientific merits are strong, as is investigator capacity. However there is no rural organization involved as a meaningful partner and no letters of support were included with the proposal. The average annual cost of the project is approximately $110,000 with a total cost of $331,742. Budget tables and justifications were provided and cost of conducting such research in three Yukon River communities is reasonable for the work being proposed.

Technical Review Committee Ranking: 4
Project Number: 18-202
Project Title: Gisasa River Chinook and summer Chum Salmon abundance and run timing assessment, Koyukuk National Wildlife Refuge, Alaska

Project Summary: The Gisasa River is located in the lower Koyukuk River drainage, which is a tributary to the Yukon River in western Alaska and lies within the Koyukuk National Wildlife Refuge. This project began in 1994 and the Monitoring Program has funded the project since 2003, with the objectives of monitoring the Chinook and Chum Salmon spawning migrations, collecting age-sex-length samples and reporting resident species passing through the weir. A video component was added to the weir in 2014 to allow for better fish identification, to continue counting fish when conditions do not allow traditional techniques (such as high water), and to improve accuracy of counts. Data collected at the project site is used by U.S. Fish and Wildlife Service and Alaska Department of Fish and Game managers to gather daily in-season tributary escapement information and for post-season evaluations. This project was previously funded each year since 2003 (through projects 03-013, 04-209, 07-207, 10-207, 14-203) (video addition 14-201).

Technical Review Committee Justification: The Gisasa River weir provides in-season run timing data in the Koyukuk River drainage to fisheries managers and enumerates escapement of Chinook and Chum Salmon populations that are harvested from the mouth of the Yukon River and into the Koyukuk River by Federally qualified subsistence users. This project strongly addresses three of the Yukon Region 2018 Priority Information Need identified by the Council. The age-sex-length data from escapement projects is essential for run reconstruction models, as well as the escapement data being valuable to monitor changes in management techniques over time. The Gisasa River weir has been in operation since 1994 using standardized sampling protocols to collect age-sex-length data, along with providing passage counts, sex ratios, run timing and weather information. The Principal Investigator works for the U.S. Fish and Wildlife Service Fairbanks Field Office, and this office has successfully operated this weir project since its inception. The proposal does not include partnerships with other agencies or organizations. The investigator intends on hiring locally or hiring a student from the Alaska Native Science and Engineering Program. The proposal included both the budget justification and budget tables and suggests a total project cost of $859,825 for the four years of the project, of which $276,149 is match from the Fairbanks Fish and Wildlife Field Office. The average annual cost to the monitoring program is $145,919, a decrease from the average annual amount of $147,577 requested in the 2014 project budget. Ultimately, the Principal Investigator fails to explain why this project is the right place to monitor for this information. Also, the project monitors a weak stock of Chinook Salmon and a moderate sized stock of Chum Salmon, yet the proposal doesn't speak to the need to monitor weak stocks.

Technical Review Committee Ranking: 5 (tied)
Project Number: 18-205
Project Title: Yukon River Coho Salmon radio telemetry

Project Summary: The investigators seek funding to conduct a Coho Salmon radio telemetry project on the Yukon River and its tributaries. Capture would occur at Russian Mission on the Lower Yukon River using drift gill nets as Coho Salmon progress through the area. A total of 300 Coho Salmon will receive esophageal radio tags with uniquely numbered spaghetti tags attached for visual identification. Radio tracking will occur throughout the main-stem of the Yukon River and tributaries to determine the fate of tagged fish. The objectives are to identify migration routes, spawning locations, run timing, migration rates, distribution, and proportional contributions of fish from different spawning stock groups to the overall Yukon River Coho Salmon population. This is a two-year project that is broken into two parts: the first year is spent setting up telemetry sites and purchasing equipment, and the second year will involve tagging and tracking Coho Salmon.

Technical Review Committee Justification: This project has a Federal nexus on the following National Wildlife Refuges Yukon Delta, Innoko, Koyukuk, Nowitna, Kanuti, Yukon Flats, Arctic, and Tetlin. It also has a Federal nexus on following National Parks and Preserves: Gates of the Arctic, Denali, Yukon–Charley Rivers. This project addresses two of the 2018 Priority Information Needs identified by the Council. Currently the most basic Coho Salmon information needed for fisheries management is lacking or incomplete. The results of this project would give managers a better understanding of migratory distribution patterns, run timing and spawning areas of Coho Salmon in the Yukon River Drainage. Radio telemetry is the best technique for a project of this nature, and the logistics are well thought out. The investigators have experience with these types of projects, and have successfully performed them in this drainage in the past. Letters of support have been submitted by four different entities including Tanana Chiefs Conference, Fairbanks Fish and Wildlife Services Field Office, Bureau of Land Management, and the Iqurmiut Traditional Council. The project will work with local hires from Russian Mission to sample Coho Salmon in the area, but the investigators do not mention using students or interns on the project and, as written capacity building will be minimal. The proposal included both the budget justification and budget tables and suggests a total project cost of $726,368 for the two years of the project, with an average annual cost to the monitoring program of $214,955. Telemetry projects are expensive to operate and require a large amount of equipment costs up front. The investment into a project with high costs that only collects data for one year is hazardous, as many situations can arise that may affect the outcome of the project. The Technical Review Committee suggests collecting Coho Salmon genetic samples while capturing fish to add value to the project.

Technical Review Committee Ranking: 5 (tied)
Project Number: 18-203
Project Title: Application of mixed-stock analysis for Yukon River Chum Salmon

Project Summary: The investigators seek funding to continue in-season mixed stock genetic analysis of Yukon River summer and fall Chum Salmon. The samples, collected in conjunction with the Pilot

Station sonar run by the Alaska Department of Fish and Game, are shipped to the U.S. Fish and Wildlife Service's Genetics Conservation Lab in Anchorage for analysis. Stock composition estimates will be available to fisheries managers within 24–48 hours, supporting the in-season management of Chum Salmon as these stocks progress up the Yukon River. The Monitoring Program has provided funding for this project since 2004 under project numbers 04-228, 06-205, 10-205, and 14-207.

Technical Review Committee Justification: Application of mixed-stock analysis for Yukon River Chum Salmon has wide geographic implications, affecting the in-season management of summer and fall run Chum Salmon. This project has a Federal nexus on the Yukon Delta National Wildlife Refuge (NWR), Innoko NWR, Koyukuk NWR, Nowitna NWR, Yukon Flats NWR, Arctic NWR, Kanuti NWR, Tetlin NWR, White Mountain National Recreation Area, Steese National Conservation Area, Yukon Charley Rivers National Preserve, and Denali National Park. This project addresses a Yukon Region 2018 Priority Information Need identified by the Council. The data from this project, along with the sonar estimates, are used by Alaska Department of Fish and Game to estimate stock abundance in the lower Yukon River which facilitates the management of the fishery. Samples will be collected from every Chum Salmon captured in the Pilot Sonar test net and stored in individually labeled vials until received in the lab. Samples will be stratified by time period or run pulse and a subsample size of 288 will be selected so that daily sample size is proportional to the daily sonar passage estimate within a stratum, which will then be genotyped for each stratum of the run. The Principal Investigator and the staff at Conservation Genetics Lab have been conducting this research for years and have the technical capacity to accomplish the objectives without assistance from outside sources. The Principal Investigator plans to partner with the Association of Village Council Presidents to employ a local hire for collecting genetics samples at Pilot Station. The proposal has an estimated total project cost of $611,212 for four years of the project, and the average annual cost to the Monitoring Program is $125,303. This project addresses a 2018 Priority Information Need for managers and stakeholders.

Technical Review Committee Ranking: 5 (tied)
Project Number: 18-201
Project Title: East Fork Andreafsky River Chinook and summer Chum Salmon abundance and run timing, Yukon Delta National Wildlife Refuge, Alaska

Project Summary: The East Fork Andreafsky River is located in the lower Yukon River drainage and lies within the Yukon Delta National Wildlife Refuge. This project began in 1994 making it one of the longest continuous data sets on the number and quality of escapement of salmon in the Yukon basin. The objectives of the project are to monitor Chinook and Chum salmon spawning migrations, collect age-sex-length samples, and report resident species passing through the weir. A video component was added to the weir in 2014 to allow for better fish identification, to continue counting when conditions do not allow traditional techniques (such as high water), and to improve accuracy of counts. The data collected at the project site is used by U.S. Fish and Wildlife Service and Alaska Department of Fish and Game managers to assist in making in-season management decisions and post-season evaluations.

Technical Review Committee Justification: This project is located within the Yukon Delta National Wildlife Refuge boundaries and addresses Chinook and Chum Salmon populations that are harvested by Federally qualified subsistence users from the mouth of the Yukon River upstream to St. Mary's. This project directly addresses three of the 2018 Priority Information Needs identified by the Councils. The East fork of the Andreafsky River weir is the only escapement project located downstream of the Pilot Station Sonar and managers use the information provided by this weir as an indicator of Chinook and summer Chum Salmon run timing and strength in the lower Yukon River. The weir has been in operation since 1994 using standardized sampling protocols to collect length, sex and age data, along with providing passage counts, sex ratios, run timing and weather information. The Principal Investigator works for the Fairbanks Fish and Wildlife Field Office, and this office has successfully operated this weir project since 2004. The proposal does not include any co-investigators or partnerships with other agencies or organizations, but the investigator stated intentions to locally hire a student from the Alaska Native Science and Engineering Program. The average annual cost to the Monitoring Program is $169,621, an increase over the average annual amount of $147,638 requested in the 2014 project budget. The investigator provides good justification for the project and why it is important for long term monitoring. However, it could use further statistical evidence discussing how long monitoring will be needed to detect escapement changes through time. In the future, it is suggested that the investigator obtains a letter of support from Alaska Native Science and Engineering Program to demonstrate their ability to pursue a student from this program. This project was previous funded with the Monitoring Program since 2001 (projects 01-058, 03-034, 04-208, 07-202, 10-202, 14-202).

Technical Review Committee Ranking: 8
Project Number: 18-204
Project Title: Yukon River Coho Salmon mixed-stock analysis

Project Summary: The investigators seek funding to conduct mixed-stock genetic analysis of Yukon River Coho Salmon, building on a previous project which created a genetic baseline. The samples, collected at the Pilot Station sonar run by the Alaska Department of Fish and Game (ADF&G), are shipped to the U.S. Fish and Wildlife Services' Conservation Genetics Lab in Anchorage for analysis. Total DNA will be extracted from fin tissue and run through a mixture model to be compared to the baseline to estimate stock composition. The reporting groups for Coho Salmon stocks include: lower river, Nenana River, Tanana River, and Porcupine River. The genetic baseline was developed in 2014 under a project funded by the Monitoring Program (14-206).

Technical Review Committee Justification: Application of mixed-stock analysis for Yukon River Coho Salmon has wide geographic implications as these stocks migrate through, are harvested in, or spawn in the many Federal public waters located on the Yukon Delta, Innoko, Koyukuk, Nowitna, Yukon Flats, Arctic, Kanuti, and Tetlin National Wildlife Refuges, along with the White Mountain National Recreation Area, Steese National Conservation Area, Yukon Charley Rivers National Preserve, and Denali National Park. This project directly addresses a 2018 Priority Information Need identified by the Councils. Federally qualified subsistence users harvested an average of 28,021 Coho Salmon from 1976 to 2008, making these stocks very important to subsistence users of the region. This study has

clear, measurable, and achievable objectives that have been successfully met in the past during similar projects, although they lack time bounds and ownership of collection processes. The science and logistics have been proven effective over time, as have the methods to achieve the proposed technological results. The Principal Investigator is a geneticist in the U.S. Fish and Wildlife Service, Conservation Genetics Lab, and was primarily responsible for planning, coordinating and executing the in-season mixed-stock analysis of Yukon River Chum Salmon at Pilot Station during previous studies. The investigators do not address partnering with Alaska rural organizations, working with interns and no plan for capacity building has been addressed. The average annual cost to the monitoring program is $24,000, which is an inexpensive project over the course of four years. The Principal Investigator states the samples will be collected from the Coho Salmon captured in the mainstem sonar test fishery but does not clearly state if the samples are collected by Alaska Department of Fish and Game employees or a U. S. Fish and Wildlife Service employees hired from Project 18-203. More description would be needed to determine if this was a standalone project or if there is some overlap between Projects 18-203 and 18-204.

Technical Review Committee Ranking: 9
Project Number: 18-200
Project Title: Identification and protection of habitat for Chena River Chinook Salmon

Project Summary: This project requests three years of funding to assess the waters in the Chena River drainage for the presence of anadromous fish species. Of particular interest is Chinook Salmon. Investigators will use seines, minnow traps, and electrofishing techniques to capture fish, and collect species identification, sex (where applicable), and length at each location. Sampling will take place in three separate times throughout the summer. Initial sample sites are based upon positive-environmental DNA samples collected from a previous project, or upstream of Anadromous Waters Catalog documentation. Results of the project will be used to update the Alaska Department of Fish and Game's (ADF&G) Anadromous Waters Catalog after each field season.

Technical Review Committee Justification: This project does not address any of the priority information needs identified in the 2018 Notice of Funding Opportunity for the Yukon River. The Chena River supports one of the largest runs of Chinook Salmon on the United States portion of the Yukon River, spawning in the main-stem and tributaries upriver from the Moose Creek Dam. Chinook Salmon from the Chena River are harvested by many Federally qualified subsistence users throughout the drainage as they pass by 21 communities of which 16 are within and adjacent to the Yukon Delta, Innoko, Koyukuk, or Nowitna National Wildlife Refuges. This project uses proven science and logistics to achieve objectives that are clear, measurable and achievable. The methods are standard for a project of this nature, and the investigators build upon recent work conducted in the drainage. The Principal Investigator has worked for the U.S. Fish and Wildlife Service since 2000. The Fairbanks Fish and Wildlife Field Office has a fully functional office in Fairbanks, and in addition to the Principal Investigator, has a staff of biologists that are experienced in northern Alaska and Yukon River fishery resource investigations and management. The overall cost for the project is $197,108, of which $46,661 is requested over three years from the Monitoring Program. This would be a low cost project with a

good sampling design building on many previous studies. The project lacks a firm commitment to address capacity building.

KUSKOKWIM REGION

Priority Information Needs

The 2018 Notice of Funding Opportunity for the Kuskokwim Region identified seven Priority Information Needs:

- Reliable quantitative and/or qualitative estimates of salmon escapements and/or harvests.

- Methods for including "quality of escapement" measures (for example, potential egg deposition, sex and size composition of spawners, spawning habitat utilization) in establishing Chinook Salmon spawning goals and determining the reproductive potential and genetic diversity of spawning escapements.

- Estimate the size and future growth of the sport fishery and impacts of the sport fishery on cultural values and social systems.

- An understanding of the meaning and significance of sharing in the context of the social, cultural, and economic life of people in the lower Kuskokwim Area.

- Traditional ecological knowledge or other knowledge of whitefish in the Kuskokwim River drainage, especially in lower and middle Kuskokwim communities. Groups of communities might include Kwethluk, Akiachak, and Tuluksak, or Kalskag, Lower Kalskag, Aniak, and Chuathbaluk, or Red Devil, Sleetmute, and Stony River.

- A spatially robust indexing method for estimating species-specific whitefish harvests on an annual basis for the Kuskokwim drainage.

- Origin of Chinook Salmon harvested for subsistence in marine waters of Etolin Strait.

Technical Review Committee Proposal Ranking

For the 2018 Monitoring Program, nine proposals were submitted for the Kuskokwim Region. The Technical Review Committee evaluated and scored each proposal for Strategic Priority, Technical and Scientific Merit, Investigator Ability and Resources, Partnership and Capacity Building, and Cost/Benefit, and ranked them as follows:

Table 3. Technical Review Committee ranking for projects in the Kuskokwim Region. Projects are listed by the Technical Review Committee ranking and include the total funds requested and the average annual request for each project submitted to the 2018 Monitoring Program within the Kuskokwim Region.

TRC Ranking	Project Number	Title	Total Project Request	Average Annual Request
1	18-350	Bethel In-season Subsistence Harvest Surveys	$271,702	$67,926
2	18-351	Kuskokwim Area Salmon Post season Subsistence Harvest Surveys	$840,225	$210,056
3	18-304	George River Salmon Weir	$726,492	$181,623
4	18-302	Kwethluk River Salmon Run Timing and Abundance	$754,808	$188,702
5 (tied)*	18-303	Tuluksak River Salmon Run Timing and Abundance	$385,180	$96,295
5 (tied)*	18-305	Kuskokwim River Sonar	$388,809	$97,202
6 (tied)*	18-352	Support for Cooperative Management of the Kuskokwim River Subsistence Salmon Fishery	$416,169	$104,042
6 (tied)*	18-300	Kuskokwim River Broad Whitefish	$613,877	$153,469
9	18-301	Inferring Production Patterns of Kuskokwim River Chinook Salmon Using Otolith Microchemistry and River	$823,207	$205,802
		Total	**$5,220,469**	**$1,305,117**

* Proposals with identical scores during the rating process may be further assessed by comparing the average annual cost. Proposals with a lower average annual cost may be ranked above a similar rated proposal that has a higher annual average cost.

In addition to the above proposed projects, there are three continuing Monitoring Plan projects in the Kuskokwim Region (**Appendix A.1**.).

Regional Advisory Council Comments

Yukon-Kuskokwim Delta Subsistence Regional Advisory Council

One member of the Council said that Project 18-352 (support for the Kuskokwim River Salmon Management Working Group) budget should include reimbursement for the expense that Working Group members incur traveling back and forth from fish camps to their villages in order to participate in Working Group teleconferences.

A Council member said that the operation of all weirs in the Kuskokwim Region is a priority, specifically the Kwethluk River weir (Project 18-302). He said weirs are some of the only existing tools that monitor salmon runs other than the Bethel Test Fishery. Weirs provide us with information about the salmon migration, which contributes to our knowledge about future returns.

A Council member said to give a higher priority to projects that address concerns often repeated by drainage residents: (1) salmon fishing opportunities do not occur during the best drying time, when the weather is dry, but instead occur later when rain and flies are present that spoil salmon, and (2) at the right time to harvest salmon, only fishing opportunities allowing for the use of 4-inch or less mesh size gillnets occur and only for targeting whitefish.

Western Interior Alaska Subsistence Regional Advisory Council

The Council concurred with the Technical Review Committee ranking for Projects 18-350 (Bethel area in-season salmon harvest surveys), 18-351 (Kuskokwim postseason salmon harvest surveys), and 18-304 (the George River weir), indicating that these projects have higher priority than all other proposed projects in the Kuskokwim Region. Specifically, it said that Project 18-350 produces data critical to management of fisheries even though one member expressed a concern regarding the truthfulness of harvest reports collected through this project. The Council said that Project 18-304, the George River weir, has effectively counted salmon for many years and is critical to salmon fishery management.

The Council said that Project 18-305 (the Kuskokwim River sonar) is more important than Projects 18-302 (Kwethluk River weir) and 18-303 (Tuluksak River weir), which were ranked higher by the Technical Review Committee. Council members provided several reasons for deeming the Kuskokwim River sonar Project 18-305 a higher priority, including (1) the importance of enumerating Chinook Salmon in the Kuskokwim River mainstem in light of recent run-size declines, (2) the importance of enumerating Sockeye, Chum, and Coho Salmon because people have been shifting their harvests from Chinook Salmon to Sockeye, Chum, and Coho Salmon, (3) the broader benefits for more users than projects that are tributary-based, and (4) the possibility of obtaining run-time data for Broad Whitefish as well as salmon. The Council also said that both weir projects (18-302 and 18-303) have been important because they enumerate Chinook Salmon runs into Kwethluk and Tuluksak Rivers, which are tributaries of the Kuskokwim River.

Interagency Staff Committee Comments

The Interagency Staff Committee supports the Technical Review Committee ranking of the 2018 Kuskokwim Region proposals. We acknowledge with declining budgets, not all high ranking and strategically important projects can be funded. Of the two proposals tied for fifth place (18-303 and 18-205), 18-305 should be ranked higher because projects funds will be used to enumerate Coho Salmon escapement. With declining number of Chinook Salmon returning to the Kuskokwim River, subsistence users are harvesting more Coho Salmon to meet their needs.

Project Summaries and Technical Review Committee Justification for Project Ranking

Technical Review Committee Ranking: 1
Project Number: 18-350
Project Title: Bethel In-season Subsistence Harvest Surveys

Project Summary: This continuation project has three objectives: (1) describe Bethel area subsistence users' annual harvest goals for Chinook, Chum and Sockeye Salmon; (2) document subsistence fishing activity in the Bethel area, including catch per unit effort by gear type, and catch composition; and (3) estimate the annual age-sex-length composition of Chinook Salmon harvested in the Bethel area subsistence fishery. Objective 2 is a newly-added component. The information will provide fisheries managers with near real-time data on fishing effort and catch for informing in-season harvest models and decisions. Catch per unit effort will be calculated and used as an index of fishing success for each salmon species. The age-sex-length information will be cataloged in the Kuskokwim Area Salmon Anadromous Waters Catalog. Final age-sex-length data will be updated in the Arctic-Yukon-Kuskokwim Database Management System for public use. From 2001 to 2004, the two project components (in-season harvest monitoring and age-sex-length data collection) were integrated (Projects 00-008, 01-023, 01-225, 01-132, and 04-353). In 2005, components were separated due to recommendations by the Technical Review Committee that the inseason monitoring portion of the project should no longer be funded. The age-sex-length data collection funding continued in Projects 05-306, 08-302, 12-302, and 16-301. In-season monitoring was reconsidered and again funded through Projects 06-306, 10-352, 10-354 and 14-353. In 2016, only two-years of funding for the age-sex-length component were requested in order to bring it and inseason harvest monitoring into the same Monitoring Program funding cycle for continuation as a single integrated project.

Technical Review Committee Justification: This four-year, on-going project has been successfully re-conceived to address previous comments provided by the Technical Review Committee and better address priority information needs in the Kuskokwim Region which include providing reliable quantitative estimates of salmon harvests, "quality of escapement" measures by characterizing the annual age-sex-length composition of Chinook salmon (*Oncorhynchus tshawytscha*) from subsistence harvest in the Bethel area, and documenting the extent that subsistence fish are shared among the people of the lower Kuskokwim. It has received Monitoring Program funds since 2001. Its strategic need and Federal linkage are clear. The investigation plan is well-written and complete. The project objectives are clear,

measurable, and achievable. Investigators are qualified to conduct the research. The project provides a strong and meaningful partnership between Alaska Department of Fish and Game and the Orutsararmiut Native Council, which administers much of the project. The budget is reasonable to complete the proposed work. Investigators are requesting funding for 78% of the overall costs of this long-term project. Investigators provided letters they received supporting the project.

Technical Review Committee Ranking: 2
Project Number: 18-351
Project Title: Kuskokwim Area Salmon Postseason Subsistence Harvest Surveys

Project Summary: The overall goal of this long-term project is to estimate the annual harvest of salmon in the subsistence fishery. Harvest information is collected through postseason household interviews, conducted at most communities in the Kuskokwim River drainage, and from harvest calendars. In addition to salmon, respondents are asked to report their harvests of Humpback Whitefish, Broad Whitefish, Sheefish, and a combined count for smaller whitefish (Round Whitefish, and Bering and Least Cisco). Broad and Humpback Whitefish harvest data have been expanded to generate total harvest estimates for these species since the late 2000s, and Sheefish and Cisco harvests have been expanded since 2014. Data will be archived in the Alaska Department of Fish and Game Arctic-Yukon-Kuskokwim Database and community-level harvest estimates made available to the public. The final report of findings will be peer reviewed and published in the Alaska Department of Fish and Game's Fisheries Data Series.

Technical Review Committee Justification: This four-year on-going project was re-conceived in 2008 when Alaska Department of Fish and Game, Commercial Fisheries Division, evaluated and changed methods, improving the project's overall success. The project's strategic need and Federal nexus are clear. The project objectives are clear, measurable, and achievable. The sampling design is clearly stated. The investigation plan is well-written and complete. Investigators are qualified to conduct the research. The project provides a strong and meaningful partnership between Orutsararmiut Native Council and Alaska Department of Fish and Game and has been funded by the Monitoring Program since 2000. The funding request has increased 20% since the last funding cycle in 2014. Investigators are requesting funding for 57% of overall costs of this long-term project. Investigators provided letters of support for the project. This project has been previously funded with the Monitoring Program through Projects 00-009, 01-024, 02-036, 04-359, 05-356, 08-352, 10-352, and 14-352.

Technical Review Committee Ranking: 3
Project Number: 18-304
Project Title: George River Weir

Project Summary: The funding requested is to support the continued operation of the George River weir for four years (Project 14-303 was funded in 2014). The George River is a middle-river tributary of the Kuskokwim River that supports all salmon species. The system lies outside of the Yukon Delta

National Wildlife Refuge, but the salmon stocks that return to the George River are harvested by Federally qualified subsistence users that live in the lower Kuskokwim River within Refuge boundaries. The George River weir has operated annually since 1996 to index salmon escapement to the middle portion of the Kuskokwim River. Historically, the project was operated in partnership between Alaska Department of Fish and Game and the Kuskokwim Native Association until 2014, but beginning in 2016, the project partnered with the Native Village of Napaimute. In addition to indexing salmon escapement, the project will conduct a high school internship program that will serve as an advance opportunity for a small group of students with expressed interest in pursuing degrees in fisheries or related fields. The data collected from the George River weir is important for management of Chinook Salmon on the Kuskokwim River as the weir provides an index of Chinook Salmon escapement in the middle Kuskokwim River, as does the Tatlawiksuk River weir; however, the Tatlawiksuk River weir will be removed in 2018. As such, the George River weir is of high value. This project was previously funded each year since 2005 (through projects 05-304, 08-303, 12-303, and 14-303).

Technical Review Committee Justification: The George River weir has collected data for 21 years that is used to monitor escapement for Chinook, Chum, and Coho salmon in the middle portion of the Kuskokwim River, as well as evaluate the size and composition of these salmon. This project addresses the 2018 Priority Information Need *for reliable quantitative and/or qualitative estimates of salmon escapements and/or harvests*. The data collected from the George River weir is a data component in the drainage-wide assessment for management of Chinook Salmon in the Kuskokwim River. Once the Tatlawiksuk River weir project is terminated in 2018, the George River weir will be the only weir monitoring salmon in the middle portion of the Kuskokwim River. Technical merit is high and the objectives are clearly written, quantifiable, and achievable; however, some objectives lack time bounds. The weir is an established and successful project that partners Alaska Department of Fish and Game and middle river communities. Previously, the project was a partnership between Alaska Department of Fish and Game and the Kuskokwim Native Association, but now is a partnership between Alaska Department of Fish and Game and the Native Village of Napaimute. The Native Village of Napaimute will operate a high school internship program that will provide meaningful learning opportunities for local high schoolers. The weir project has been well received by local residents, and is viewed as an important project supporting management, providing fundamental insights into issues such as the contribution of middle river salmon populations to the subsistence harvests in the lower Kuskokwim River. The 2018 total costs are approximately 19% lower than the 2014 total costs to the Monitoring Program.

Technical Review Committee Ranking: 4
Project Number: 18-302
Project Title: Kwethluk River Salmon Run Timing and Abundance

Project Summary: The funding requested is to support the continued operation (since 2000) of the Kwethluk River weir for four years (Project 14-308 received four years of funding from the Monitoring Program in 2014). The Kwethluk River is lower-river tributary of the Kuskokwim River that flows through the Yukon Delta National Wildlife Refuge and supports all Pacific salmon species. The weir has operated for 17 years under the Monitoring Program, providing information on escapement

magnitude and run timing for all salmon species with additional age and sex collection for Chinook, Chum, and Coho salmon. The previously funded projects had objectives that enumerated all salmon species in the Kwethluk, while the current proposed project only enumerates Chinook and Chum Salmon. As a result, the collection of age-sex-length information will be limited to Chinook and Chum Salmon. In order to decrease costs of the project, the investigators propose ceasing weir operations on August 15 rather than the normal date of September 10. The weir is one of two weirs, along with the Tuluksak River weir, monitored in the lower section of the Kuskokwim River. Escapement data gathered from the Kwethluk River weir is utilized to help assess the Kuskokwim River drainage-wide run-size and escapement assessment for Chinook Salmon, while age composition data is used to help set drainage-wide escapement goals for Chinook Salmon in the Kuskokwim River. This project was previously funded each year since 2000 (through projects 00-019, 04-301, 07-306, 10-306, 12-309 Video Addition, and 14-308).

Technical Review Committee Justification: The Kwethluk River weir is a well-established and successful salmon monitoring project that provides information on a majority of the escapement that occurs in the lower section of the Kuskokwim River. The weir provides critical information for in-season and postseason assessments for Chinook Salmon in the Kuskokwim River and addresses two 2018 Priority Information Needs identified by the Yukon-Kuskokwim Delta and Western Interior Alaska Subsistence Regional Advisory Councils. Technical merit is high with clear, measurable, and achievable objectives. Other than addressing the technical challenge associate with high early spring flows, the project does not have any major operational or technical deficiencies. The primary investigator is highly skilled and has managed the Kwethluk River weir for a long time; however, the role of other listed investigators is unclear. The project has multiple letters of support from local, Federal, and independent entities (Organized Village of Kwethluk, Tuluksak Native Community, Native Village of Napaimute, Association of Village Council Presidents, Orutsararmiut Native Council, Kuskokwim Watershed Council, and the Yukon Delta National Wildlife Refuge). The investigators propose an annual elders' tour to help educate elders away from any misconceptions about the weir project. The project plans on hiring an Alaska Native Science and Engineering Program student. However, no budget or letter of support for an Alaska Native Science and Engineering Program student is provided in the project documentation. Cost of the project has been reduced by 20%, which is primarily associated with the reduction in the amount of time the weir will be in operation. This reduction in time should not compromise the quality of the Chinook data collected because the majority (>95%) of the Chinook run will have occurred by the new weir removal date on August 15. Chum Salmon are a second species to be counted on the weir and it is currently unclear if the new weir removal date of August 15 will adequately capture the entirety of the Chum run.

Technical Review Committee Ranking: 5 (tied)
Project Number: 18-303
Project Title: Tuluksak River Salmon Run Timing and Abundance

Project Summary: The funding requested is to support the continued operation of the Tuluksak River weir for another four years (Project 14-306 received four years of funding from the Monitoring Program

in 2014). The Tuluksak River, like the Kwethluk River, is a monitored lower-river tributary of the Kuskokwim River that flows through the Yukon Delta National Wildlife Refuge (Refuge) and supports all Pacific salmon species. The river has experienced disrupted hydrological flow from mining, which has possibly decreased available habitat for the salmon returning to the river. The weir was in operation from 1991 through 1994 and then from 2002 to present, providing information on escapement magnitude and run timing for all salmon species with additional age-sex-length data collected for Chinook, Chum, and Coho salmon. The previously funded projects had objectives that enumerated all salmon species in the Tuluksak, while the current proposed project only enumerates Chinook and Chum Salmon. Age-sex-length information will also be collected on only Chinook and Chum Salmon, rather than Chinook, Chum, and Coho Salmon like the previously funded projects. In order to decrease costs of the project, the investigators propose ceasing weir operations on August 1 rather than the normal date of September 10. The investigators also propose to decrease costs by reducing personnel from one crew leader and three shared Tuluksak Native Community technicians to one U.S. Fish and Wildlife Service crew leader and one local hire from a rural village. This project was previously funded each year since 2001 (through projects 01-053, 04-302, 07-307, 10-307, 14-306).

Technical Review Committee Justification: The Tuluksak River weir is a well-established and successful salmon monitoring project that provides information on a majority of the escapement that occurs in the lower section of the Kuskokwim River. The weir provides critical information for in-season and post-season assessments for Chinook Salmon in the Kuskokwim River. The project addresses two 2018 Priority Information Needs identified by the Yukon-Kuskokwim Delta and Western Interior Subsistence Regional Advisory Councils. Technical merit is high with clear, measurable, and achievable objectives. The primary investigator is highly skilled and has managed the Kwethluk River weir for a long time; however, it is unclear what role(s) the other listed investigators hold in the project. The project has multiple letters of support from varying local, Federal, and independent entities: TNC, Organized Village of Kwethluk, Native Village of Napaimute, Association of Village Council Presidents, Orutsararmiut Native Council, and the Kuskokwim Watershed Council. The project also plans on hiring one rural Alaskan technician each season as a local hire, as well as an Alaska Native Science and Engineering Program student. However, no budget or letter of support for an Alaska Native Science and Engineering Program student is provided in the project documentation. The 2018 total costs are approximately 51% lower than the 2014 total costs. The reduction in costs is primarily associated with the reduction in the amount of time the weir will be in operation and reduction from four weir operations staff to two weir operations staff. The investigator stated that the reduction in time would not compromise the objectives of capturing the run timing of Chinook and Chum, however both Chinook and Chum are known to migrate past the weir location well into August, so the newly proposed removal date could potentially reduce the total run size by not counting all of the fish.

Technical Review Committee Ranking: 5 (tied)
Project Number: 18-305
Project Title: Kuskokwim River Sonar

Project Summary: The funding requested is to enable the Alaska Department of Fish and Game (ADF&G) to continue annual sonar operations during the month of August to enumerate the annual Coho Salmon run in the Kuskokwim River. From 2014 to 2016, Alaska Department of Fish and Game conducted a feasibility study using sonar in combination with drift gillnetting to estimate salmon abundance in the Kuskokwim River. As a result of the successful completion of the feasibility study, Alaska Department of Fish and Game has secured long-term funding for continued sonar operations; however, the existing budget is only adequate to operate the project through the overlapping Chinook, Chum, and Sockeye Salmon runs. Results obtained from this project could eliminate the need to estimate Coho Salmon abundance through complicated run-reconstruction models. It would also provide in-season abundance information to in-season managers, who would then utilize that information to help make more informed decisions regarding late season harvest opportunities for Coho Salmon. The proposed project can also indirectly improve existing knowledge on whitefish species abundance (although not specifically stated as an objective of the project).

Technical Review Committee Justification: This project would result in monitoring all Pacific salmon species utilized in the subsistence fishery in the Kuskokwim River via sonar at the confluence of the Kuskokwim River and Church Slough. This project addresses the 2018 Priority Information Need identified by the Councils. Technical merit is high with clear, measurable, and achievable objectives. Similar sonar methodologies are used on the Yukon, Kenai, and Copper rivers. Investigators are all highly skilled and the plans for this project have been discussed with all State, local, rural, and tribal management groups in the area. In turn, each of these groups has provided a letter of support (Kuskokwim River Salmon Management Working Group, Kuskokwim River Inter-Tribal Fish Commission, Bethel Fish and Game Advisory Committee, the Native Village of Napaimute, and the Yukon Delta National Wildlife Refuge). In order to promote capacity building with management advisory groups, all members of the Working Group, Fish Commission, in-season managers, and Refuge staff will be invited to visit the sonar project while in operation. Detailed budget tables and budget justifications were provided by the investigators. Investigators are requesting the Monitoring Program pay 51% of the overall cost of running the sonar from May through August. There is uncertainty as to whether or not the data resulting from Coho Salmon counts justify the cost of the project.

Technical Review Committee Ranking: 6 (tied)
Project Number: 18-352
Project Title: Support for Cooperative Management of the Kuskokwim River Subsistence Salmon Fishery

Project Summary: This project supports the activities of the Kuskokwim River Salmon Management Working Group. The Working Group is largely a cooperative management forum. The effectiveness of the Working Group is dependent on sharing information among stakeholders during the often hectic pace

of the fishing season. In 2016 the Working Group met 11 times. Staff provided 15 information packets containing detailed salmon-run assessments to Working Group members and the public. The Alaska Department of Fish and Game hosts a webpage with this information and an archive of audio recordings of every meeting since 2012. The Working Group receives weekly reports from Orutsararmiut Native Council's Kuskokwim In-season Subsistence Catch Monitoring Program (Project 18-350). Since 2001, the Monitoring Program has contributed funds to the operation of the Working Group through Projects 01-116, 06-307, 10-353, and 14-353.

Technical Review Committee Justification: The Kuskokwim River Salmon Management Working Group is considered to be a successful model of collaboration between stakeholders, and it provides a much needed public forum in which rural subsistence fishers and other stakeholders meet and have discussions with State and Federal fishery managers regarding salmon subsistence, commercial, and sport fisheries. The project's Federal nexus is clear, but the investigator does not explain how this project fits into new management efforts such as the Kuskokwim River Inter-tribal Fish Commission. The project could better address current needs by adding a seat on the Working Group for a U.S. Fish and Wildlife Service representative. The investigator is qualified to conduct the project. The budget request has increased significantly by 59% since 2014. Investigators are requesting funding for 70% of overall costs for this project, and cost sharing has gone down significantly from previous funding cycles when Alaska Department of Fish and Game contributed more to the support of its staff.

Technical Review Committee Ranking: 6 (tied)
Project Number: 18-300
Project Title: Kuskokwim River Broad Whitefish

Project Summary: The funding requested is to build upon a Broad Whitefish tagging and monitoring project (14-301) that was previously funded with modification by the Monitoring Program in 2014, then subsequently not funded in 2016 (Project 16-305). The previous project was primarily a feasibility study for mark-recapture techniques to estimate abundances of Broad Whitefish in the upper Kuskokwim River, as well as to estimate age-sex-length compositions for the population. This project is proposing to build on the previous project by implementing tested mark-recapture techniques to estimate Broad Whitefish abundance and population demographics in the upper Kuskokwim River, as well as add a mark-recovery component, which will produce estimates of subsistence exploitation rates for the species throughout the Kuskokwim River drainage. The project also has added rural organization staff as co-investigators, who are vital in accomplishing objectives from the mark-recovery component of the project.

Technical Review Committee Justification: Broad Whitefish are an important subsistence species in the Kuskokwim Region that are heavily utilized by Federally qualified subsistence users within the Yukon Delta National Wildlife Refuge. This project addresses two 2018 Priority Information Needs identified by the Yukon-Kuskokwim Delta and Western Interior Alaska Subsistence Regional Advisory Councils. The methodology used for the analysis is technically sound; however, the objectives do lack time bounds and ownership. The investigators did not address a prior concern of the Technical Review

Committee regarding sensitivities of Broad Whitefish to electrofishing. Further explanation is needed on how estimating subsistence exploitation rates can be used to provide harvest estimates. If properly done, this project could provide more information about Broad Whitefish in the Kuskokwim River than any other project completed to date. Primary investigators are highly skilled and have done similar work in the region, while co-investigators for the project are rural organizations from the lower and middle Kuskokwim River (Orutsararmiut Native Council and Native Village of Napaimute), where a majority of the Broad Whitefish subsistence harvest comes from which is expected to be a benefit to the mark-recapture component of the study. The capacity building portion of this project has increased since the last investigation plan with the inclusion of the two rural organizations. It is still unclear how the rural organization will participate in the research process. There were no letters of support submitted for the project. The level of requested funding for this project is justifiable when considering the large geographic scale of the study and the potential results that will add substantially to the knowledge of Broad Whitefish in the drainage. The project is expensive over the course of four years, but there is a significant match (>1/3 of the total).

Technical Review Committee Ranking: 9
Project Number: 18-301
Project Title: Inferring Production Patterns of Kuskokwim River Chinook Salmon Using Otolith Microchemistry and River Isoscapes

Project Summary: The proposed project is seeking to quantify the production patterns and life-history strategies of Kuskokwim River Chinook Salmon at spatial and temporal scales relevant to fisheries management. The project would do this by generating a geo-spatial model of strontium isotope signatures collected from water samples collected throughout the Kuskokwim River drainage. The model then would be able to reapportion Chinook Salmon harvested in the lower portion of the Kuskokwim River based on strontium isotope signatures found in otoliths collected from the harvested Chinook Salmon in the subsistence fishery or at the Bethel Test Fishery. This analytical framework could be used to assess inter-annual variability in production and how this production varies with environmental variation or fishery harvests. The same type of work has been done in the Nushagak River in the Bristol Bay system and is currently being done in the Yukon River.

Technical Review Committee Justification: This project is highly technical and could potentially provide an analytical framework that can reconstruct patterns of productivity and life history strategies at fine spatial scales for Chinook Salmon in the Kuskokwim River. The project does not address any of the 2018 Priority Information Needs for the Kuskokwim Region; however, it does address several objectives identified in the "*Gap Analysis for the Kuskokwim Area Salmon Research Plan"* developed by the Kuskokwim Fisheries Resources Coalition in 2006. The overall results produced by the project could provide important insights that can be used to develop and implement effective management and conservations strategies given uncertainty in Chinook Salmon populations within the Kuskokwim River. Objectives lack time bounds and ownership and sample size is not justified. This project involves the collaboration of many Federal, State, and university entities, the investigators are well regarded in their research fields and have produced similar high quality work in the Nushagak River. The project does

not have letters of support from any State, Federal, tribal, or independent entities, nor are any of the investigators part of any rural organization. There is no plan to hire any local hires for the project. The investigators indicate that they will take advantage of the capacity building plan that is in place through Arctic-Yukon-Kuskokwim Sustainable Salmon Initiative funded projects in order to communicate the importance and implications of the work produced in the proposal. The cost of the project is high.

SOUTHWEST REGION

Priority Information Needs

The 2018 Notice of Funding Opportunity for the Southwest Region identified eight Priority Information Needs:

- Reliable estimates of abundance of salmon populations in the Southwest Alaska Region and assessment of region-wide declines in populations.

- Reliable estimates of the harvest and use of salmon and other, nonsalmon fish species for subsistence. Of specific interest are harvest trends at Unalaska Bay, Togiak, and southwest Kodiak Island communities.

- Comparative ecological evaluation of lake rearing habitats of Sockeye Salmon stocks in southwest Kodiak Island, including Olga Lakes and Akalura Lake watersheds, and the assessment of (1) declines of salmon stocks and associated subsistence harvest opportunities and (2) potential effects of climate change on salmon production in these lake systems.

- Abundance and assessment of salmon stocks harvested in critical subsistence fisheries. Of specific interest are the Buskin River and McLees Lake stocks.

- An assessment of crab populations in Women's Bay.

- Reliable estimates of Sockeye Salmon escapements in the Lake Clark watershed.

- Reliable estimates of salmon escapement and evaluation of "quality of escapement" measures (for example, potential egg deposition, sex and size composition of spawners, spawning habitat quality and utilization) for determining the reproductive potential of spawning stocks in Big Creek, Naknek River, Alagnak River, Nushagak River, Chignik River, Meshik River and Togiak River.

- Reliable estimate of harvest of Dolly Varden in the Togiak River drainage by residents of Togiak and Twin Hills.

Technical Review Committee Proposal Ranking

For the 2018 Monitoring Program, five proposals were submitted for the Southwest Region. The Technical Review Committee evaluated and scored each proposal for Strategic Priority, Technical and Scientific Merit, Investigator Ability and Resources, Partnership and Capacity Building, and Cost/Benefit, and ranked them as follows:

Table 4. Technical Review Committee ranking for projects in the Southwest Region. Projects are listed by the Technical Review Committee ranking and include the total matching funds, total funds requested, and the average annual request for each project submitted to the 2018 Monitoring Program within the Southwest Region.

TRC Ranking	Project Number	Title	Total Project Request	Average Annual Request
1 (tied)*	18-400	Buskin River Sockeye Salmon Stock Assessment and Monitoring	$529,976	$132,494
1 (tied)*	18-451	Subsistence harvest trends of salmon and nonsalmon fish in 4 southern Kodiak Island communities	$242,319	$80,773
3	18-450	Unalaska Fish Harvest Practices	$296,701	$74,175
4	18-402	Estimation of Sockeye Salmon escapement into McLees Lake	$207,192	$51,798
5	18-401	Southwest Kodiak Ecological Assessment	$402,681	$100,670
		Total	**$1,678,869**	**$439,910**

* Proposals with identical scores during the rating process may be further assessed by comparing the average annual cost. Proposals with a lower average annual cost may be ranked above a similar rated proposal that has a higher annual average cost.

In addition to the above proposed projects, there are three continuing Monitoring Plan projects in the Southwest Alaska Region (**Appendix A.1**.).

Regional Advisory Council Comments

Kodiak/Aleutians Subsistence Regional Advisory Council

The majority of Council members said Project 18-400 (Buskin River Sockeye Salmon) was the priority in the Southwest Alaska Region, as it was for the Technical Review Committee, because this fishery is important to residents of Kodiak city. Some Council members said that because the project has been funded by the Monitoring Program since 2000, they support skipping the project during this funding cycle in order to provide funding for projects in other regions. Many Council members said Project 18-450 (Unalaska fish harvest practices) is a higher priority for the Kodiak/Aleutian Subsistence Regional Advisory Council than Project 18-451 (Subsistence harvest of fish at Kodiak communities). The Council said it became more aware of fishery issues in the Unalaska area recently and therefore supports funding Proposal 18-450, which addresses some of those issues.

One Council member stated that Project 18-402 (McLees Lake weir) is a higher priority in the Southwest Alaska region than is reflected in the fourth place score from the Technical Review Committee. That Council member said that the Technical Review Committee failed to acknowledge in its justification the project's partnership with Qawalangin Tribe of Unalaska. The Council member estimated that McLees Lake produces 70% of local subsistence salmon harvests annually and said that currently there is no in-season monitoring of the salmon run and weirs are essential in order to provide maximize opportunities for people to harvest salmon for subsistence.

One Council member said that a project with objectives similar to Project 18-401 (southwest Kodiak Island ecological assessment) has been requested by some Council members for several years and is a Council priority in the Kodiak/Aleutians Region, but the Council member also noted the proposal apparently did not reflect the high level of community involvement planned through the project.
The Council said it was gratified to see the number of projects submitted addressing fishery issues in the three areas of the Kodiak/Aleutians Region, which are the following: the Kodiak Island area, southern Alaskan Peninsula, and the Aleutians. One Council member wanted funding to be distributed across the three areas.

Bristol Bay Subsistence Regional Advisory Council

The Council expressed surprise that no projects were submitted in the Bristol Bay Region. The Council had no comments on Southwest Alaska Region project proposals.

Interagency Staff Committee Comments

The Interagency Staff Committee supports the Technical Review Committee ranking of the 2018 Southwest Alaska Region proposals. In addition, many data gaps have been identified in this region and the Interagency Staff Committee recommends continued effort be made to address these data gaps.

Project Summaries and Technical Review Committee Justification for Project Ranking

Technical Review Committee Ranking: 1 (tied)
Project Number: 18-400
Project Title: Buskin River Sockeye Salmon Stock Assessment and Monitoring

Project Summary: This proposal would continue another four years of operation of two weirs; one on the Buskin River at the outlet of Buskin Lake, and another, nearby weir on Lake Louise Creek (a tributary of the Buskin River), during the months of June through August by the Alaska Department of Fish and Game (ADF&G). This project would provide estimates of sockeye salmon spawning escapement into the Buskin River system and obtain information on residency and traditional fishing sites from subsistence fishery participants. The Buskin River salmon weirs have been funded through the Fisheries Resource Monitoring Program since 2000, under Projects 00-032, 04-414, 07-402, 10-403 and 14-401. Data collected at these weirs since 2000 has been utilized by ADF&G to assess and modify spawning escapement goals and improve run forecasts. This has allowed State and Federal fisheries managers to better manage subsistence harvests and avoid unnecessary restrictions.

Technical Review Committee Justification: The Sockeye Salmon run to Buskin River supports what is usually the largest subsistence fishery in terms of both harvest and permits issued in the Kodiak Management Area, and the run has been identified by the Federal Subsistence Board as an important subsistence resource for customary and traditional use by the residents of Kodiak. This project addresses the Southwest Region 2018 Priority Information Need identified by the Council. The five stated project objectives are clearly written, quantifiable, and achievable. Project objectives are similar to the previously funded Project 14-401, but the current investigation plan does not address how fish counts at the weirs are validated. The Alaska Department of Fish and Game has a long history of fisheries data collection and analysis and presently operates 18 salmon escapement weirs within the Kodiak/Aleutians Region. All Sport Fisheries Division projects are designed and conducted through development of formalized operational plans which undergo rigorous review by highly qualified and experienced research and biometrics staff. If funded, the Principal Investigator would continue a high school student internship program established in 2003 to provide education and career development opportunity for local Federally qualified subsistence users. The Alaska Department of Fish and Game and Kodiak National Wildlife Refuge office of the U.S. Fish and Wildlife Service have established a cooperative agreement to utilize the Buskin River weir as an educational tool for the service's ‘Summer Science and Salmon Camp Program, which provides a science-based venue for local youths to learn the importance of salmon for subsistence and other uses comprising an integral part of the Kodiak lifestyle. Total amount of funds being requested is $529,976, an average of $132,494 per year, which is an 8.5 % increase over the previous four-year budget for Project 14-401. While the requested funding for the proposed work appears reasonable to accomplish project objectives, this project, given its long history and being located near the Alaska Department of Fish and Game, Kodiak office and on a road system, should be more efficient and cost effective as time goes by.

Technical Review Committee Ranking:1 (tied)
Project Number: 16-451
Project Title: Subsistence Fish Harvest Trends in Four Southern Kodiak Island Communities

Project Summary: Beginning in the 2018 calendar year, this project spans approximately three and half years and proposes to conduct comprehensive subsistence surveys to update harvest data on salmon and nonsalmon species in the communities of Akhiok, Larson Bay, Karluk, and Old Harbor. In addition to updating harvest data, investigators propose to document local and traditional knowledge of salmon populations in Olga Lake and Akalura Lake watersheds by residents of Larson Bay and Akhiok. Local observations about the occurrence of other species of fish, vegetation changes, algal blooms, or unusual ice/hard winter events will also be documented.

Technical Review Committee Justification: The project directly addresses one 2018 Priority Information Need identified by the Council. This project is local in scope but may contribute to a growing body of traditional knowledge on salmon population trends statewide. The project is technically sound and the timeline is realistic giving ample opportunity for investigators to address each stage of research, data analysis, community review, and reporting requirements. However, the project is broad in scope. It is recommended that the investigation plan demonstrate more specifically how two very different information objectives would come together as a cohesive end product. The Principal Investigator works at the Alaska Department of Fish and Game and no further partnerships are proposed. Capacity building is addressed through the hire and training of local research assistants. Six letters of support demonstrate local interest in the project. The cost is more than reasonable for the work proposed considering the expense of travel and the length of time spent conducting field work and writing the final report.

Technical Review Committee Ranking: 3
Project Number: 18-450
Project Title: Unalaska Fish Harvest Practices

Project Summary: This project has a Federal nexus within the Alaska Maritime Wildlife Refuge. This four-year project proposes to update community harvest data for all subsistence resources, with a focus on fish species, through the administration of a comprehensive subsistence survey, participant observation in subsistence fishing activities, and key respondent interviews. The Monitoring Program previously funded Project 12-450, which also conducted comprehensive subsistence surveys and traditional local knowledge interviews in Unalaska and other communities. However, the results in Unalaska were based on a small household sample that is not easily compared with previous surveys and does not represent the community as a whole. Significantly, this project seeks to update harvest data over 22-years old and to provide managers with a greater understanding of how the recent ban on commercial trawling in Unalaska Bay has impacted local subsistence fisheries.

Technical Review Committee Justification: This project directly addresses the 2018 Priority Information Need identified by the Council. The study plan is well designed with only minor concerns,

easily addressed by researchers before implementation of the first field season. Specifically, the investigation plan should describe a sampling effort that directly addresses that portion of the Unalaska population that is defined as permanent residents of Alaska. Additionally, the budget could be further reduced through a reduction in full team travel for community scoping and review meetings. The investigator capacity for the work proposed is strong and the timeline is realistic, giving ample opportunity for investigators to address each stage of research, data analysis, community review, and reporting requirements. There are no rural organizations listed as co-investigators for this project, however, a cooperative agreement will be signed with the Qawalangin Tribe to identify and hire local research assistants. There are six letters of support from local organizations and agencies. The budget is reasonable for the work proposed but could become more competitive if some staff travel reductions were made.

Technical Review Committee Ranking: 4
Project Number: 18-402
Project Title: Estimation of Sockeye Salmon Escapement into McLees Lake

Project Summary: This proposal would continue another four years of operation of the McLees Lake weir to collect timely escapement information in order to optimize subsistence fishing opportunity and maintain the sustainability of the Sockeye Salmon resource at McLees Lake. This project would continue work by the U.S. Fish and Wildlife Service, funded through the Monitoring Program from 2001 to 2011 via Projects 01-059, 04-403, 07-405 and 10-406; and the Alaska Department of Fish and Game (ADF&G), funded by the Alaska Sustainable Salmon Fund (AKSSF) from 2012 through 2017. Prior to that, escapement information consisted of counts obtained during aerial surveys conducted by the State of Alaska. Data collected since 2001 has been used by the State to assess spawning escapement goals, and by both Federal and State managers to better manage subsistence harvests and avoid unnecessary restrictions.

Technical Review Committee Justification: This project addresses the Southwest Alaska Region 2018 Priority Information Needs identified by the Council. The Sockeye Salmon run to McLees Lake provides most of the subsistence harvest for this species taken by Federally-qualified subsistence users from Unalaska. The five stated project objectives are clearly written, quantifiable, and achievable, and the study design and methods are technically sound. However, the investigation plan does not state why the project should be continued, and how the collected data will be extrapolated and utilized for the management of the salmon subsistence salmon fisheries. The investigators have both the ability and resources to successfully conduct this work. The Alaska Department of Fish and Game (ADF&G), Kodiak office has a long history of fisheries data collection and analysis, presently operates 18 salmon escapement weirs within the Kodiak/Aleutians Region, and has the necessary resources to fully support this project. This project will continue the development of partnerships between the U.S. Fish and Wildlife Service, the Qawalangin Tribe of Unalaska, and Alaska Department of Fish and Game. Capacity building will occur with the Qawalangin Tribe by their direct participation in the hiring of the field technicians and ongoing consultation to develop educational opportunities. Total amount of funds being requested is $207,192, for an average of $51,798 per year, which is a substantial decrease in the

annual costs of the project in prior years. The budget is reasonable and adequate to accomplish the project objectives.

Technical Review Committee Ranking: 5
Project Number: 18-401
Project Title: Southwest Kodiak Ecological Assessment

Project Summary: This is a four-year funding request to conduct a comparative evaluation of lake rearing Sockeye Salmon habitats from Akalura, Olga, Red, and Horse Marine lakes in the Southwest Kodiak Archipelago. Subsistence users that fish the Alitak Bay area have identified declines in Sockeye Salmon production from Akalura and South Olga Lakes as a subsistence concern. The project seeks to identify linkages between climate, juvenile Sockeye Salmon health, and lake rearing conditions for two lakes that have had declining production (Akalura and South Olga Lakes) to compare with two nearby systems with relatively stable projection (Red and Horse Marine lakes). Smolt condition, age, and stable isotope data will be used with cohort and limnologic data to identify relationships in the freshwater rearing habitat and develop habitat based models of optimal escapement. This information will provide biologists with new information to better manage the systems for improved subsistence opportunity. Project results and deliverables would be disseminated to rural residents to establish an open dialog between the three investigator groups and regional subsistence users.

Technical Review Committee Justification: This project addresses the Southwest Region 2018 Priority Information Need identified by the Council. The current proposal is an improvement to a very similar (non-funded) proposal the three investigators submitted in 2016, as it addresses the issues highlighted by the Technical Review Committee. The proposed project identifies clear, measurable, and achievable objectives. However, the investigation plan does not tie together what the real issue is that is being addressed, for example, nutrient deficiency versus ocean conditions, and does not address how the results of the project would help in the management of salmon stocks. The investigators of the proposed project appear to have the resources available to accomplish the proposed objectives and project responsibilities have been clearly delineated for the three investigators. The Principal Investigator has significant resources available to her from the Alaska Department of Fish and Game (ADF&G), Kodiak office. This project would directly foster collaboration among ADF&G, the Kodiak Regional Aquaculture Association, and the U.S. Fish and Wildlife Service. It is unclear whether any local residents will be hired to complete any aspect of the project. Two letters of support were submitted for the project. The total four-year funding request for the proposed project is $402,681 with an average annual request of $100,670. The cost of the projects appears to be well justified and reasonable to achieve the proposed objectives.

SOUTHCENRAL REGION

Priority Information Needs

The 2018 Notice of Funding Opportunity for the Southcentral Region identified five Priority Information Needs:

- Reliable estimates of Chinook and Sockeye salmon escapement into the Copper River drainage (for example, projects utilizing weir, sonar, mark-recapture methods).

- Abundance, run timing, spawning site fidelity and timing, and age-sex-length composition of Chinook Salmon that stage or spawn in the Kenai River and its tributaries below Skilak Lake.

- Assessment and subsistence harvest of the Ibeck Creek Coho Salmon population.

- In-season harvest monitoring of Chitina salmon fisheries.

- In-season harvest monitoring of Kenai/Kasilof Chinook Salmon fisheries.

Technical Review Committee Proposal Ranking

For the 2018 Monitoring Program, seven proposals were submitted for the Southcentral Region. The Technical Review Committee evaluated and scored each proposal for Strategic Priority, Technical and Scientific Merit, Investigator Ability and Resources, Partnership and Capacity Building, and Cost/Benefit, and ranked them as follows:

Table 5. Technical Review Committee ranking for projects in the Southcentral Region. Projects are listed by the Technical Review Committee ranking and include the total matching funds, total funds requested, and the average annual request for each project submitted to the 2018 Monitoring Program within the Southcentral Region.

TRC Ranking	Project Number	Title	Total Project Request	Average Annual Request
1	18-504	Estimating the Inriver Abundance of Copper River Chinook Salmon	$860,000	$215,000
2	18-501	Gulkana River Sockeye Salmon Harvest Contribution	$293,440	$73,360
3	18-502	Ibeck Creek Coho Salmon Escapement and Harvest Monitoring	$333,557	$166,779
4	18-503	Abundance and Run Timing of Salmon in Long Lake	$72,046	$18,012
5	18-505	Abundance and Run Timing of Salmon in Tanada Creek	$333,498	$83,375
6 (tied)*	18-550	Upper Copper River Fisheries Information Network	$180,312	$90,156
6 (tied)*	18-506	Testing Small Unmanned Aircraft Systems to Index Salmon Spawning Escapement in the Upper Copper	$194,155	$97,078
		Total	**$2,267,008**	**$743,760**

* Proposals with identical scores during the rating process may be further assessed by comparing the average annual cost. Proposals with a lower average annual cost may be ranked above a similar rated proposal that has a higher annual average cost.

In addition to the above proposed projects, there are no continuing Monitoring Plan projects in the Southcentral Region (**Appendix A.1**.).

Regional Advisory Council Comments

Southcentral Alaska Subsistence Regional Advisory Council

The Council was pleased that investigators for Project 18-504 (Copper River Chinook Salmon abundance), the highest ranked project in the region by the Technical Review Committee, had applied for and received additional funding to cover project expenses beyond the Monitoring Program request. Some Council members questioned why the Technical Review Committee ranked a small fishery like Ibeck Creek Coho Salmon, the focus of Project18-502 (Ibeck Creek Coho Salmon escapement and harvest) higher than a project like 18-505 (Tanada Creek salmon abundance and run timing) that has broader management implications for a large drainage like the Copper River. One Council member said Project 18-506 (Upper Copper River fisheries information), the methodology for which includes use of a drone, is a priority in the region. He said the project tests new technology that has statewide management implications. This project was tied for sixth place by the Technical Review Committee. One Council member said Projects 18-504, 18-505, and 18-506 are priorities in the region.

Interagency Staff Committee Comments

The Interagency Staff Committee supports the Technical Review Committee ranking of the 2018 Southcentral Region proposals. We acknowledge with declining budgets, not all high ranking and strategically important projects can be funded.

Project Summaries and Technical Review Committee Justification for Project Ranking

Technical Review Committee Ranking: 1
Project Number: 18-504
Project Title: Estimating the In-river Abundance of Copper River Chinook Salmon

Project Summary: Investigators request funding for continuation of Project 14-505, which provides the only statistically valid estimate of Chinook Salmon migrating up the Copper River each year. This project is solely operated by a rural Organization, the Native Village of Eyak. The Monitoring Program funded initial efforts to develop a Chinook Salmon abundance estimation project based on mark-recapture methods in 2001 (Project 01-020), and the first unbiased annual estimate was obtained since 2003 (Projects 02-015, 04-503, 07-503, 10-503, and 14-505). Prior to this, information on Chinook Salmon abundance was obtained from aerial surveys of a few clear-water spawning tributaries supplemented by information from radio telemetry studies. Chinook Salmon migrate through a gauntlet of fisheries prior to reaching spawning areas, starting with State-managed commercial fisheries in marine waters. Federal subsistence fisheries occur within the Chitina and Glennallen Subdistricts of the Upper Copper River District as well as in Tanada Creek (Batzulnetas).

Technical Review Committee Justification: Estimates of Chinook Salmon abundance produced from this mark-recapture experiment are used to determine whether the Copper River Chinook Salmon

escapement goal is achieved, and are used by Federal and State fishery managers to influence management of Copper River salmon fisheries. This project addresses the 2018 Priority Information Need identified by the Council. The basic design of this project is well-tested and documented, and results have been accurate and reliable. Declining Chinook Salmon stocks are a concern to rural users and managers alike, and this project would allow for continued monitoring of these stocks. The Native Village of Eyak has a long history of completing projects on time and within budget, the scientific and technical quality of the work has been excellent, and reports have been well-written and completed on schedule. Letters of support from the Alaska Department of Fish and Game, Divisions of Commercial Fisheries and Sport Fish, and the Ahtna Intertribal Resource Commission were submitted on behalf of this project. This project is operated and administered by a rural organization, the Principal Investigator is a fishery biologist funded under the Partners for Fisheries Monitoring Program, and local residents are preferentially hired as field technicians. The Native Village of Eyak has used this project platform for past and current coordinated efforts with the Alaska Department of Fish and Game, with plans (through this proposal) for future coordinated projects. The total cost for the four years of the project is $1,660,000, of which $215,000 per year is requested from the Monitoring Program, leaving $200,000 per year currently unfunded. The Native Village of Eyak is pursuing several avenues to obtain funding to cover the balance of the project costs, and the project would be an exceptional value to the Monitoring Program if a partner is found to support the remaining funding gap.

Technical Review Committee Ranking: 2
Project Number: 18-501
Project Title: Gulkana River Sockeye Salmon Harvest Contribution

Project Summary: This proposal is to fund the in-river harvest contribution estimates program for Sockeye Salmon in the Copper River and age-sex-length collection from the harvest for Sockeye and Chinook Salmon. Sockeye Salmon returns to the Copper River drainage are composed of wild fish and hatchery-produced fish from the Gulkana Hatchery. Escapement of wild Sockeye Salmon is determined by apportioning the counts from the Miles Lake sonar by wild and hatchery fish using the in-river harvest contribution estimates and subsequently subtracting in-river harvest of wild fish. Estimates are made based on samples collected from harvests of the State personal use fishery near Chitina and State and Federal subsistence fisheries fish wheels above the McCarthy Bridge. This information is needed to evaluate whether the escapement goal has been met, which in turn affects management of the in-river fisheries. From 2012 to 2015, the Alaska Sustainable Salmon Fund funded a successful Alaska Department of Fish and Game, Division of Sport Fish project to expand the sampling program all the way to Chistochina, a section of the river where the majority of Federally qualified subsistence users are located. The Alaska Department of Fish and Game, Division of Sport Fish, partnering with the Copper River Intertribal Resource Commission (CRITR), is requesting funding to continue the project and return it to the expanded sampling protocols that were in place during 2012 to 2015.

Technical Review Committee Justification: This project addresses two of the Southcentral Region 2018 Priority Information Needs identified by the Council. This project has drainage-wide implications and the ability to affect management of all in-river Sockeye Salmon fisheries by helping managers to

evaluate whether the established escapement goal has been met and assessing the contribution of wild and hatchery stocks to subsistence fisheries. The project's objectives are clear, measureable, and achievable, and the project uses proven science and logistics. The Principal Investigator's agency has been using these methods to achieve the desired technical results over the life of the project until recent budget cuts forced the use of opportunistic sampling. The project in question has been in place since 1981, and ADF&G has the resources (technicians, transportation, housing, office facilities, otolith and scale processing and analyzation capacity, personnel and budget administration, data analysis, etc.) to carry out the project. The Copper River Intertribal Resource Commission will be providing a seasonal technician to the program as well as local knowledge and support. The Principal Investigator has partnered with an Alaska Native organization, as a co-Principal Investigator. The project has the ability to increase the technical capacity of Copper River Intertribal Resource Commission by involving them in all aspects of the project, including logistics, project management, and hiring. The total cost of the project is $392,263 for the four years of the project, of which $61,620 is in-kind support from the State and $37,203 is match from Copper River Intertribal Resource Commission. The budget is reasonable across all agreement periods, and realistic for the proposed work.

Technical Review Committee Ranking: 3
Project Number: 18-502
Project Title: Ibeck Creek Coho Salmon Escapement and Harvest Monitoring Program

Project Summary: This new project would provide two years of escapement estimates and harvest monitoring of Ibeck Creek Coho Salmon. Ibeck Creek is an easily accessible, road system drainage just outside of Cordova that has seen a substantial increase in use by local Federally qualified subsistence users and for sport fishing. The increased use, paired with recent declines in Coho Salmon escapement indices, has caused local concern. The investigators propose using an adaptive resolution imaging sonar (ARIS) unit to estimate escapement above the sport fishing boundary and establishing a creel survey to estimate annual harvest. A similar project was proposed but not funded through the 2016 Monitoring Program funding cycle. That proposal included a similar creel survey, but also included a resistance board weir for escapement estimates and an educational day camp component.

Technical Review Committee Justification: Ibeck Creek, a tributary of the Eyak River located on the Copper River delta, is the highest utilized road accessible subsistence resource for the rural community of Cordova, and is also the largest wild salmon sport fishery in Prince William Sound and the lower Copper River region. This project directly addresses a Priority Information Need identified by the Council for the 2016 and 2018 Monitoring Program notices of funding opportunity. This project has the capability of advancing research, while also providing reliable information about current subsistence and conservation concerns related to harvest levels and escapement monitoring. Both survey methods included in this project (related to creel and sonar) seem appropriate for this location, and the proponents appear to have incorporated feedback provided by the Technical Review Committee on their last submission of this project to the Monitoring Program. Mr. Piché and the Native Village of Eyak, have a long history of successfully completing projects funded by the Monitoring Program, and have the appropriate resources available (ARIS unit, field site equipment, vehicles, technicians, office facilities,

personnel and budget administration, data analysis, etc.) to carry out the project. Other individuals at Native Village of Eyak, the U.S. Forest Service, and the Alaska Department of Fish and Game have offered additional support for the project (field work, analysis, etc.) as needed to ensure success. This project has a high level of capacity building as it would be operated and administered by a rural Organization, and the Principal Investigator would be a biologist funded under the Partners for Fisheries Monitoring Program. This project is the result of six meetings between 2014 and 2017 of stakeholders and management agencies (Native Village of Eyak, U.S. Forest Service subsistence managers and fisheries biologists, Alaska Department Fish and Game, Commercial Fisheries Division biologists, Alaska Department of Fish and Game, Sport Fisheries Division biologists, and Copper River Watershed Project biologists). The cost is for this project is on the higher end, but is reasonable across all agreement periods and appears reasonable for the proposed products.

Technical Review Committee Ranking: 4
Project Number: 18-503
Project Title: Abundance and Run Timing of Salmon in Long Lake

Project Summary: This investigation plan proposes continued funding for the Long Lake Weir, which provides annual estimates of Sockeye Salmon entering the Long Lake system to spawn. It is the longest running salmon escapement project within the Copper River drainage, with operations beginning in 1974. Weir operation has been funded through the Monitoring Program since 2004. Sockeye Salmon is the primary salmon species spawning in Long Lake, and the stock is unique in that it has one of the longest known spawning durations (August through April) of any population in North America. Documented escapements have ranged from a low of 567 in 2008 to a high of 49,747 in 2002. The contribution of Long Lake Sockeye Salmon escapements to the total Copper River escapement (based on the Miles Lake sonar) has declined over time (9.1% average 1978-1984, 2.7% average 1985-1994, 2.1% average 1995-2004, and 1.1% average 2005-2014), and does not appear to correlate with the overall Sockeye Salmon returns to the drainage. This is one of only two salmon counting weirs in the Copper River drainage.

Technical Review Committee Justification: This project directly addresses a 2018 Priority Information Need identified by the Southcentral Region, but does not appear to have wide geographic implications as spawning occurs in Long Lake, well upstream of harvest. Data collection occurs between early August and early October, outside of the dates necessary for in-season management of this resource. Both of the objectives for this project are clear, measureable, and achievable. Although this project has provided a long-term data set, it is unclear what sort of knowledge gap the weir may be filling after 43 years, and there is no mention in the investigation plan of using this information as part of a drainage-wide or long-term assessment of the resource. Wrangell-St. Elias National Park and Preserve personnel have implemented this project since 2000. No letters of support were submitted for the project. The investigation plan states that the project provides an opportunity to collaborate with local students, non-profit organizations, and agencies to partner in the data collecting process, but no clear plan for accomplishing this was provided. Residents of local communities are hired to work at the weir. The total cost of the project is $155,313 for four years, of which $83,267 (54.6%) is contribution from the

National Park Service. The average annual cost of the project to the monitoring program would be $18,012, which is very reasonable for the proposed project.

Technical Review Committee Ranking: 5
Project Number: 18-505
Project Title: Abundance and Run Timing of Salmon in Tanada Creek

Project Summary: This investigation plan proposes continued funding to provide annual estimates of salmon entering Tanada Creek to spawn. This weir has been funded through the Monitoring Program since its inception in 2000 (Projects 00-013, 04-502, 07-502, 10-502, and 14-503). In 2007, video equipment was integrated into the weir to both ensure that all salmon passing the site would be recorded and allow salmon to migrate past the weir at all times rather than only when crew was on site. Escapements of Sockeye Salmon, on seasons with complete counts between 2003 and 2015, have ranged from a low of 4,514 in 2006 to a high of 52,162 in 2013. The contribution of Tanada Creek Sockeye Salmon escapements to the total Copper River escapement over this same time (based on the Miles Lake sonar) has varied from 0.5% to 5.4%. Escapements of Chinook Salmon have typically been low (zero to 10 in most years), but have been as high as 137 in 2008. This is one of only two salmon counting weirs in the Copper River drainage, and is at a road accessible location.

Technical Review Committee Justification: This project directly addresses a 2018 Priority Information Need identified by the Council for the Southcentral Region, and provides information that directly informs management of Sockeye Salmon harvest in the Batzulnetas fishery. The data is also not a formal component of the State's postseason assessment of the run; however, aerial surveys, the Gulkana counting tower, and Long Lake and Tanada weirs are used to review escapement distribution and escapement strength. Both of the objectives are clear, measureable, and achievable. Although this project has provided a relatively long-term data set, there is no mention by the investigator of using this information as part of a drainage-wide or long-term assessment of the resource. Wrangell-St. Elias National Park and Preserve personnel have implemented this project since 1997, and they have all of the resources available to carry out the project. No letters of support were submitted for the project. The investigation plan states that the project provides an opportunity to collaborate with local students, tribes and culture camps, non-profit organizations, and agencies to partner in the data collecting process but no clear plan for accomplishing this is provided or reflected in the budget. Residents of local communities will be hired to work at the weir. The total cost of the project is $684,498 for four years, of which $351,000 (51.2%) is contribution from the National Park Service. This is a relatively expensive dataset for the information, but it is also one of only three assessment projects in the Copper River.

Technical Review Committee Ranking: 6 (tied)
Project Number: 18-550
Project Title: Upper Copper River Fisheries Information Network

Project Summary: This project intends to develop and extend an existing mobile data collection tool (Alaska Logbook) for the voluntary inseason harvest reporting from the subsistence, personal use, and

sport fish in the Copper River Fisheries. Copper River salmon are a fully allocated resource and managers need accurate and timely information to make regulatory decisions. Currently, harvest reporting happens postseason despite management decisions being made in-season to open or close fisheries or adjust harvest limits. This project seeks to provide managers with in-season harvest data by establishing a voluntary, web-based subsistence harvest reporting system. The system would collect in-season harvest information from the Chitina and Glennallen subsistence, personal use, and sport fisheries. The investigator contends that this will provide reliable estimates of Chinook and Sockeye Salmon escapement into the Copper River drainage.

Technical Review Committee Justification: This project addresses two of the 2018 Priority Information Needs identified by the Council. The project seeks to inform salmon fisheries managers based on enumerations of in-season harvests, but salmon fisheries are currently managed using observations of salmon run sizes. The methods described in this proposal, while novel, are not fully developed as there are questions pertaining to technology development, cellular connectivity, participant buy-in, data ownership and transfer of information among parties, among other questions. The project primarily focuses on the development of technological tools for data collection but does not suggest substantial collection and use of the relevant data. The Principle Investigator Organizations appear to have substantial resources available to undertake this research. Resumes were missing for key personnel at Copper River Intertribal Resource Commission and Ecotrust who appear to have significant involvement in the work and account for a large portion of the personnel budget. Investigators intend to partner with many communities, corporations, tribal councils, non-profit organizations, and governmental agencies to conduct the work, however no letters of support were provided. The capacity building aspects of the proposal are lacking as no local hires, student interns or field technicians are slated to assist with project management and fieldwork. The average annual cost of the project is $90,156. An expansion of the project to include implementation of the developed data tool and generation of critical data may warrant increased costs.

Technical Review Committee Ranking: 6 (tied)
Project Number: 18-506
Project Title: Testing Small Unmanned Aircraft Systems to Index Salmon Spawning Escapement in the Upper Copper River Watershed

Project Summary: This project seeks to test the feasibility of using small, unmanned aircraft systems to locate, index, and monitor salmon spawning streams in the Upper Copper River watershed. The Alaska Department of Fish and Game currently conducts aerial surveys in the upper Copper River drainage as a part of its assessment of salmon returns. The Division of Sport Fish conducts surveys on four clear water systems to provide information on both Chinook and Sockeye Salmon distribution and as an index of returns to be used postseason and compared to past years. The Division of Commercial Fisheries staff survey around 30 systems to provide a relative examination of both Chinook and Sockeye Salmon distribution. The proponents suggest that the small, unmanned aircraft systems with a camera and sensor platform offer key advantages to aerial surveys as they are safe, cost effective, can operate with minimal

pilot training and licensing, and can fly at specific speeds and elevations over very precise areas at specific times of the day.

Technical Review Committee Justification: The project addresses the 2018 Southcentral Region Priority Information Need identified by the Council. The objectives for this project seem clear and potentially achievable based on the information provided. This method of escapement assessment has been discussed for many years, but has not yet become established methodology, and there are concerns about the limitations and requirements of using this technology for this purpose. The project goals would not have an immediate impact on subsistence fisheries or salmon conservation as increased quality of index surveys in the Upper Copper River drainage would not affect management. The primary investigator, Ms. McCall Valentine of the Copper River Intertribal Resource Commission, has served as co-investigator or participated in eight Monitoring Program Projects. No letters of support were submitted with this proposal package, and the proponent is advised to seek additional feedback from its partners or consult with local agencies to aid future submissions. This project would be operated and administered by a rural Alaska Native Organization, and the Principal Investigator is the acting social scientist funded under the Partners for Fisheries Monitoring. The investigator plans to work with local communities to hire field technicians from a pool of students studying biological sciences. The primary objective of this project, to develop a working methodology for the use of small unmanned aircraft systems in monitoring escapement index streams in the upper Copper River watershed, would require two years of development for a single stream site. It is not clear that the time and expense required to conduct this study, and the need for additional technological enhancements that would increase applicability for this type of research, would result in improved data over the current aerial survey methods.

SOUTHEAST REGION

Priority Information Needs

The 2018 Notice of Funding Opportunity for the Southeast Region identified four Priority Information Needs:

- Reliable estimates of Sockeye Salmon escapement and in-season estimates of harvest at the following systems: Kanalku, Klawock, Hetta, Falls Lake, Sarkar, Kook, Neva, Karta, Hatchery, Eek, Kah Sheets, Klag, Gut, Kutlaku, Salmon Bay, Sitkoh, Hoktaheen, Alecks Creek, and Virginia Lake.

- Escapement indexes for Eulachon at the Unuk River and the Yakutat Forelands.

- Traditional ecological knowledge of how each community distributes harvest between Sockeye Salmon systems available to them.

- Reliable estimates of salmon populations and harvests in the sport and subsistence fisheries at Kah Sheets and Alecks Creek.

Technical Review Committee Proposal Ranking

For the 2018 Monitoring Program, 13 proposals were submitted for the Southeast Region. The Technical Review Committee evaluated and scored each proposal for Strategic Priority, Technical and Scientific Merit, Investigator Ability and Resources, Partnership and Capacity Building, and Cost/Benefit, and ranked them as follows:

Table 6. Technical Review Committee ranking for projects in the Southeast Region. Projects are listed by the Technical Review Committee ranking and include the total matching funds, total funds requested, and the average annual request for each project submitted to the 2018 Monitoring Program within the Southeast Region.

TRC Ranking	Project Number	Title	Total Project Request	Average Annual Request
1	18-610	Klag Lake Sockeye Stock Assessment	$567,772	$141,943
2	18-604	Hetta Lake Sockeye Stock Assessment	$679,106	$169,777
3 (tied)*	18-609	Sitkoh Lake Sockeye Stock Assessment	$331,498	$82,875
3 (tied)*	18-602	Falls Lake Sockeye Stock and Harvest Assessment	$488,241	$122,060
3 (tied)*	18-603	Gut Bay Sockeye Stock and Harvest Assessment	$509,253	$127,313
6	18-607	Neva Lake Sockeye Stock Assessment	$608,426	$152,107
7	18-606	Kook Lake Sockeye Stock Assessment	$630,337	$157,584
8	18-600	Alecks Creek Sockeye Stock Assessment	$509,879	$127,469
9	18-608	Sarkar Lake Sockeye Stock Assessment	$359,725	$89,931
10	18-612	Kanalku Lake Sockeye Stock Assessment	$746,400	$186,600
11	18-605	Klawock Lake Sockeye Stock Assessment	$116,410	$29,103
12	18-611	North Southeast Alaska Eulachon Population Monitoring	$768,317	$192,079
13	18-601	District 1 Eulachon Assessment	$168,745	$42,186
		Total	**$6,484,109**	**$1,621,027**

* Proposals with identical scores during the rating process may be further assessed by comparing the average annual cost. Proposals with a lower average annual cost may be ranked above a similar rated proposal that has a higher annual average cost.

In addition to the above proposed projects, there is one continuing Monitoring Plan projects in the Southeast Region (**Appendix A.1**.).

Regional Advisory Council Comments

Southeast Alaska Subsistence Regional Advisory Council

Several Council members said Unuk River Eulachon (encompassed by Project 18-601, District 1 Eulachon assessment) is their top priority in the Southeast Alaska Region and requested that transcripts of the Council's discussion with a Metlakatla representative during the first day of the Council meeting be provided to the Federal Subsistence Board. The project was ranked last place in the region by the Technical Review Committee. A Council member said the continuation of long-term projects and geographic distribution of funding are priorities.

Interagency Staff Committee Comments

The Interagency Staff Committee supports funding the 2018 Southeast proposals in order of Technical Review Committee ranking. Forest Service staff shared information on declining Monitoring Program funding with the Southeast Council at their Fall 2017 Meeting. Council members recognized the funding reductions and agreed with the Technical Review Committee ranking order of the Southeast Monitoring Program proposals. The Council also voiced concern with District 1 Eulachon monitoring (Proposal No 18-601). Forest Service staff stated that there are ongoing efforts to monitor Eulachon on the Unuk River. The Forest Service is currently working with local stakeholders to address Unuk River Eulachon monitoring in 2018.

Project Summaries and Technical Review Committee Justification for Project Ranking

Technical Review Committee Ranking: 1
Project Number: 18-610
Project Title: Klag Lake Sockeye Salmon Stock Assessment

Project Summary: The Sitka Tribe of Alaska seeks four years of funding to continue a stock status and trends and harvest monitoring project for Sockeye Salmon at Klag Bay. A picket weir will be used to count all salmon migrating upstream and a trap at the weir will be used to sample fish for age-sex-length and mark a portion of Sockeye Salmon for mark-recapture weir validation. Post- spawn Sockeye Salmon will be sampled for marks to estimate escapement and validate the weir count. A Sockeye Salmon assessment project at Klag Bay has been funded through the Monitoring Program, which has aided in management of this fishery. Information generated by the project has led to both liberalized harvest limits and closures of the fishery due to conservation concerns. This project has been funded with the Monitoring Program since 2001 (through projects 01-128, 04-609, 07-604, 10-604, 14-609).

Technical Review Committee Justification: This project directly addresses a 2018 Priority Information Need by the Southeast Region Council. This is also one of few outside waters Sockeye Salmon escapements that is currently monitored and serves as an indicator stock. This project has functioned in the past effectively and was found to be scientifically sound. Kyle Rosendale is a fisheries biologist with

the Sitka Tribe of Alaska and will be the sole investigator for this project. He has worked on the Klag Bay Monitoring Program project in 2016 and has experience on other Sockeye Salmon monitoring projects at Redoubt Lake and Falls Lake, 2013-2015. Four letters of support were received for this project from the City and Borough of Sitka, the Sitka Conservation Society, the Alaska Department of Fish and Game, and the U.S. Forest Service. The Sitka Tribe of Alaska assumed full control over the project after building their sampling and technical capacity over the first few years of the project when they partnered with the Alaska Department of Fish and Game. Development of this project has shown the high degree of project partnership and capacity building that has been exemplified through many years of successful collaboration. The average annual cost of this project is $141,943 which is about average for Monitoring Program projects in Southeast Alaska with similar objectives, deliverables and logistical challenges.

Technical Review Committee Ranking: 2
Project Number: 18-604
Project Title: Hetta Lake Subsistence Sockeye Salmon Project

Project Summary: The investigators propose to continue Sockeye Salmon escapement monitoring at Hetta Lake. This project plans to continue the comprehensive fish harvest monitoring program at Hydaburg which has been funded through the Monitoring Program since 2003. This project has been funded with the Monitoring Program since 2001(01-130, 04-606, 07-606, 10-606, and 14-603).

Technical Review Committee Justification: This project addresses a 2018 Priority Information Need identified by the Southeast Alaska Subsistence Regional Advisory Council. Since Hetta Lake is the primary source of Sockeye Salmon for Hydaburg, recent poor escapements resulted in Hydaburg being unable to meet its community Sockeye Salmon subsistence needs. In-season escapement information is used by the community to shift subsistence effort away from Hetta Lake in times of conservation concern. The investigator should address the possibility of missing fish due to unforeseen circumstances that could result in a minimum count or a minimum estimate of escapement. This project will add to a long term data set concerning salmon runs at Hetta Lake and Sockeye Salmon harvest patterns of the community of Hydaburg. The Principal Investigator has substantial administrative and logistical resources to successfully complete the project. The co-investigator will provide technical expertise and ensure deliverables are completed on time. Local residents will be hired to run the field portion of the project. The average annual cost of the project is $169,776. The cost is mostly consistent across all years, however, it is marginally higher in years one and two due to the purchase of materials and supplies and replacing an outboard motor. The higher costs can be partly attributed to the additional study component of the community-wide harvest monitoring program for Hydaburg.

Technical Review Committee Ranking: 3 (tied)
Project Number: 18-609
Project Title: Sitkoh Lake Sockeye Salmon Stock Assessment

Project Summary: The investigators propose four more years of funding from the Monitoring Program for Sockeye Salmon stock assessment at Sitkoh Lake. Investigators will count Sockeye Salmon and other species of fish migrating into Sitkoh Lake using two underwater-video equipped net weirs. Age-sex-length data will be collected from a small sample of Sockeye Salmon captured at the spawning grounds, the main goal of which is to determine if there is a significant number of Sockeye Salmon in the escapement that spent two or more years in fresh water before reaching smolt size. This project has been funded intermittently through the Monitoring Program since 2001 (through projects 01-126, 04-605, 10-605 and 14-611).

Technical Review Committee Justification: This project addresses a 2018 Priority Information Need identified by the Southeast Alaska Subsistence Regional Advisory Council. The remotely monitored dual underwater video-equipped net weir system for counting fish has worked well at this site in the past. The age determination objective is narrow in scope but may be appropriate for a system where the goal is not run reconstruction. The goals of remote monitoring are to build capacity of project cooperators and to decrease the cost of the Monitoring Program in the Southeast Region. The Principal Investigator, has the resources of the U.S. Forest Service at his disposal and several decades of fisheries research experience in Alaska. The Co-investigator also works for the U.S. Forest Service, has over 20 years of experience in fisheries, and has been involved with Monitoring Program projects since 201, The Angoon Community Association will provide contract administration, logistical support and hire local fisheries technicians. The Angoon Community Association, Alaska Department of Fish and Game, and U.S. Forest Service have been cooperating on the stock assessment of Sitkoh Lake Sockeye Salmon for many years. The average annual cost of this project is $82,875, which is on the lower end of the cost range of other similar past Monitoring Program projects. However, due to sharing of personnel and transportation, completion of this project within the outlined budget is contingent on the Kook Lake project being funded.

Technical Review Committee Ranking: 3 (tied)
Project Number: 18-602
Project Title: Falls Lake Subsistence Sockeye Salmon Stock and Harvest Assessment

Project Summary: This proposal is to continue Sockeye Salmon escapement and harvest monitoring at Falls Lake on Baranof Island. This is the primary stock used by residents of Kake, and escapement and harvest of this stock was listed as a 2018 Priority Information Need by the Southeast Alaska Subsistence Regional Advisory Council. A Monitoring Plan-funded project has been in place at Falls Lake for 14 of the last 16 years and has shown that a sizable portion of the terminal return is harvested in the subsistence fishery. The project uses a mark-recapture study to estimate the escapement, with fish being trapped and marked at the top of a fish ladder and sampled for marks using a video net weir. Scale data is used to estimate age-sex-length distribution, and harvest surveys conducted at the marine terminal area

are used to estimate both sport and subsistence harvest. This project has been funded through the Monitoring Program since 2000 (through projects 00-044, 04-607, 07-609, 10-609, 14-602).

Technical Review Committee Justification: This project addresses the Southeast Alaska Subsistence Regional Advisory Council's 2018 Priority Information Need. Falls Lake is the primary source of Sockeye Salmon for Federally qualified subsistence users in the village of Kake. The mark-recapture study will provide a validated escapement estimate, which is ideal. However, using redundant swim-through video weirs would reduce the handling of fish, reduce the risk of predation, and avoid delaying their migration without compromising the precision of the estimate. Methodology for the harvest monitoring needs to be developed including, a description of the approach or type of date collected should be included in the proposal. The scale sampling targets should provide enough samples to meet precision goals, and the harvest monitoring will provide a much better estimate of harvest than permit data. Local residents, through the Organized Village of Kake, can provide traditional and community knowledge of the site and local issues. Partnership with the Organized Village of Kake is meaningful by providing administrative and logistical support, hiring technicians from the local community, and providing local knowledge and input on community issues. No letters of support were included; however, the local village organization is a partner in the project. The average annual cost of the project is $122,060, with a total cost of $488,241, and was found to be within the range of similarly-sized weir projects.

Technical Review Committee Ranking: 3 (tied)
Project Number: 18-603
Project Title: Gut Bay Subsistence Sockeye Salmon Stock and Harvest Assessment

Project Summary: This proposal is to develop a Sockeye Salmon escapement and harvest monitoring project at Gut Bay Lake on Baranof Island. This stock is one of the primary stocks used by residents of Kake, and escapement and harvest of this stock was listed as a 2018 Priority Information Need by the Southeast Alaska Subsistence Regional Advisory Council. While there is some history of monitoring, information about abundance and harvest of Gut Bay Sockeye Salmon is limited. A pair of video net weirs will be used to estimate escapement, with mark-recapture providing validation of weir counts. The subsistence harvest will be estimated through onsite surveys.

Technical Review Committee Justification: This project addresses the Southeast Alaska Subsistence Regional Advisory Council's 2018 Priority Information Needs. The double redundant net weirs combined with mark-recapture will provide a validated escapement estimate, which is ideal. However, using swim-through redundant video weirs would reduce the risk of predation, avoid delaying their migration, and minimize fish handling while still providing a reasonable degree of confidence in the escapement counts. Methodology for the harvest monitoring needs to be developed including, a description of the approach or type of date collected should be included in the proposal. The scale sampling targets should provide enough samples to meet precision goals, and the harvest monitoring will provide a much better estimate of harvest than permit data. The remote site, inclement weather, and wilderness designation of the study site will pose logistical challenges. Float planes cannot safely land

on the lake itself, and the wilderness designation may prevent the use of helicopters to transport equipment, so it may be difficult to deliver the net weirs and other equipment to the pond where they are to be deployed. The proposal does not directly address these challenges, but investigators have successfully operated a similar project at nearby Falls Lake. Traditional knowledge of the site and local community issues are available through the tribal partner. The co-investigator agency is a tribal Organization and will play a meaningful role by providing administrative and logistical support, hiring technicians from the local community, and providing local knowledge and input on community issues. No letters of support were included; however, the local village Organization is a partner in the project. The average annual cost of the project is $127,313, with a total cost of $509,253.

Technical Review Committee Ranking: 6
Project Number: 18-607
Project Title: Neva Lake Sockeye Salmon Stock Assessment

Project Summary: The investigators propose four more years of Sockeye Salmon stock assessment at Neva Lake. Investigators will count Sockeye Salmon and other species of fish migrating into Neva Lake using an underwater video equipped picket weir. Age-sex-length data will be collected from a small sample of Sockeye Salmon captured at the spawning grounds, the main goal of which is to determine if there is a significant number of Sockeye Salmon in the escapement that spent two or more years in fresh water before reaching smolt size. This project has been funded with the Monitoring Program since 2002 (through projects 02-012, 06-601, 10-612 and 14-612).

Technical Review Committee Justification: The Sockeye Salmon escapement estimate at Neva Lake has been consistently identified as Priority Information Need by the Southeast Alaska Subsistence Regional Advisory Council for many years and was included in the 2018 Priority Information Needs. A single video chute will allow Sockeye Salmon and other species to pass a double picket weir system designed to boost confidence in the final count. Motion triggered video will be sent via wireless link to the crew quarters in Excursion Inlet where it will be recorded and reviewed by the crew. This technique was used successfully last year at this site and at other Monitoring Program sites. It is not clear how the length and sex data will be analyzed, and there are probably not enough samples to generate useful estimates of these parameters. Mr. Van Alen has been Principal Investigator on several Monitoring Program projects. The Hoonah Indian Association will be a co-investigator on this project and will administer the contract, hire local fisheries technicians and provide housing, food, and supplies for the camp. The average annual cost for this project is $152,106. The cost of this project is above average compared to similar projects in Southeast Alaska funded through the Monitoring Program. One of the benefits of remote monitoring is the elimination of the need to keep a field camp and of expensive travel to the project site. In subsequent years, the cost of this project could be reduced as it will be fully converted to remote monitoring.

Technical Review Committee Ranking: 7
Project Number: 18-606
Project Title: Kook Lake Sockeye Salmon Stock Assessment

Project Summary: This proposal is to continue a Sockeye Salmon stock assessment at Kook Lake. The escapement has fluctuated annually since 2005 and appears to be correlated with commercial purse seine effort in the Sockeye Salmon migration corridor of Icy and Chatham Straits. Kook Lake is an important source of Sockeye Salmon for the community of Angoon particularly when the returns to Kanalku Lake are poor. This project has been intermittently funded with the Monitoring Program since 2005 (05-601, 10-610 and 14-610).

Technical Review Committee Justification: This project addresses a 2018 Priority Information Need identified by the Southeast Alaska Subsistence Regional Advisory Council. The dual underwater-video equipped net weir system for counting fish has worked well at this site in the past. The redundancy creates a data backup and can boost confidence in the final count, the first project objective. The second objective is to determine if most Sockeye Salmon in the escapement spent one year in fresh water. The age determination objective is narrow in scope but may be appropriate for a system where the goal is not run reconstruction. Offsite remote video monitoring has proven to be successful at other Monitoring Program sites. The Principal Investigator, has the resources of the U.S. Forest Service at his disposal and several decades of fisheries research experience in Alaska. The Co-investigator also works for the U.S. Forest Service, has over 20 years of experience in fisheries, and has been involved with Monitoring Program projects since 2014. The Angoon Community Association will administer the contract, provide logistical support and hire local fisheries technicians. The average annual cost of this project is $157,584, which is at the high end of the cost range of other similar Monitoring Program projects. The annual costs are consistent because the majority of the equipment will be carried over from the past funding cycle. Testing remote video monitoring could lead to significant cost reductions on future projects.

Technical Review Committee Ranking: 8
Project Number: 18-600
Project Title: Alecks Creek Subsistence Sockeye Salmon Stock and Harvest

Project Summary: This project proposes to use net weirs to estimate the escapement of Sockeye Salmon into Alecks Lake, collect age-sex-length data, and estimate the subsistence harvest in the marine terminal area. Alecks Creek is located on Kuiu Island and is used primarily by the residents of Kake to harvest salmon for subsistence. There have been no Monitoring Plan-funded projects there, and there is little information on the escapement, run timing, or demographics of the Sockeye Salmon run in this location.

Technical Review Committee Justification: Sockeye Salmon escapement estimates at Alecks Creek has been consistently identified as a priority information need by the Southeast Alaska Subsistence Regional Advisory Council for many years and was included in the 2018 Priority Information Need.

The combination of redundant video net weirs and mark-recapture will provide validated estimates of escapement, and the scale sampling targets should provide enough scales to meet precision goals. Use of a swim-through system rather than trap/mark/recapture may have been preferable, as it would require less handling, delay, and predation risk to the fish with only a small loss of statistical rigor. The harvest monitoring component of the study requires a camp close to the beach, while the weir site will be at least 3.5 kilometers away at the lake outlet. This will provide a constant challenge to field crews, especially with requirements for regularly marking fish passing through the weirs. Also, the site is situated in a designation wilderness area, which will likely create some permitting issues and curtail activities that are not allowed in wilderness areas (such as helicopter use, etc.). Methodology for the harvest monitoring needs to be developed, including a description of the approach or type of date collected should be included in the proposal. The scale sampling targets should provide enough samples to meet precision goals, and the harvest monitoring will provide a much better estimate of harvest than permit data. The co-investigator represents the local village organization, the Organized Village of Kake, and will be responsible for hiring local technicians to do field work for the project, as well as providing administrative and logistical support. No letters of support were included, but the local village organization is a partner in the project. The average annual cost of the project is $127,469, with a total cost of $509,879. .

Technical Review Committee Ranking: 9
Project Number: 18-608
Project Title: Sarkar Sockeye Salmon Stock and Harvest Assessment

Project Summary: The investigators plan to count Sockeye Salmon migrating into the upper Sarkar watershed with two video equipped net weirs and to survey the rest of the system to determine if any significant numbers of Sockeye Salmon spawn elsewhere. Age-sex-length measurements will be taken from a representative sample of Sockeye Salmon captured with dip nets and beach seines at spawning and/or staging areas. Escapement data on this system is scarce. A weir was operated in 1982 and 1983 at the main outlet, which generated Sockeye Salmon counts that were not validated.

Technical Review Committee Justification: This project directly addresses the 2018 Priority Information Needs that were identified by the Council. A declining trend of Sockeye Salmon escapement into Klawock Lake coupled with recent management restrictions could shift some effort to the Sarkar Sockeye Salmon stock and increase the need for stock and harvest assessments. Sockeye Salmon will be counted by a pair of underwater-video equipped net weirs located above the main lake in this multi-lake system. Methodology for the harvest monitoring needs to be developed including, a description of the approach or type of date collected should be included in the proposal. The scale sampling targets should provide enough samples to meet precision goals, and the harvest monitoring will provide a much better estimate of harvest than permit data. The Principal Investigators are both fish biologists with the U.S. Forest Service and have substantial resources available to them. Co-investigator Jeff Reeves will provide in-kind help with project administration, project logistics, and writing/editing reports. The Craig Tribal Association will serve as the primary Alaska Native Organization associated with this study. They will receive the majority of the budget to administer the project and hire qualified

personnel from rural Prince of Wales Native organizations and the Island's rural communities. A portion of its budget will be used to acquire project equipment such as a mobile field camp, video net weirs, a skiff and motor, and other items necessary to carry out this project. The average cost of this project is $89,931 per year which is very low compared to similar funded Monitoring Program projects. It appears they may have underestimated the annual personnel cost by approximately $29,000 in the Craig Tribal Association budget due to a mathematical error.

Technical Review Committee Ranking: 10
Project Number: 18-612
Project Title: Kanalku Lake Subsistence Sockeye Salmon Stock Assessment

Project Summary: This project proposes continued operation of a weir to count Sockeye Salmon entering Kanalku Lake and the collection of biological information from fish captured on the spawning grounds. The purpose of this project is to provide four additional years of Sockeye Salmon escapement counts above the barrier falls at Kanalku Lake, along with estimates of age-length-sex composition. Long-term information about the size and timing of the Sockeye Salmon spawning escapement directly benefits management of the fishery through more complete accounting of Sockeye Salmon production by brood year and improved expectations of the annual run size. This project has been funded Monitoring Program since 2001, with the Alaska Department of Fish and Game as the Principal Investigator. The Alaska Sustainable Salmon Fund provided partial funding in some years.

Technical Review Committee Justification: The Kanalku watershed is located within Admiralty Island National Monument. Sockeye Salmon returning to Kanalku Lake are harvested by Federally qualified subsistence users living in the community of Angoon. Sockeye Salmon escapement estimates at Kanalku Lake have been consistently identified as a Priority Information Need for the Southeast Region for many years and was included in the 2018 Notice of Funding Opportunity. This project would continue to provide additional escapement counts and biological information building on work initiated in 2001. The objectives are clear and measurable with a few suggestions for modification. This cooperative project would continue between the Alaska Department of Fish and Game, the Angoon Community Association and the U.S. Forest Service. All investigators have a record of success with past projects. The community of Angoon has direct dependence on Kanalku Lake for their Sockeye Salmon for subsistence. They continue to have a meaningful role in accomplishing the objectives of this project, and local fisheries technicians would be employed. Although this is a high priority project, the high cost is high in comparison with similar projects in Southeast Alaska funded through the Monitoring Program.

Technical Review Committee Ranking: 11
Project Number: 18-605
Project Title: Klawock Lake Sockeye Salmon Population Assessment

Project Summary: This proposal is to provide staff to assist in counting Sockeye Salmon passing through the Klawock River weir, which is maintained and operated by the Southern Southeast Regional

Aquaculture Association. It funds a technician position working at the weir itself and a biologist position to manage the project, analyze the data, and prepare reports. Klawock Lake Sockeye Salmon are an important resource to local residents, and have recently exhibited a steep decline, which has affected subsistence harvest. The escapement and harvest of Klawock Lake Sockeye Salmon have been monitored under at least five previous Monitoring Plan-funded projects.

Technical Review Committee Justification: This project addresses a Priority Information Need identified for the Southeast Region in the 2018 Notice of Funding Opportunity. This project provides an un-validated weir count, which is not recommended. The Klawock River weir has the reputation of being well-built and maintained, but fish would be undercounted in the event of high water or undetected breaks in the weir. Any such undercounting would be detected with the addition of a mark-recapture component to the study, which could be achieved with relatively little additional effort and cost. The proposal's plan to handle potential high water events is to visually observe and estimate the number of fish passing over the weir, which is unrealistic. The scale sampling target (600 fish) is excessive for the goal of estimating the age, length, and sex composition of the escapement with a coefficient of variation less than 10%. The Klawock Cooperative Association is a partner in the study and is responsible for hiring a fishery technician and providing administrative support. The Association has completed three years of partnership in this project. The investigation plan states that local Native Organizations have been consulted and are in support of the project, but no letters of support were included. The matching contribution by Southern Southeast Regional Aquaculture Association consists of staff time and the expense of maintaining the weir, which they would be required to do even without the support from the Monitoring Program. One discrepancy found in the budget narrative states that it includes 30 days salary for the U.S. Forest Service biologist, but the spreadsheet shows 1.5 months of time.

Technical Review Committee Ranking: 12
Project Number: 18-611
Project Title: Northern Southeast Alaska Eulachon Population Dynamics Monitoring

Project Summary: This proposal is to develop a monitoring strategy for Eulachon populations in northern Southeast Alaska and to integrate local residents and traditional knowledge into the management of those populations. Several methods of measuring Eulachon abundance (environmental DNA concentration, mark-recapture, larval out drift, and catch per unit effort) will be tested at spawning locations in the Lynn Canal area. The cost-effectiveness of each approach will be used to determine the best technique for each location. In conjunction with the testing, a working group of Eulachon stakeholders will be established to develop a community-led adaptive management framework.

Technical Review Committee Justification: Eulachon have long been an important subsistence resource in the area and are widely used in local communities. However, the Council did not list the stock status of northern Southeast Alaska Eulachon as a 2018 Priority Information Need. The proposed methods include analysis of environmental DNA and conventional fisheries methods using mark-recapture, larval out drift, and catch per unit effort. The use of environmental DNA as a tool for measuring population abundance is an emerging science, but tests have proven promising. Eulachon

have long been an important subsistence resource in the area, and are widely used in local communities. However, the stock status of northern Southeast Alaska Eulachon was not an identified Priority Information Need in the 2018 Notice of Funding Opportunity. Project partners include a number of non-rural organizations, and the development of capacity in those agencies is a goal of the project. Information sharing among stakeholders is a goal of the study as well as collection of traditional ecological knowledge. The expenses for the project are reasonable and well-planned, but the overall cost is high due to its ambitious scope.

Technical Review Committee Ranking:13
Project Number:18-601
Project Title: District 1 Eulachon Population Assessment

Project Summary: This project proposes to continue a previously funded Monitoring Program project of the District 1 Eulachon population, using a combination of remote sensing and field surveys. Using satellite cameras that transmit a real-time image of known spawning locations, investigators will watch for signs of Eulachon presence, such as gatherings of seabirds or marine mammals. When Eulachon are believed to be present, field crews will travel to spawning sites and observe the extent of any spawning, collect samples, and document the abundance of any Eulachon present. This Eulachon population has been monitored to a varying degree since at least 2001, including under a Monitoring Program-funded project (14-607) in 2014.

Technical Review Committee Justification: This project addresses a Southeast Alaska Subsistence Regional Advisory Council's 2018 Priority Information Need. The abundance measurements described are fairly subjective and difficult to standardize. The plan is unclear on the extent of the fieldwork planned, such as the number of survey trips each year. The proposal states that harvest will be documented if subsistence fishing occurs, but does not describe the methods that would be used. The Principal Investigator has completed several Monitoring Plan-funded projects in the past, including the precursor to the proposed project. There does not appear to be any significant capacity building component of the project. No letters of support were included. The average annual cost of the project is $42,186, with a total cost of $168,745. It's not clear from the proposal how many field trips per year are planned, but the budget appears to be sufficient for several trips. There is no money allocated for replacement or upgrade of the satellite cameras, which are likely quite expensive and prone to failure. While the methods proposed will not provide a precise population estimate, they should document the location and timing of spawning Eulachon at the survey sites, as well as basic information such as age-weight-length, sex, and egg deposition.

MULTI-REGIONAL

Priority Information Needs

The Multi-Regional category is for projects that are applicable in more than one region. No priority information needs for the Multi-Regional category were identified for the 2018 Notice of Funding Opportunity. However, proponents submit proposals which have research components in more than one Monitoring Program region.

Technical Review Committee Proposal Ranking

For the 2018 Monitoring Program, two proposals were submitted for the Multi-Regional category. The Technical Review Committee evaluated and scored each proposal for Strategic Priority, Technical and Scientific Merit, Investigator Ability and Resources, Partnership and Capacity Building, and Cost/Benefit, and ranked them as follows:

Table 7. Technical Review Committee ranking for projects in the Multi-Region. Projects are listed by the Technical Review Committee ranking and include the total matching funds, total funds requested, and the average annual request for each project submitted to the 2018 Monitoring Program within the Multi-Regional Region.

TRC Ranking	Project Number	Title	Total Project Request	Average Annual Request
1	18-751	Togiak River Harvest Assessment of Dolly Varden	$120,236	$40,079
2	18-750	Kuskokwim, Southcentral and Southeast Wild Food Sharing Events	$34,686	$11,562
		Total	**$154,922**	**$51,641**

* Proposals with identical scores during the rating process may be further assessed by comparing the average annual cost. Proposals with a lower average annual cost may be ranked above a similar rated proposal that has a higher annual average cost.

In addition to the above proposed projects, there is one continuing Monitoring Plan projects in the Multi-Region (**Appendix A.1**.).

Regional Advisory Council Comments

Southcentral Alaska Subsistence Regional Advisory Council

Regarding Project 18-750 (southwest, southcentral, and southeast Alaska wild food sharing events), a Council member asked if the Office of Subsistence Management had ever requested funding from the Monitoring Program for research before. She does not support the project.

Bristol Bay Subsistence Regional Advisory Council

The Council said Project 18-751 (Togiak River Dolly Varden harvest) is a priority in the Multi-region category because of the importance of Dolly Varden to villages in and around the Togiak National Wildlife Refuge. One Council member said that to be accurate, investigators must verify the Yup'ik taxonomy for trout and char because Yup'ik people identify these fish species by different stages in their lifecycle.

Western Interior Alaska Subsistence Regional Advisory Council

One Council member said that Project 18-750 (describing wild food sharing events) has more relevance to the Western Interior Region than Project 18-751 (Togiak River harvest assessment of Dolly Varden).

Interagency Staff Committee Comments

The Interagency Staff Committee supports the Technical Review Committee ranking for 2018 of Multi-Regional proposals.

Project Summaries and Technical Review Committee Justification for Project Ranking

Technical Review Committee Ranking: 1
Project Number: 18-751
Project Title: Subsistence Harvest Assessment and Stock Composition of Dolly Varden and Nonsalmon fish stocks in the Togiak National Wildlife Refuge

Project Summary: This three-year project proposes to collect subsistence harvest data of nonsalmon fish in the communities of Togiak and Twin Hills, to collect traditional knowledge, and to estimate the stock composition of subsistence-caught Dolly Varden from the Togiak and Kanektok Rivers in the Togiak National Wildlife Refuge. Dolly Varden will be sampled from subsistence fisheries in the Togiak and Kanektok Rivers. Genetic data will be used to estimate the proportions of major stocks of Dolly Varden contributing to subsistence catches and overwintering in these drainages. This project would be an interdisciplinary effort building upon previous Monitoring Program-funded Projects 16-453 and 16-752.

Justification: This project directly addresses a 2018 Priority Information Need from the Southwest Region and builds upon current 2016 Monitoring Program projects. This is an interdisciplinary project and the implications for knowledge sharing and integration of datasets and results are intriguing. The proposed work is manageable, but an extended timeline is recommended. Investigator ability is strong and there is general community support for the work with local hire and student participation opportunities. As this project builds upon two on-going Monitoring Program projects, advantages include infrastructure, logistics, data, and cost sharing with the foundational projects, good interagency partnership and capacity building opportunities, and a reasonable budget.

Technical Review Committee Ranking: 2
Project Number:18-750
Project Title: A Descriptive Investigation of Rural Community-Wide Wild Food Sharing Events at Upper Copper River, Lower Kuskokwim River, and Southeast Areas of Alaska

Project Summary: This three-year, multi-region ethnographic study proposes to use semi-directed interviews and participant observation to document community-wide wild foods sharing events in three regions of rural Alaska: the upper Copper River, the lower Kuskokwim River, and Southeast Alaska (community of Wrangell). The project seeks to document participation in the events, what happens, where and when they occur, and the role that wild-caught fish plays in supporting these events. Each member of the research team would be responsible for the work in a specific region, and each has previous fieldwork experience in that region. Project fieldwork would take place during the first two years of the project, with travel to the region in the third year for community review of the educational materials developed through this project. Local research assistants will be hired to assist with the interviews. The end result of the project will be a technical report along with educational materials describing the food sharing events, with an intended audience of both the villages and Federal fishery management staff. From the standpoint of Federal management, the goal of the educational materials is to help managers incorporate local cultural values represented by the food sharing events in their decision making. Although this is a new study, it builds on previous work in the study regions to document the harvest and use of subsistence resources.

Technical Review Committee Justification: This project directly addresses a 2018 Priority Information Need for the Kuskokwim Region as identified by the Council but, information about food sharing is not an identified Priority Information Need for the two other regions included in the proposed project. The investigation plan focuses on documenting one or more food sharing events in each region and developing educational materials about the events. The project objectives are generally clear and appear to be achievable, although it would have been helpful to include an explanation of what constitutes a food sharing event. The project would employ key informant interviews and participant observation, and success would be measured by the development of the educational packages. The investigators are all Federal agency employees with previous experience conducting ethnographic research in the regions in which they would work. This prior experience with fieldwork in rural Alaska is an important qualification for project success. Three local assistants (one in each region) would be hired to assist with a single aspect of the project, the key informant interviews. However, no letters of support were

submitted. No letters of support were submitted. The investigation plan identifies multiple regional partners for two of the three regions, but no partners were identified for the remaining region. The average annual cost of the project is $11,562. The cost is reasonable for the work being proposed. The salary and benefit costs of the investigators are being paid by the Federal agency, which helps to keep costs down.

APPENDIX A

Table A.1. Summary of continuing 2016 projects funded under the Fisheries Resource Monitoring Program.

Project Number	Project Title
Northern Region	
16-101	Arctic Dolly Varden Telemetry
16-104	Selawik River Inconnu Spawning Population
16-105	Kobuk River Sheefish Abundance
16-106	Aerial Monitoring of Dolly Varden Overwintering Abundance
16-107	Chandler Lake Trout Abundance Estimation
16-152	Meade River Changes in Subsistence Fisheries
Yukon Region	
16-203	Bering Cisco Spawning Abundance in the Upper Yukon Flats
16-204	Henshaw Creek Abundance and Run Timing of Adult Salmon
16-205	Burbot Population Assessments Tanana Upper Yukon Drainages
16-251	Yukon River Burbot Life History and Subsistence Use
16-255	Yukon River In-Season Community Surveyor Program
16-256	In Season Salmon Management Teleconferences
Kuskokwim Region	
16-302	Pitka Fork Weir
16-303	Upper Kuskokwim River Sheefish
16-351	Middle Kuskokwim River In-season Subsistence
Southwest Region	
16-451	Bristol Bay Subsistence Salmon Networks
16-452	Western Gulf of Alaska Salmon and Other Harvests
16-453	Togiak River Chinook Salmon Subsistence Harvest Assessment
Southeast Alaska Region	
16-604	Eek Lake Sockeye Salmon Stock Assessment
Multi-region	
16-752	Fish Harvest and Use Y-K Delta Coastal Communities

Table 8. 2018 Technical Review Committee Fisheries Resource Monitoring Plan Ranking by Region

IP Number	SST or HMTEK	Project Name	Organization	Total	Average Annual Cost	Running Average Total
Northern						
18-103	SST	Unalakleet Rvr. Weir	ADFG-CF/NSEDC/BLM	$622,645	$155,661	$155,661
18-101	SST	Kobuk Rvr. Dolly Varden Genetics	ADFG-SF/USFWS	$55,800	$27,900	$183,561
18-100	SST	Lower Colville Rvr. Arctic Grayling Sub. Fishery	ADFG-SF	$246,503	$82,168	$265,729
18-151	HMTEK	Priority Knowledge Dolly Varden South Chukchi Sea	WCS/NV Kotzebue	$644,228	$214,743	$480,472
18-150	HMTEK	Bering Land Bridge National Preserve TEK & Scientific Surveys	NPS	$421,322	$105,331	$585,803
18-102	SST	Dolly Varden Life History-North Slope Alaska	UAF/USFWS	$313,579	$156,790	$742,593
18-104	SST	Broad Whitefish Health in Northern Alaska	North Slope Borough	$137,950	$45,983	$788,576
Yukon						
18-251	HMTEK	TEK Yukon Flats-Draanjik Basin	YRDFA/TCC	$180,628	$60,209	$60,209
18-250	HMTEK	Upper Tanana Rvr. Salmon Spawning	ADFG-SF & SUB	$160,584	$53,528	$113,737
18-252	HMTEK	Yukon Rvr. Subsistence Salmon Networks	ADFG-SUB/OSU	$331,742	$110,581	$224,318
18-202	SST	Gisasa Rvr. Weir Chinook & Summer Chum	USFWS	$583,676	$145,919	$370,237
18-203	SST	Yukon Rvr. Chum Mixed Stock Analysis	USFWS	$501,212	$125,303	$495,540
18-201	SST	EF Adreafsky Rvr. Weir Chinook & Summer Chum	USFWS	$678,485	$169,621	$665,161
18-205	SST	Yukon Rvr. Coho Radio Telemetry	ADFG-CF/USFWS	$429,910	$214,955	$880,116
18-204	SST	Yukon Rvr. Coho Mixed Stock Analysis	USFWS	$96,000	$24,000	$904,116
18-200	SST	Chena Rvr. Chinook Habitat	USFWS	$46,661	$15,554	$919,670
Kuskokwim						
18-350	HMTEK	Bethel Sub. Harvest Surveys	ONC/ADFG-CF	$271,702	$67,926	$67,926
18-351	HMTEK	Kuskokwim Area Salmon Post Season Sub. Harvest Surveys	ADFG-CF/ONC	$840,225	$210,056	$277,982
18-304	SST	George Rvr. Weir	ADFG-CF/NVN	$726,492	$181,623	$459,605
18-302	SST	Kwethluk Rvr. Weir	USFWS	$754,808	$188,702	$648,307
18-303	SST	Tuluksak Rvr. Weir	USFWS	$385,180	$96,295	$744,602
18-305	SST	Kuskokwim Rvr. Sonar	ADFG-CF	$388,809	$97,202	$841,804
18-352	HMTEK	Kuskokwim Rvr. Salmon Management Working Group	ADFG-CF	$416,169	$104,042	$945,846
18-300	SST	Kuskokwim Rvr. Broad Whitefish Stock and Harvest Assessment	USFWS/NVN/ONC	$613,877	$153,469	$1,099,315
18-301	SST	Kuskokwim Rvr. Chinook Otolith Microchemistry	Univ.WA/USFWS/USGS/Univ. Utah/ADFG-CF	$823,207	$205,802	$1,305,117
Southwest						
18-451	HMTEK	Kodiak Island-Olga & Okalura Lk. Salmon & Nonsalmon Harvest	ADFG-SUB	$242,319	$80,773	$80,773
18-400	SST	Buskin Rvr. Sockeye Assessment	ADFG-SF	$529,976	$132,494	$213,267
18-450	HMTEK	Unalaska Fish Harvest Practices	ADFG-SUB	$296,701	$74,175	$287,442
18-402	SST	McLees Lk. Sockeye Escapement	ADFG-CF	$207,192	$51,798	$339,240
18-401	SST	SW Kodiak Ecological Assessment	ADFG-CF/KRAA	$402,681	$100,670	$439,910
Southcentral						
18-504	SST	Copper Rvr Chinook Assessment	NVE	$860,000	$215,000	$215,000
18-501	SST	Gulkana Rvr. Sockeye Harvest	ADFG-SF/CRITR	$293,440	$73,360	$288,360
18-502	SST	Ibeck Creek Coho Escapement and Harvest	NVE/USFS	$333,557	$166,779	$455,139
18-503	SST	Long LK Sockeye Escapement and Harvest	NPS	$72,046	$18,012	$473,151
18-505	SST	Tanada Crk. Weir Chinook & Sockeye	NPS-Wrangell	$333,498	$83,375	$556,526
18-500	SST	Gulkana Rvr. Chinook Escapement	ADFG-SF	$438,954	$109,739	$666,265
18-550	HMTEK	Copper Rvr. Fisheries Info. Network	CRITR/Ecotrust	$180,312	$90,156	$756,421
18-506	SST	Testing Small Unmanned Aircraft Systems to Index Salmon Escapement Copper Rvr	CRITR	$194,155	$97,078	$853,499
Southeast						
18-610	SST	Klag Lk. Sockeye Assessment	Sitka Tribe of Alaska	$567,772	$141,943	$141,943
18-604	SST	Hetta Lk. Sockeye Assessment	Hydaburg Coop Assoc./KECS	$679,106	$169,777	$311,720
18-609	SST	Sitkoh Lk. Sockeye Assessment	USFS/ACA/ADFG-CF	$331,498	$82,875	$394,595
18-602	SST	Falls Lk. Sockeye Stock and Harvest Assessment	USFS/OVK	$488,241	$122,060	$516,655
18-603	SST	Gut Bay Sockeye Stock and Harvest Assessment	USFS/OVK	$509,253	$127,313	$643,968
18-607	SST	Neva Lk. Sockeye Assessment	USFS/Hoonah Indian Assoc./ADFG-CF	$608,426	$152,107	$796,075
18-606	SST	Kook Lk. Sockeye Assessment	USFS/ACA/ADFG-CF	$630,337	$157,584	$953,659
18-600	SST	Alecks Creek Sockeye Stock and Harvest Assessment	USFS/OVK	$509,879	$127,469	$1,081,128
18-608	SST	Sarkar Lk. Sockeye Stock and Harvest Assessment	USFS/Craig Tribal Assoc.	$359,725	$89,931	$1,171,059
18-612	SST	Kanalku Lk. Sockeye Assessment	ADFG-CF/ACA/USFS	$746,400	$186,600	$1,357,659
18-605	SST	Klawock Lk. Sockeye Assessment	USFS/KCA/SSRAA	$116,410	$29,103	$1,386,762
18-611	SST	North SE AK Eulachon Monitoring	CIA/TAC/NPS/STC/OSU	$768,317	$192,079	$1,578,841
18-601	SST	District 1 Eulachon Assessment	USFS	$168,745	$42,186	$1,621,027
Multi-Regional						
18-751	HMTEK	Togiak Rvr. Harvest Assessment of Dolly Varden	ADFG-SUB/BBNA/USFWS-Togiak NWR & CGL	$120,236	$40,079	$40,079
18-750	HMTEK	Multi-regional (Kusko., Southcentral and Southeast)-Wild Food Sharing Events	OSM	$34,686	$11,562	$51,641

Green	Projects the Technical Review Committee ranked that would be recommended for funding.
Yellow	Projects the Technical Review Committee would use caution with funding due to: 1) Technical Review Committee score. 2) Regional budget allocation. 3) Technical Review Committee concerns.
Red	Projects the TRC would not recommend for funding at this time.

* Note - All projects are in ranked order from highest to lowest for each Region. Where ties occur, projects are listed by lowest to highest annual cost.

TABLE 9. 2018 Draft Recommendations for the Fisheries Resource Monitoring Plan

Based upon Technical Review Committee rankings, Regional Advisory Committee comments and Interagency Staff Committee comments

IP Number	SST or HMTEK	Project Name	Organization	Total	Average Annual Cost	Running Average Annual Total	Region
18-610	SST	Klag Lk. Sockeye Assessment	Sitka Tribe of Alaska	$567,772	$141,943	$141,943	Southeast
18-504	SST	Estimating Inriver Abundance of Copper Rvr. Chinook	NVE	$860,000	$215,000	$356,943	Southcentral
18-350	HMTEK	Bethel Sub. Harvest Surveys	ONC/ADFG-CF	$271,702	$67,926	$424,869	Kuskokwim
18-604	SST	Hetta Lk. Sockeye Assessment	Hydaburg Coop Association/KECS	$679,106	$169,777	$594,646	Southeast
18-251	HMTEK	TEK Yukon Flats-Draanjik Basin	YRDFA/TCC	$180,628	$60,209	$654,855	Yukon
18-609	SST	Sitkoh Lk. Sockeye Assessment	USFS/ACS	$331,498	$82,875	$737,730	Southeast
18-751	HMTEK	Togiak River Harvest Assessment of Dolly Varden	ADFG-SUB/BBNA/USFWS-Togiak NWR & CGL	$120,236	$40,079	$777,809	Multi-Region
18-351	HMTEK	Kuskokwim Area Salmon Post Season Sub. Harvest Surveys	ADFG-CF/ONC	$840,225	$210,056	$987,865	Kuskokwim
18-602	SST	Falls Lk. Sockeye Assessment	USFS/OVK	$488,241	$122,060	$1,109,925	Southeast
18-103	SST	Unalakleet Rvr. Weir	ADFG-CF/NSEDC/BLM	$622,645	$155,661	$1,265,586	Northern
18-250	HMTEK	Upper Tanana River Salmon Spawning	ADFG-SF & SUB	$160,584	$53,528	$1,319,114	Yukon
18-400	SST	Buskin Rvr. Sockeye Assessment	ADFG-SF	$529,976	$132,494	$1,451,608	Southwest
18-451	HMTEK	Kodiak Island-Olga & Okalura Lakes Salmon & Nonsalmon Harvest	ADFG-SUB	$242,319	$80,773	$1,532,381	Southwest
18-252	HMTEK	Yukon Rvr. Subsistence Salmon Networks	ADFG-SUB/OSU	$331,742	$110,581	$1,642,962	Yukon
18-202	SST	Gisasa Rvr. Weir Chinook & Summer Chum	USFWS-FFWFO	$583,676	$145,919	$1,788,881	Yukon
18-100	SST	Lower Colville Rvr. Arctic Grayling-Nuiqsut Sub. Fishery	ADFG-SF	$246,503	$82,168	$1,871,049	Northern
18-304	SST	George River Weir	ADFG-CF/NVN	$726,492	$181,623	$2,052,672	Kuskokwim
18-501	SST	Gulkana Rvr. Sockeye Harvest Contribution	ADFG-SF/CRITR	$293,440	$73,360	$2,126,032	Southcentral

Region	Average Annual Cost by Region	DOI Funds	USDA Funds
Northern	$237,829	$237,829	$0
Yukon	$370,237	$370,237	$0
Kuskokwim	$459,605	$459,605	$0
Southwest	$213,267	$213,267	$0
Southcentral	$288,360	$188,360	$100,000
Southeast	$516,655	$0	$516,655
Multi-Region	$40,079	$40,079	$0
TOTALS	$2,126,032	$1,509,377	$616,655

Section 2: Delegation of Authority Letters (DAL)

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Federal Subsistence Board

1011 East Tudor Road, MS 121
Anchorage, Alaska 99503 - 6199

FISH and WILDLIFE SERVICE
BUREAU of LAND MANAGEMENT
NATIONAL PARK SERVICE
BUREAU of INDIAN AFFAIRS

FOREST SERVICE

OSM 17058.JH

Refuge Manager
U.S. Fish and Wildlife Service
Yukon Delta National Wildlife Refuge
P.O. Box 346
Bethel, Alaska 99559

Dear Yukon Delta National Wildlife Refuge Manager:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the Manager of the Yukon Delta National Wildlife Refuge (Refuge Manager) to issue emergency special actions when necessary to ensure the conservation of a healthy fish population, to continue subsistence uses of fish, for the continued viability of a fish population, or for public safety reasons. This delegation only applies to Federal public waters subject to the Alaska National Interest Lands Conservation Act (ANILCA) Title VIII in the Kuskokwim Area, including the Goodnews and Kanektok Rivers.

It is the intent of the Board that Federal subsistence fisheries management by Federal officials be coordinated, prior to implementation, with the representatives from Regional Advisory Councils (Councils), the Kuskokwim River Inter-tribal Fish Commission (KRITFC), the Office of Subsistence Management (OSM), and the Alaska Department of Fish and Game (ADF&G), to the extent possible. The OSM will be used by managers to facilitate communication of actions and ensure proposed actions are technically and administratively aligned with legal mandates and policies. Federal managers are expected to cooperate with managers from the State and other Federal agencies, the Council Chair(s), and applicable Council members to minimize disruption to subsistence resource users and existing agency programs, consistent with the need for emergency special action. In addition, the Kuskokwim River Salmon Management Working Group (KRSMWG) will be notified of actions and decisions whenever possible.

DELEGATION OF AUTHORITY

1. Delegation: The Refuge Manager is hereby delegated authority to issue emergency special actions affecting fisheries in Federal public waters as outlined under the **Scope of Delegation** below. Although a public hearing is not required for emergency special actions, if deemed necessary by you, then a public hearing on the emergency special action is recommended. Special actions are governed by regulation at 36 CFR 242.19 and 50 CFR 100.19.

2. Authority: This delegation of authority is established pursuant to 36 CFR 242.10(d)(6) and 50 CFR 100.10(d)(6), which state: "The Board may delegate to agency field officials the authority to set harvest and possession limits, define harvest areas, specify methods or means of harvest, specify permit requirements, and open or close specific fish or wildlife harvest seasons within frameworks established by the Board."

3. Scope of Delegation: The regulatory authority hereby delegated is limited to the issuance of emergency special actions as defined by 36 CFR 242.19(a) and 50 CFR 100.19(a). Such an emergency action may not exceed 60 days, and may not be extended.

This delegation permits you to open or close Federal subsistence fishing periods or areas provided under codified regulations. It also permits you to specify methods and means; to specify permit requirements; and to set harvest and possession limits for Federal subsistence fisheries.

This delegation also permits you to close and re-open Federal public waters to nonsubsistence fishing, but does not permit you to specify methods and means, permit requirements, or harvest and possession limits for State-managed fisheries. This delegation may be exercised only when it is necessary to conserve healthy populations of fish or to ensure continuation of subsistence uses.

All other proposed changes to codified regulations, such as customary and traditional use determinations or requests for special actions greater than 60 days, shall be directed to the Board.

The Federal public waters subject to this delegated authority are those within the Kuskokwim Area (as described in the Subsistence Management Regulations for the Harvest of Fish and Shellfish on Federal Public Lands and Waters in Alaska). You will coordinate all local fishery decisions with all affected Federal land managers.

4. Effective Period: This delegation of authority is effective from the date of this letter and continues until superseded or rescinded.

5. Guidelines for Review of Proposed Special Actions: You will use the following guidelines to determine the appropriate course of action when reviewing proposed special actions.

a) Does the proposed special action fall within the geographic and regulatory scope of delegation?

b) Have you communicated with the OSM to ensure the emergency special action is aligned with Federal subsistence regulations and policy?

c) Does the proposed action need to be implemented immediately as an emergency special action, or can the desired conservation or subsistence use goal be addressed by deferring the issue to the next regulatory cycle?

d) Does the supporting information in the proposed special action substantiate the need for the action?

e) Are the assertions in the proposed special action confirmed by available current biological information and/or by affected subsistence users?

f) Is the proposed special action supported in the context of available historical information on stock status and harvests by affected users?

g) Is the proposed special action likely to achieve the expected results?

h) Have the perspectives of the Chair or alternate of the affected Council(s), the KRITFC, OSM, and affected State and Federal managers been fully considered in the review of the proposed special action?

i) Have the potential impacts of the proposed special action on all affected subsistence users and non-Federally qualified users within the drainage been considered?

j) Can public announcement of the proposed special action be made in a timely manner to accomplish the management objective?

k) After evaluating all information and weighing the merits of the special action against other actions, including no action, is the proposed emergency special action reasonable, rational, and responsible?

6. Guidelines for Delegation: You will become familiar with the management history of the fisheries in the region, with the current State and Federal regulations and management plans, and be up-to-date on stock and harvest status information.

You will provide subsistence users in the region a local point of contact about Federal subsistence fishery issues and regulations and facilitate a local liaison with State managers and other user groups. For in-season management decisions and special actions, consultation is not always possible, but to the extent practicable, two-way communication will take place before decisions are implemented. You will also establish meaningful and timely opportunities for government-to-government consultation related to pre-season and post-season management actions as established in the Board's Government to Government Tribal Consultation Policy (Federal Subsistence Board Government to Government Tribal Consultation Policy 2012).

By [INSERT DATE] of each year, you will convene a meeting of representatives from the Yukon Delta NWR, the KRITFC, and other Federally sanctioned entities to determine, in consultation with the OSM and ADF&G, if conditions warrant Federal management of subsistence fisheries on the Kuskokwim River.

In addition to any guidelines collaboratively established for issuing emergency special actions via this delegated authority, you will review emergency special action requests or situations that may require an emergency special action and all supporting information to determine (1) consistency with

36 CFR 242.19 and 50 CFR 100.19, (2) if the request/situation falls within the scope of your delegated authority, (3) if significant conservation problems or subsistence harvest concerns are indicated, and (4) what the consequences of taking an action may be on potentially affected subsistence uses and nonsubsistence uses. Requests not within your delegated authority will be forwarded to the Board for consideration.

You will maintain a record of all special action requests and justification of your decisions. A copy of this record will be provided to the Administrative Records Specialist at OSM no later than sixty days after development of the document.

You will immediately notify the Board through the Assistant Regional Director for the OSM, and coordinate with the Chair or alternate of the affected Council(s), the KRITFC, local ADF&G managers, and other affected Federal conservation unit managers concerning emergency special actions being considered. In addition, the KRSMWG will be notified of actions and decisions whenever possible.

If the timing of a regularly scheduled meeting of the affected Council(s) permits without incurring undue delay, you may seek Council recommendations on the proposed emergency special action.

You will issue decisions in a timely manner. Before the effective date of any decision, reasonable efforts will be made to notify Council representatives, the KRITFC, the KRSMWG, the public, OSM, affected State and Federal managers, and law enforcement personnel. If an action is to supersede a State action not yet in effect, the decision will be communicated to Council representatives, the KRITFC, the KRSMWG, the public, OSM, and State and Federal managers at least 24 hours before the State action would be effective. If a decision to take no action is made, you will notify the proponents of the request immediately.

You may defer an emergency special action request, otherwise covered by this delegation of authority, to the Board in instances when the proposed management action will have a significant impact on a large number of Federal subsistence users or is particularly controversial. These options should be exercised judiciously and only when sufficient time allows. Such deferrals should not be considered when immediate management actions are necessary for conservation purposes. The Board may determine that an emergency special action request may best be handled by the Board, subsequently rescinding the delegated authority for the specific action only.

7. Reporting: If pre-season meetings result in the need for Federal management of the fishery, you will submit a written report to the Board by [INSERT DATE] of each year documenting the outcome of this determination process, as well as outlining the in-season collaborative decision making process adopted by the group to include input from the KRIFC, the OSM, and ADF&G, proposed strategies for in-season management, and agreed upon guidelines for issuing emergency special actions via delegated authority.

You must provide to the Board, through the Assistant Regional Director for the OSM, a report describing the pre-season coordination efforts, local fisheries management decisions, and post-season evaluation activities for the previous fishing season by November 15. A summary of emergency special action requests and your resultant actions must be provided to the coordinator of the

appropriate Council(s) at the end of the calendar year for presentation during regularly scheduled Councils meetings.

8. Support Services: Administrative support for your local Federal subsistence fisheries management activities will be provided by the Office of Subsistence Management.

Should you have any questions about this delegation of authority, please feel free to contact the Assistant Regional Director for the OSM at toll-free 1-800-478-1456 or (907) 786-3888.

Sincerely,

Anthony Christianson
Chair

Enclosures

cc: Federal Subsistence Board
Assistant Regional Director, Office of Subsistence Management
Deputy Assistant Regional Director, Office of Subsistence Management
Subsistence Policy Coordinator, Office of Subsistence Management
Fisheries Division Supervisor, Office of Subsistence Management
Chair, Yukon-Kuskokwim Delta Subsistence Regional Advisory
Chair, Western Interior Subsistence Regional Advisory Council
Superintendent, Lake Clark/Katmai National Parks and Preserve
Superintendent, Denali National Park and Preserve
Manager, Togiak National Wildlife Refuge
Manager, Alaska Maritime National Wildlife Refuge
Assistant Regional Director, Law Enforcement, U.S. Fish and Wildlife Service (Region 7)
Commissioner, Alaska Department of Fish and Game
Interagency Staff Committee
Administrative Record

Western Interior Alaska Subsistence Regional Advisory Council and Yukon-Kuskokwim Delta Subsistence Regional Advisory Council comments on draft Kuskokwim Area delegation of authority letter

The Western Interior Alaska Subsistence Regional Advisory Council took up the draft revised Kuskokwim Area delegation of authority letter on October 11, 2017, at its fall meeting in Fairbanks.

The Council Chair wanted assurances of Councils representation in the delegation of authority consultation process. He also raised concern about ensuring the delegation letter would be updated if the Kuskokwim River Partnership Project is finalized.

One Council member requested information about the Inter-tribal Fish Commission consultation that would be occurring. Another Council member clarified that the Council did have representatives on the State's Kuskokwim River Salmon Management Working Group.

Following their discussion, the Council affirmed that the letter, in this form, at this point, is adequate and sufficient for what the needs are of this Council.

The Yukon-Kuskokwim Delta Subsistence Regional Advisory Council took up the draft revised Kuskokwim Area delegation of authority letter on October 13, 2017, at its fall meeting in Bethel.

Following an overview of the areas of the letter up for review, the Council engaged in a discussion of what changes would come to the current process through the Partnership Project.

A Council member stated that the Council Chair or Vice Chair should work with the group (the Kuskokwim River Inter-tribal Fish Commission) as RAC members as they are involved with the fishery manager for the Kuskokwim.

The Council provided no further comments regarding the draft language in the revised letter.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Yukon Delta National Wildlife Refuge
P.O. Box 346
Bethel, Alaska 99559

REPLY REFER TO:
YDNWR

December 29, 2017

MEMORANDUM

To: Chair, Federal Subsistence Board

Through: Associate Regional Director, Office of Subsistence Management

From: Refuge Manager, Yukon Delta National Wildlife Refuge

Subject: Draft Delegation of Authority Letter

I would like to thank the Federal Subsistence Board (Board) for the opportunity to comment on the draft delegation of authority letter for the Yukon Delta National Wildlife Refuge Manager (Refuge Manager). Per your request for review and comments related to the consistency between the draft revisions and current conservation and subsistence fishing issues on the Kuskokwim River, I offer the following:

1) Page 1, paragraph 2: The paragraph specifically states that Federal subsistence fisheries management by Federal officials be coordinated, prior to implementation, with representatives from the Kuskokwim River Salmon Management Working Group (KRSMWG). It has been suggested that coordination, prior to implementation, with a non-federal entity such as the KRSMWG would likely be inconsistent with the Federal Advisory Committee Act (FACA). The paragraph should be reworded to avoid this inconsistency.

2) Page 2, Section 3 "Scope of Delegation", paragraph 3: The paragraph specifically states that "This delegation also permits you to close and re-open Federal public waters to nonsubsistence fishing, but does not permit you to specify methods and means, permit requirements, or harvest and possession limits for State-managed fisheries." I would like to point out that the Refuge Manager's inability to specify gear type for State-managed fisheries, at times complicates conservation and management of the Kuskokwim River fishery. Due to the nature of the mixed stock fishery on the Kuskokwim River, there are times when the Refuge Manager might close the harvest of a particular species to all but federally-qualified subsistence users because of a conservation concern for that species, only to have nonsubsistence users legally fishing for other species using any gear type permitted under State regulation, thereby running the risk of incidentally harvesting the species of concern. To be more specific, in a situation where the Refuge Manager closes Chinook salmon harvest to all but federally-qualified users due to a conservation concern for Chinook, the harvest of all other species remains under the management of the State. Under this scenario, it is conceivable that non-subsistence users could legally fish with any gear type permitted under State regulation for chum or sockeye salmon, or any other fish species, during the Chinook closer and incidentally catch Chinook salmon. Once caught in a gill net, the live release of a Chinook salmon is highly unlikely. If the Refuge Manager had the authority to prohibit nonsubsistence users from using gill nets while participating in the State-managed fishery, taking this action would still allow fishing for all other species using live-release gear for both federally-qualified as well as nonsubsistence users. It has been argued that the use of this authority could be interpreted as Federal overreach, however, the argument could also be made that the alternative solution, i.e. closing the harvest of every other fish species within the federal public waters of the Kuskokwim would also constitute Federal overreach having far more significant ramifications. I urge the Board to give ample consideration to this matter for the instances when there are no other options for addressing the issue of fishing during periods of overlapping runs.

3) Page 3, Section 6, "Guidelines for Delegation", paragraph 3: The Board requests input on the date whereby the Refuge Manager will convene a meeting of representatives from the Refuge, the Kuskokwim River Intertribal Fish Commission (KRITFC), and other Federally sanctioned entities to determine if conditions warrant Federal management of subsistence fisheries on the Kuskokwim River. As noted, this language was added to address concerns associated with FP17-05, which was considered by the Board during its January 2017 meeting. During deliberation of FP17-05, the proponent expressed concern about not having a decision regarding which entity would be managing the Kuskokwim River fishery until late April or Early May of a given year. The proponent suggested that we should know by February what the population predictions or returns are going to be for the following summer. A representative from the Alaska Department of Fish and Game (Department) indicated that, based on the timing of subsistence harvest data collection, which is fundamental to finalizing the population predictions, a March timeframe is when the Department typically has all the information and completes the necessary forecast analyses to be able to develop management strategies based upon those predictions. Given that the final predictions are critical to addressing management strategies and, ultimately, determining which entity will be managing the fishery, I recommend a meeting date in the timeframe between mid-March and early April.

4) Page 4, Section 7, "Reporting", paragraph 1: The Board requests input on the date whereby the Refuge Manager will submit a written report to the Board in the event that the decision is made to implement Federal management of the fishery. Recognizing that a) based on the process outlined under section 6, the decision to Federally manage the fishery would be made through a joint meeting of the Refuge, the KRITFC, and other Federally sanctioned entities and in consultation with the OSM and the Department, b) I recommend that the meeting to determine if conditions warrant Federal management of the subsistence fishery take place between mid-March and early-April, and c) the timeframe immediately following this meeting is extremely busy for the many representatives who are collaborating on Kuskokwim River fisheries management, I recommend that the required report be due to the Board no sooner than June 1.

5) Page 4, Section 7, "Reporting", paragraph 1: The paragraph specifically states that a report will be submitted to the Board outlining the in-season collaborative decision making process adopted by the group to include input from the KRSMWG. As mentioned above, it has been suggested that including a non-federal entity such as the KRSMWG in our in-season collaborative decision making process would likely be inconsistent with FACA. The paragraph should be reworded to avoid this inconsistency.

Thank you again for the opportunity to provide input. If you have any questions or would like to discuss these matters further, please contact me at (907) 543-1002.

Ken Stahlnecker

Federal Subsistence Board

1011 East Tudor Road, MS 121
Anchorage, Alaska 99503 - 6199

FISH and WILDLIFE SERVICE
BUREAU of LAND MANAGEMENT
NATIONAL PARK SERVICE
BUREAU of INDIAN AFFAIRS

FOREST SERVICE

OSM 17073.SA

Field Supervisor
U.S. Fish and Wildlife Service
Kenai Fish and Wildlife Conservation Office
43655 Kalifornski Road
Soldotna, Alaska 99669

Dear Kenai Office Field Supervisor:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the Field Supervisor of the Kenai Fish and Wildlife Conservation Office (Field Supervisor) to issue emergency special actions when necessary to ensure the conservation of a healthy fish population, to continue subsistence uses of fish, for the continued viability of a fish population, or for public safety reasons. This delegation only applies to Federal public waters subject to the Alaska National Interest Lands Conservation Act (ANILCA) Title VIII in the Cook Inlet Area.

It is the intent of the Board that Federal subsistence fisheries management by Federal officials be coordinated, prior to implementation, with Regional Advisory Council (Council) representatives, the Office of Subsistence Management (OSM), and the Alaska Department of Fish and Game (ADF&G) to the extent possible. The OSM will be used by managers to facilitate communication of actions and to ensure proposed actions are technically and administratively aligned with legal mandates and policies. Federal managers are expected to cooperate with managers from the State and other Federal agencies, the Council Chair(s), and applicable Council members to minimize disruption to resource users and existing agency programs, consistent with the need for emergency special action.

DELEGATION OF AUTHORITY

1. <u>Delegation:</u> The Field Supervisor is hereby delegated authority to issue emergency special actions affecting fisheries in Federal public waters as outlined under the **Scope of Delegation** below. Although a public hearing is not required for emergency special actions, if deemed necessary by you, then a public hearing on the emergency special action is recommended. Special actions are governed by regulation at 36 CFR 242.19 and 50 CFR 100.19.

2. Authority: This delegation of authority is established pursuant to 36 CFR 242.10(d)(6) and 50 CFR 100.10(d)(6), which state: "The Board may delegate to agency field officials the authority to set harvest and possession limits, define harvest areas, specify methods or means of harvest, specify permit requirements, and open or close specific fish or wildlife harvest seasons within frameworks established by the Board."

3. Scope of Delegation: The regulatory authority hereby delegated is limited to the issuance of emergency special actions as defined by 36 CFR 242.19(a) and 50 CFR 100.19(a). Such an emergency action may not exceed 60 days, and may not be extended.

This delegation permits you to open or close Federal subsistence fishing periods or areas provided under codified regulations. It also permits you to specify methods and means; to specify permit requirements; and to set harvest and possession limits for Federal subsistence fisheries.

This delegation also permits you to close and re-open Federal public waters to nonsubsistence fishing, but does not permit you to specify methods and means, permit requirements, or harvest and possession limits for State-managed fisheries. This delegation may be exercised only when it is necessary to conserve healthy populations of fish or to ensure the continuation of subsistence uses.

All other proposed changes to codified regulations, such as customary and traditional use determinations or requests for special actions greater than 60 days, shall be directed to the Board.

The Federal public waters subject to this delegated authority are those within the Cook Inlet Area (as described in the Subsistence Management Regulations for the Harvest of Fish and Shellfish on Federal Public Lands and Waters in Alaska). You will coordinate all local fishery decisions with all affected Federal land managers.

4. Effective Period: This delegation of authority is effective from the date of this letter and continues until superseded or rescinded.

5. Guidelines for Review of Proposed Special Actions: You will use the following guidelines to determine the appropriate course of action when reviewing proposed special actions.

a) Does the proposed special action fall within the geographic and regulatory scope of delegation?

b) Have you communicated with the OSM to ensure the emergency special action is aligned with Federal subsistence regulations and policy?

c) Does the proposed action need to be implemented immediately as an emergency special action, or can the desired conservation or subsistence use goal be addressed by deferring the issue to the next regulatory cycle?

d) Does the supporting information in the proposed special action substantiate the need for the action?

e) Are the assertions in the proposed special action confirmed by available current biological information and/or by affected subsistence users?

f) Is the proposed special action supported in the context of available historical information on stock status and harvests by affected users?

g) Is the proposed special action likely to achieve the expected results?

h) Have the perspectives of the Chair or alternate of the affected Council(s), OSM, and affected State and Federal managers been fully considered in the review of the proposed special action?

i) Have the potential impacts of the proposed special action on all affected subsistence users and non-Federally qualified users within the drainage been considered?

j) Can public announcement of the proposed special action be made in a timely manner to accomplish the management objective?

k) After evaluating all information and weighing the merits of the special action against other actions, including no action, is the proposed emergency special action reasonable, rational, and responsible?

6. Guidelines for Delegation: You will become familiar with the management history of the fisheries in the region, with the current State and Federal regulations and management plans, and be up-to-date on stock and harvest status information.

You will provide subsistence users in the region a local point of contact about Federal subsistence fishery issues and regulations and facilitate a local liaison with State managers and other user groups. For in-season management decisions and special actions, consultation is not always possible, but to the extent practicable, two-way communication will take place before decisions are implemented. You will also establish meaningful and timely opportunities for government-to-government consultation related to pre-season and post-season management actions as established in the Board's Government to Government Tribal Consultation Policy (Federal Subsistence Board Government to Government Tribal Consultation Policy 2012).

You will review emergency special action requests or situations that may require an emergency special action and all supporting information to determine (1) consistency with 36 CFR 242.19 and 50 CFR 100.19, (2) if the request/situation falls within the scope of your delegated authority, (3) if significant conservation problems or subsistence harvest concerns are indicated, and (4) what the consequences of taking an action may be on potentially affected subsistence uses and nonsubsistence uses. Requests not within your delegated authority will be forwarded to the Board for consideration.

You will maintain a record of all special action requests and justification of your decisions. A copy of this record will be provided to the Administrative Records Specialist at OSM no later than sixty days after development of the document.

You will immediately notify the Board through the Assistant Regional Director for the OSM, and coordinate with the Chair or alternate of the affected Council(s), local ADF&G managers, and other affected Federal conservation unit managers concerning special actions being considered.

If the timing of a regularly scheduled meeting of the affected Council(s) permits without incurring undue delay, you may seek Council recommendations on the proposed emergency special action.

You will issue decisions in a timely manner. Before the effective date of any decision, reasonable efforts will be made to notify Council representatives, the public, OSM, affected State and Federal managers, and law enforcement personnel. If an action is to supersede a State action not yet in effect, the decision will be communicated to Council representatives, the public, OSM, and State and Federal managers at least 24 hours before the State action would be effective. If a decision to take no action is made, you will notify the proponents of the request immediately.

You may defer an emergency special action request, otherwise covered by the delegation of authority, to the Board in instances when the proposed management action will have a significant impact on a larger number of Federal subsistence users or is particularly controversial. These options should be exercised judiciously and only when sufficient time allows. Such deferral should not be considered where immediate management actions are necessary for conservation purposes. The Board may determine that an emergency special action request may be best handled by the Board, subsequently rescinding the delegated authority for the specific action only.

7. <u>Reporting:</u> You must provide to the Board, through the Assistant Regional Director for the OSM, a report describing the pre-season coordination efforts, local fisheries management decisions, and post-season evaluation activities for the previous fishing season by November 15.

A summary of emergency special action requests and your resultant actions must be provided to the coordinator of the appropriate Council(s) at the end of the calendar year for presentation during regularly scheduled Council meetings.

8. Support Services: Administrative support for your local Federal subsistence fisheries management activities will be provided by the Office of Subsistence Management.

Should you have any questions about this delegation of authority, please feel free to contact the Assistant Region Director, Office of Subsistence Management, at toll-free 1-800-478-1456 or (907) 786-3888.

Sincerely,

Anthony Christianson
Chair

Enclosure

cc: Federal Subsistence Board
Assistant Regional Director, Office of Subsistence Management
Deputy Assistant Regional Director, Office of Subsistence Management
Subsistence Policy Coordinator, Office of Subsistence Management
Fisheries Division Supervisor, Office of Subsistence Management
Chair, Southcentral Alaska Subsistence Regional Advisory Council
Superintendent, Lake Clark/Katmai National Parks and Preserves
Superintendent, Denali National Park and Preserve
Manager, Kenai National Wildlife Refuge
Manager, Alaska Maritime National Wildlife Refuge
Forest Supervisor, Chugach National Forest
District Ranger, Seward Ranger District
Assistant Regional Director, Law Enforcement, U.S. Fish and Wildlife Service, Region 7
Commissioner, Alaska Department of Fish and Game
Interagency Staff Committee
Administrative Record

Ninilchik Traditional Council
P.O. Box 39070
Ninilchik, Alaska 99639
Phone: 907 567-3313 / Fax: 907 567-3308
E-mail: ntc@ninilchiktribe-nsn.gov
ninilchiktribe-nsn.gov

October 30, 2017

Mr. Eugene R. Peltola, Jr.
Assistant Regional Director
Office of Subsistence Management
1011 East Tudor Road, MS 121
Anchorage, AK 99503-6199

Re: Draft Revised 2017 Fisheries Delegation of Authority Letter for the Cook Inlet

Dear Mr. Peltola, Jr.:

The Ninilchik Traditional Council ("NTC" or "the Tribe") appreciates the opportunity to comment on the draft letter revising the Federal Subsistence Board's delegation of authority to the Field Supervisor of the Kenai Fish and Wildlife Conservation Office.

50 C.F.R. § 100.10(d)(6) permits the Board to delegate its authority to agency field officials to make certain in-season management decisions, including defining harvest areas, specifying methods or means of harvest, specifying permit requirements, and opening or closing specific harvest seasons, within frameworks established by the Board.

The current draft letter fails to identify or establish any frameworks guiding how these in-season decisions are made. The Board must identify and establish such frameworks in order to make this delegation of authority valid and effective under ANILCA. NTC believes the following elements should be included within a framework structuring how these decisions should be made as a result of a delegation of the Board's authority:

- **The delegation of authority needs to identify a specific threshold that will trigger an in-season management decision to close or take other restrictive action regarding a game population or fish stock**.

- **Opportunities to engage in subsistence uses of a resource shall not be restricted until after all other non-subsistence uses of that resource are restricted**.

- **Subsistence opportunities to harvest a resource cannot be restricted if subsistence harvest of that resource is either negligible or zero**.

- **The closure of any subsistence fishery needs to be based upon current subsistence harvest data**.

This last framework would be easy to implement, given that subsistence users are required to comply with a 24-hour reporting period for certain subsistence fisheries on the Kenai and Kasilof Rivers, and as a result of that reporting deadline, in-season management would have the most current and accurate information. This information should be used to guide all in-season management closure decisions, given that it is the most current and accurate information available about the health of a population or stock.

Furthermore, multiple portions of the letter reference specific terms without defining what those terms mean. For example, section 5(e) of the draft letter references "current biological data" without defining what data would be considered either "current" or "biological." If the Field Supervisor is going to make an in-season management decision to restrict subsistence access to and uses of a particular resource, the rural residents with recognized subsistence uses affected by a restrictive in-season management decision should be able to know what data that decision is based upon. The lack of an adequate definition identifying what comprises "current biological data," combined with the draft letter's absence of any frameworks, unlawfully grants the Field Supervisor unfettered discretion to take actions that may have serious negative effects on qualified subsistence uses of fish and wildlife without adequately identifying the information upon which those decisions are based.

In December 2016, NTC and the Board entered into an agreement regarding NTC's continued use of a subsistence gillnet in the Kenai River. That agreement contains and clearly established frameworks guiding specific in-season management decision-making. NTC believes that the draft delegation of authority letter's lack of any frameworks guiding such decisions confounds the spirit and substance of this Agreement.

NTC requests a tribal consultation regarding the draft delegation of authority letter to discuss revising that letter to include a framework within which the Board's delegated authority should be used to make specific in-season decisions.

Yours very truly,

Ivan Z. Encelewski
Executive Director
Ninilchik Traditional Council

cc: Jennifer Hardin, Ph.D., Subsistence Policy Coordinator - OSM
Ninilchik Traditional Council

Southcentral Alaska Subsistence Regional Advisory Council comments on draft revised Cook Inlet Area delegation of authority letter

The Southcentral Alaska Subsistence Regional Advisory Council took up the draft revised Cook Inlet Area delegation of authority letter on November 7, 2017, at its fall meeting in Homer.

Following an overview of the areas of the letter up for review, one Council member asked staff whether consultation or communication with the Council or Council Chair was included in the letter, and where.

Another Council member asked staff for clarification on what constituted non-subsistence fishing in Federal Public waters of Cook Inlet.

The Council provided no further comment on the revised letter.

Federal Subsistence Board

3601 C Street, Suite 1030
Anchorage, Alaska 99503

FISH and WILDLIFE SERVICE
BUREAU of LAND MANAGEMENT
NATIONAL PARK SERVICE
BUREAU of INDIAN AFFAIRS

FOREST SERVICE

MAY - 3 2002

FWS/OSM/C:/ReardenInSeason

Mr. Michael Rearden, Manager
U.S. Fish and Wildlife Service
Yukon Delta National Wildlife Refuge
P.O. Box 346
Bethel, Alaska 99559

Dear Mr. Rearden:

This letter delegates specific regulatory authority from the Federal Subsistence Board to you as Manager of the Yukon Delta National Wildlife Refuge to issue special actions when necessary to assure the conservation of healthy fish stocks and to provide for subsistence uses of fish in Federal waters subject to ANILCA Title VIII (Federal waters) in the Kuskokwim Area, including the Goodnews and Kanektok Rivers.

Overview

Federal managers are responsible for local management of subsistence fishing by qualified rural residents in Federal waters; this includes the authority to restrict all uses in Federal waters if necessary to conserve healthy fish stocks or to provide for subsistence uses in Federal waters. State managers are responsible for in-season management of State subsistence, commercial, recreational, and personal use fisheries in all waters.

It is the intent of the Federal Subsistence Board that subsistence fisheries management by Federal officials be coordinated with the Alaska Department of Fish and Game and involve Regional Advisory Council representatives to conserve healthy fish stocks while providing for subsistence uses. Federal managers are expected to cooperate with State managers and minimize disruption to resource users and existing agency programs, as agreed to under the Interim Memorandum of Agreement for Coordinated Fisheries and Wildlife Management for Subsistence Uses on Federal Public Lands in Alaska.

000022

FEDERAL FISHERIES MANAGEMENT
DELEGATION OF AUTHORITY

1. **Delegation:** The Manager of the Yukon Delta National Wildlife Refuge is hereby delegated authority to issue emergency regulations (special actions) affecting fisheries in Federal waters as outlined under **3. Scope of Delegation**.

2. **Authority:** This delegation of authority is established pursuant to 36 CFR 242.10(d)(6) and 50 CFR 100.10(d)(6), which states: "The Board may delegate to agency field officials the authority to set harvest and possession limits, define harvest areas, specify methods or means of harvest, specify permit requirements, and open or close specific fish or wildlife harvest seasons within frameworks established by the Board."

3. **Scope of Delegation:** The regulatory authority hereby delegated is limited to the issuance of emergency special actions as defined by 36 CFR 242.19(d) and 50 CFR 100.19(d). Such an emergency action may not exceed 60 days, and may not be extended. This delegation permits you to open or close Federal subsistence fishing periods or areas provided under codified regulations. It also permits you to specify methods and means; to specify permit requirements; and to set harvest and possession limits for Federal subsistence fisheries. This delegation also permits you to close and re-open Federal waters to non-subsistence fishing, but does not permit you to specify methods and means, permit requirements, or harvest and possession limits for State-managed fisheries. This delegation may be exercised only when it is necessary to conserve fish stocks or to continue subsistence uses.

All other proposed changes to codified regulations, such as customary and traditional use determinations, shall be directed to the Federal Subsistence Board.

The Federal waters subject to this delegated authority are those within the Kuskokwim Area (as described in the Subsistence Management Regulations for the Harvest of Fish and Shellfish on Federal Public Lands and Waters in Alaska). The Refuge Manager will coordinate all local fishery decisions with all affected Federal land managers.

4. **Effective Period:** This delegation of authority is effective until superseded or rescinded.

5. **Criteria for Review of Proposed Special Actions:** The Refuge Manager will use the following considerations to determine the appropriate course of action when reviewing proposed special actions.

1. Does the proposed special action fall within the geographic and regulatory scope of delegation?

2. Does the proposed special action need to be implemented immediately as a special action, or can the desired conservation or subsistence use goal be addressed by deferring the issue to the annual regulatory cycle?

3. Does the supporting information in the proposed special action substantiate the need for the action?

4. Are the assertions in the proposed special action confirmed by available current biological information and/or by other affected subsistence users?

5. Is the proposed special action supported in the context of available historical information on stock status and harvests by affected users?

6. Is the proposed special action likely to achieve the expected results?

7. Have the perspectives of ADF&G managers and Regional Advisory Council representatives been fully considered in the review of the proposed special action?

8. Have the potential impacts of the proposed special action on all affected subsistence users within the drainage been considered?

9. Can public announcement of the proposed special action be made in a timely manner to accomplish the management objective?

10. After evaluating all information and weighing the merits of the special action against other actions, including no action, is the special action reasonable, rational and responsible?

6. **Guidelines for Delegation:**

1. The Refuge Manager will become familiar with the management history of the fisheries in the region, with the current State and Federal regulations and management plans, and be up-to-date on stock and harvest status information.

2. The Refuge Manager will review special action requests or situations that may require a special action and all supporting information to determine (1) if the request/situation falls within the scope of authority, (2) if significant conservation problems or subsistence harvest concerns are indicated, and (3) what the consequences of taking an action may be on potentially affected subsistence users and non-subsistence users. Requests not within the delegated authority of the Refuge Manager will be forwarded to the Federal Subsistence Board for consideration. The Refuge Manager will keep a record of all special action requests and their disposition.

3. The Refuge Manager will immediately notify the Federal Subsistence Board through Tom Boyd, Assistant Regional Director for Subsistence, U.S. Fish and Wildlife Service, and notify/consult with local ADF&G managers, Regional Advisory Council members, and other affected Federal conservation unit managers concerning special actions being considered.

4. The Refuge Manager will issue timely decisions. Users, affected State and Federal managers, law enforcement personnel, and Regional Advisory Council representatives should be notified before the effective date/time of decisions. If an action is to supersede a State action not yet in effect, the decision will be communicated to affected users, State and Federal managers, and Regional Advisory Council representatives at least 6 hours before the State action would be effective. If a decision is to take no action, the requestor will be notified immediately.

5. There may be unusual circumstances under which the Refuge Manager will determine that he/she should not exercise the authority delegated, but instead request that the Federal Subsistence Board should handle the special action request. In a similar vein, the Federal Subsistence Board may determine that a special action request should not be handled by the delegated official but by the Board itself (i.e. rescind the delegated authority for that specific action only). These options should be exercised judiciously and may only be initiated where sufficient time allows. Such decisions should not be considered where immediate management actions are necessary for fisheries conservation purposes.

7. Reporting: The Refuge Manager must provide to the Federal Subsistence Board a report describing the pre-season coordination efforts, local fisheries management decisions, and post-season evaluation activities for the previous fishing season by November 15.

8. Support Services: Administrative support for local fisheries management activities of the Refuge Manager will be provided by the Office of Subsistence Management, U. S. Fish and Wildlife Service, Department of the Interior.

This delegation of authority will provide subsistence users in the region a local point of contact and will facilitate a local liaison with State managers and other user groups. Timely local management decisions optimize the opportunity for users to harvest fish when and where they are available, without jeopardizing spawning escapement goals for specific stocks.

Should you have any questions about this delegation of authority, please feel free to contact Mr. Thomas H. Boyd, Assistant Regional Director for Subsistence, U. S. Fish and Wildlife Service, Office of Subsistence Management at toll-free 1-800-478-1456 or (907) 786-3888.

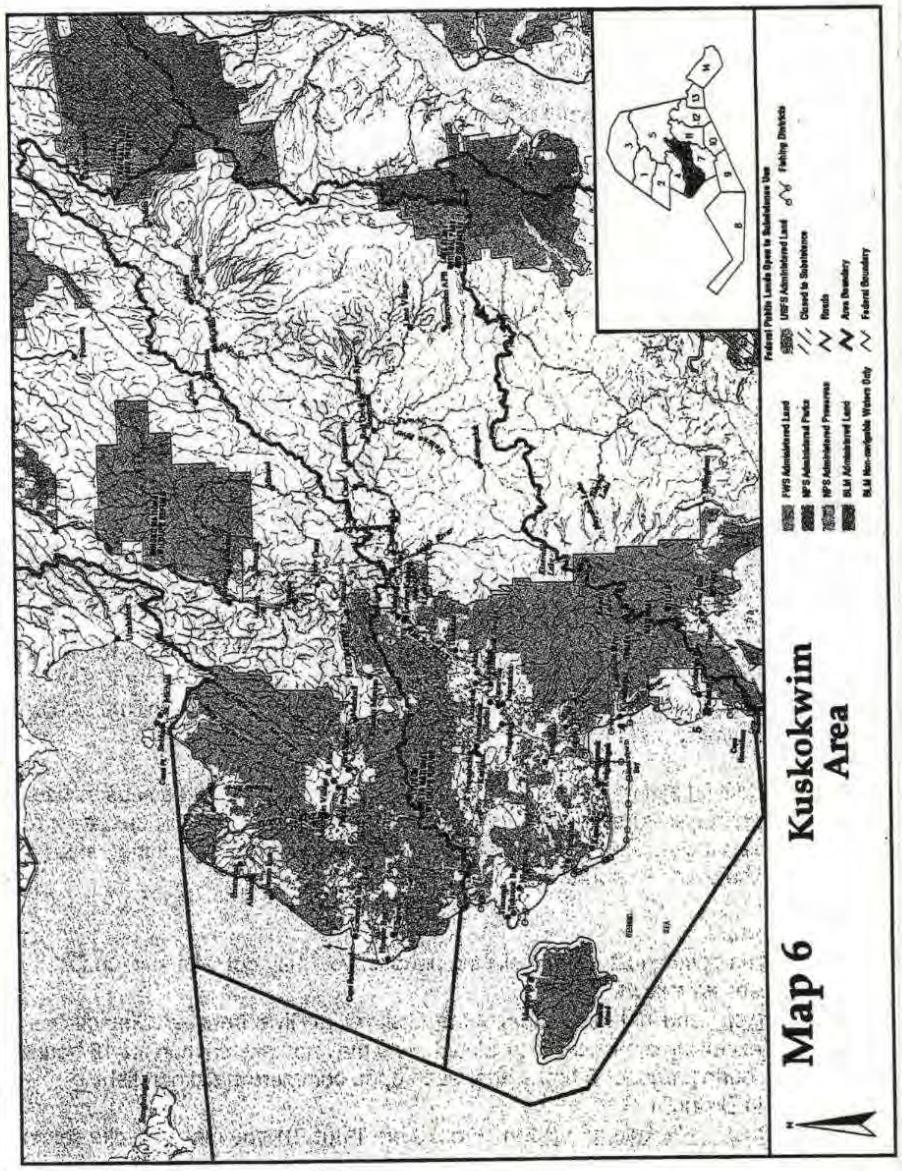
Sincerely,

Mitch Demientieff, Chair
Federal Subsistence Board

Attachment: Map of the Kuskokwim Area

cc: Members of the Federal Subsistence Board
Mr. Harry Wilde, Sr., Chair, Yukon-Kuskokwim Delta Subsistence Regional Advisory
Mr. Robert Nick, Member, Yukon-Kuskokwim Delta Subsistence Regional Advisory Council
Mr. James Charles, Member, Yukon-Kuskokwim Delta Subsistence Regional Advisory Council
Mr. Ronald Sam, Chair, Western Interior Subsistence Regional Advisory Council
Mr. Carl Morgan, Member, Western Interior Subsistence Regional Advisory Council
Mr. Ray Collins, Vice-Chair, Western Interior Subsistence Regional Advisory Council
Ms. Deb Liggett, Superintendent, Lake Clark/Katmai National Parks and Preserve
Mr. Steve Martin, Superintendent, Denali National Park and Preserve
Mr. Aaron Archibeque, Manager, Togiak National Wildlife Refuge
Mr. Greg Siekaniec, Manager, Alaska Maritime National Wildlife Refuge
Mr. Stanley Pruszenski, Assistant Regional Director - Law Enforcement, U.S. Fish and Wildlife Service
Mr. Frank Rue, Commissioner, Alaska Department of Fish and Game
Mr. Thomas H. Boyd, FWS Office of Subsistence Management

KUSKOKWIM AREA



Kuskokwim

Federal Subsistence Board

3601 C Street, Suite 1030
Anchorage, Alaska 99503

FISH and WILDLIFE SERVICE
BUREAU of LAND MANAGEMENT
NATIONAL PARK SERVICE
BUREAU of INDIAN AFFAIRS

FOREST SERVICE

MAY - 3 2002

FWS/OSM/C:/SonnevilInSeason

Mr. Gary Sonnevil, Project Leader
U.S. Fish and Wildlife Service
Kenai Fishery Resources Office
43655 Kalifornski Road
Kenai, Alaska 99611

Dear Mr. Sonnevil:

This letter delegates specific regulatory authority from the Federal Subsistence Board to you as Project Leader of the Kenai Fishery Resources Office to issue special actions when necessary to assure the conservation of healthy fish stocks and to provide for subsistence uses of fish in Federal waters subject to ANILCA Title VIII (Federal waters) in the Cook Inlet Area.

Overview

Federal managers are responsible for local management of subsistence fishing by qualified rural residents in Federal waters; this includes the authority to restrict all uses in Federal waters if necessary to conserve healthy fish stocks or to provide for subsistence uses in Federal waters. State managers are responsible for in-season management of State subsistence, commercial, recreational, and personal use fisheries in all waters.

It is the intent of the Federal Subsistence Board that subsistence fisheries management by Federal officials be coordinated with the Alaska Department of Fish and Game and involve Regional Advisory Council representatives to conserve healthy fish stocks while providing for subsistence uses. Federal managers are expected to cooperate with State managers and minimize disruption to resource users and existing agency programs, as agreed to under the Interim Memorandum of Agreement for Coordinated Fisheries and Wildlife Management for Subsistence Uses on Federal Public Lands in Alaska.

000023

FEDERAL FISHERIES MANAGEMENT
DELEGATION OF AUTHORITY

1. Delegation: The Project Leader of the Kenai Fishery Resources Office is hereby delegated authority to issue emergency regulations (special actions) affecting fisheries in Federal waters as outlined under **3. Scope of Delegation**.

2. Authority: This delegation of authority is established pursuant to 36 CFR 242.10(d)(6) and 50 CFR 100.10(d)(6), which states: "The Board may delegate to agency field officials the authority to set harvest and possession limits, define harvest areas, specify methods or means of harvest, specify permit requirements, and open or close specific fish or wildlife harvest seasons within frameworks established by the Board."

3. Scope of Delegation: The regulatory authority hereby delegated is limited to the issuance of emergency special actions as defined by 36 CFR 242.19(d) and 50 CFR 100.19(d). Such an emergency action may not exceed 60 days, and may not be extended. This delegation permits you to open or close Federal subsistence fishing periods or areas provided under codified regulations. It also permits you to specify methods and means; to specify permit requirements; and to set harvest and possession limits for Federal subsistence fisheries. This delegation also permits you to close and re-open Federal waters to non-subsistence fishing, but does not permit you to specify methods and means, permit requirements, or harvest and possession limits for State-managed fisheries. This delegation may be exercised only when it is necessary to conserve fish stocks or to continue subsistence uses.

All other proposed changes to codified regulations, such as customary and traditional use determinations, shall be directed to the Federal Subsistence Board.

The Federal waters subject to this delegated authority are those within the Cook Inlet Area (as described in the Subsistence Management Regulations for the Harvest of Fish and Shellfish on Federal Public Lands and Waters in Alaska). The Project Leader will coordinate all local fishery decisions with all affected Federal land managers.

4. Effective Period: This delegation of authority is effective until superseded or rescinded.

5. Criteria for Review of Proposed Special Actions: The Project Leader will use the following considerations to determine the appropriate course of action when reviewing proposed special actions.

1. Does the proposed special action fall within the geographic and regulatory scope of delegation?

2. Does the proposed special action need to be implemented immediately as a special action, or can the desired conservation or subsistence use goal be addressed by deferring the issue to the annual regulatory cycle?

3. Does the supporting information in the proposed special action substantiate the need for the action?

4. Are the assertions in the proposed special action confirmed by available current biological information and/or by other affected subsistence users?

5. Is the proposed special action supported in the context of available historical information on stock status and harvests by affected users?

6. Is the proposed special action likely to achieve the expected results?

7. Have the perspectives of ADF&G managers and Regional Advisory Council representatives been fully considered in the review of the proposed special action?

8. Have the potential impacts of the proposed special action on all affected subsistence users within the drainage been considered?

9. Can public announcement of the proposed special action be made in a timely manner to accomplish the management objective?

10. After evaluating all information and weighing the merits of the special action against other actions, including no action, is the special action reasonable, rational and responsible?

6. Guidelines for Delegation:

1. The Project Leader will become familiar with the management history of the fisheries in the region, with the current State and Federal regulations and management plans, and be up-to-date on stock and harvest status information.

2. The Project Leader will review special action requests or situations that may require a special action and all supporting information to determine (1) if the request/situation falls within the scope of authority, (2) if significant conservation problems or subsistence harvest concerns are indicated, and (3) what the consequences of taking an action may be on potentially affected subsistence users and non-subsistence users. Requests not within the delegated authority of the Project Leader will be forwarded to the Federal Subsistence Board for consideration. The Project Leader will keep a record of all special action requests and their disposition.

3. The Project Leader will immediately notify the Federal Subsistence Board through Tom Boyd, Assistant Regional Director for Subsistence, U.S. Fish and Wildlife Service, and notify/consult with local ADF&G managers, Regional Advisory Council members, and other affected Federal conservation unit managers concerning special actions being considered.

4. The Project Leader will issue timely decisions. Users, affected State and Federal managers, law enforcement personnel, and Regional Advisory Council representatives should be notified before the effective date/time of decisions. If an action is to supersede a State action not yet in effect, the decision will be communicated to affected users, State and Federal managers, and Regional Advisory Council representatives at least 6 hours before the State action would be effective. If a decision is to take no action, the requestor will be notified immediately.

5. There may be unusual circumstances under which the Project Leader will determine that he/she should not exercise the authority delegated, but instead request that the Federal Subsistence Board should handle the special action request. In a similar vein, the Federal Subsistence Board may determine that a special action request should not be handled by the delegated official but by the Board itself (i.e. rescind the delegated authority for that specific action only). These options should be exercised judiciously and may only be initiated where sufficient time allows. Such decisions should not be considered where immediate management actions are necessary for fisheries conservation purposes.

7. Reporting: The Project Leader must provide to the Federal Subsistence Board a report describing the pre-season coordination efforts, local fisheries management decisions, and post-season evaluation activities for the previous fishing season by November 15.

8. Support Services: Administrative support for local fisheries management activities of the Project Leader will be provided by the Office of Subsistence Management, U. S. Fish and Wildlife Service, Department of the Interior.

This delegation of authority will provide subsistence users in the region a local point of contact and will facilitate a local liaison with State managers and other user groups. Timely local management decisions optimize the opportunity for users to harvest fish when and where they are available, without jeopardizing spawning escapement goals for specific stocks.

Should you have any questions about this delegation of authority, please feel free to contact Mr. Thomas H. Boyd, Assistant Regional Director for Subsistence, U. S. Fish and Wildlife Service, Office of Subsistence Management at toll-free 1-800-478-1456 or (907) 786-3888.

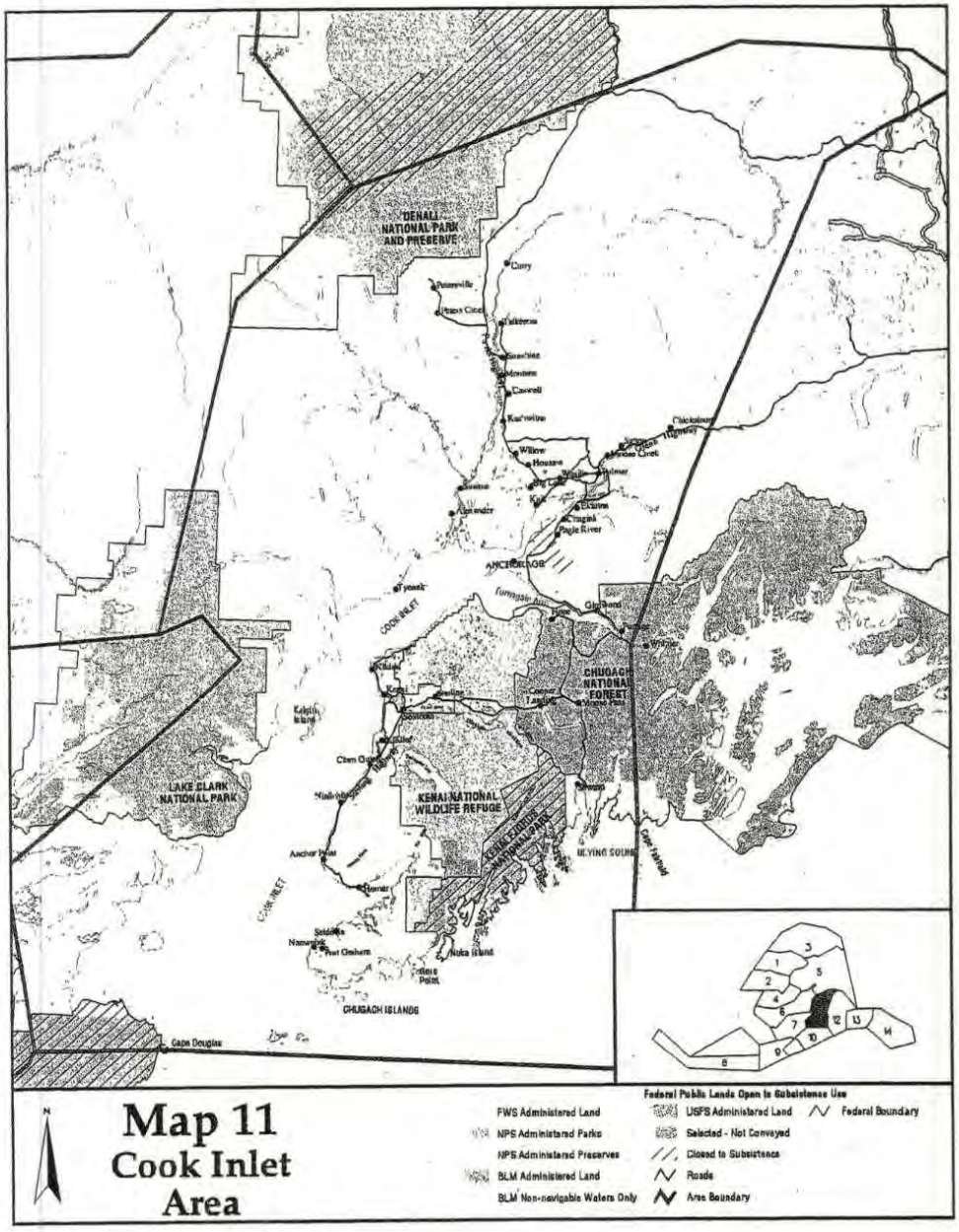
Sincerely,

Mitch Demientieff, Chair
Federal Subsistence Board

Attachment: Map of the Cook Inlet Area

cc: Members of the Federal Subsistence Board
Mr. Ralph Lohse, Chair, Southcentral Alaska Subsistence Regional Advisory Council
Ms. Clare Swan, Member, Southcentral Alaska Subsistence Regional Advisory Council
Ms. Deb Liggett, Superintendent, Lake Clark/Katmai National Parks and Preserves
Mr. Steve Martin, Superintendent, Denali National Park and Preserve
Mr. Gary Candelaria, Superintendent, Wrangell-St. Elias National Park and Preserve
Mr. Robin West, Manager, Kenai National Wildlife Refuge
Mr. Greg Siekaniec, Manager, Alaska Maritime National Wildlife Refuge
Mr. Dave Gibbens, Chugach Forest Supervisor
Mr. Michael Kania, Seward District Ranger
Mr. Stanley Pruszenski, Assistant Regional Director - Law Enforcement, U.S. Fish and Wildlife Service
Mr. Frank Rue, Commissioner, Alaska Department of Fish and Game
Mr. Thomas H. Boyd, FWS Office of Subsistence Management

COOK INLET AREA



Map 11
Cook Inlet Area

Federal Public Lands Open to Subsistence Use

FWS Administered Land		USFS Administered Land	Federal Boundary
NPS Administered Parks		Selected - Not Conveyed	
NPS Administered Preserves		Closed to Subsistence	
BLM Administered Land		Roads	
BLM Non-navigable Waters Only		Area Boundary	

Section 3: Regulatory Issues

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Specific Requests from Agreement	**2018 Season and Beyond Implementation**
1. 10 fathom gillnet length	Already in regulation at §___.27(e)(10)(iv)(J)(1)
2. Single gillnet permitted	Already in regulation at §___.27(e)(10)(iv)(J)(1)
3. Fishery to take place in Moose Range Meadows	Already in regulation at §___.27(e)(10)(iv)(J)
4. Fishery dates (7/1-8/15, 9/10-9/30)	FP17-10
5. Reporting daily catches within 72 hours	FP17-10
6. Remove operational plan requirement	FP17-10
7. Live release of all Rainbow Trout and Dolly Varden	FP17-10
8. Salmon taken in the gillnet fishery included as part of the dipnet/rod and reel fishery annual household limits only	FP17-10
9. Gillnet must have mesh size no larger than 5.25 inches	FP17-10 (permit stipulation)
10. Submission of an annual report to the Federal fishery manager	FP17-10 (permit stipulation)
11. Collection of samples from all harvested Chinook Salmon for genetic testing	FP17-10 (permit stipulation)
12. Anchor point and buoy (any color but red)	FP17-10 (permit stipulation)
13. Eliminate annual total harvest limit for late-run Chinook Salmon	Rulemaking
14. Eliminate annual total harvest limit for Sockeye, Coho and Pink salmon	Rulemaking
15. Early-run Chinook season (7/1-7/15), harvest/ encounter limit, closure until 7/16 once limit is met	Rulemaking
16. Establish late-run Chinook harvest limit associated with time period (7/16-8/15), and closure of gillnet fishery until 9/10 if limit is reached	Rulemaking
17. Establish specific limits and select time periods for Chinook Salmon harvest	Rulemaking
18. Establish early-run Chinook Salmon household limit	Rulemaking
19. Resident fish encounter limits (100 Rainbow, 150 Dolly Varden), closure of fishery for season if limits reached, retention of fish that die in net	Rulemaking
20. Retention of all incidental mortalities regardless of species or length. Retentions count towards encounter and harvest totals for specified species	Rulemaking
21. Retention of jack Chinook Salmon (less than 20 inches in length), which does not count towards encounter or harvest totals	Rulemaking
22. Remove language adopting State seasonal river bank closures from Federal subsistence regulations.	Rulemaking

August 2017

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Section 4: Policy Issues

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POLICY ON CLOSURES TO HUNTING, TRAPPING AND FISHING ON FEDERAL PUBLIC LANDS AND WATER IN ALASKA

FEDERAL SUBSISTENCE BOARD

Adopted August 29, 2007

PURPOSE

This policy clarifies the internal management of the Federal Subsistence Board (Board) and provides transparency to the public regarding the process for addressing federal closures (closures) to hunting, trapping, and fishing on Federal public lands and waters in Alaska. It also provides a process for periodic review of regulatory closures. This policy recognizes the unique status of the Regional Advisory Councils and does not diminish their role in any way. This policy is intended only to clarify existing practices under the current statute and regulations; it does not create any right or benefit, substantive or procedural, enforceable at law or in equity, against the United States, its agencies, officers, or employees, or any other person.

INTRODUCTION

Title VIII of the Alaska National Interest Lands Conservation Act (ANILCA) establishes a priority for the taking of fish and wildlife on Federal public lands and waters for non-wasteful subsistence uses over the taking of fish and wildlife on such lands for other purposes (ANILCA Section 804). When necessary for the conservation of healthy populations of fish and wildlife or to continue subsistence uses of such populations, the Federal Subsistence Board is authorized to restrict or to close the taking of fish and wildlife by subsistence and non-subsistence users on Federal public lands and waters (ANILCA Sections 804 and 815(3)). The Board may also close Federal public lands and waters to any taking of fish and wildlife for reasons of public safety, administration or to assure the continued viability of such population (ANILCA Section 816(b)).

BOARD AUTHORITIES

- ANILCA Sections 804, 814.815(3), and 816.
- 50 CFR Part 100 and 36 CFR Part 242, Section .10(d)(4).

POLICY

The decision to close Federal public lands or waters to Federally qualified or non-qualified subsistence users is an important decision that will be made as set forth in Title VIII of ANILCA. The Board will not restrict the taking of fish and wildlife by users on Federal public lands (other than national parks and park monuments) unless necessary for the conservation of healthy populations of fish and wildlife resources, or to continue subsistence uses of those populations, or for public safety or administrative reasons, or "pursuant to other applicable law." Any individual or organization may propose a closure. Proposed closures of Federal

public lands and waters will be analyzed to determine whether such restrictions are necessary to assure conservation of healthy populations of fish and wildlife resources or to provide a meaningful preference for qualified subsistence users. The analysis will identify the availability and effectiveness of other management options that could avoid or minimize the degree of restriction to subsistence and non-subsistence users.

Like other Board decisions, closure actions are subject to change during the yearly regulatory cycle. In addition, closures will be periodically re-evaluated to determine whether the circumstances necessitating the original closure still exist and warrant continuation of the restriction. When a closure is no longer needed, actions to remove it will be initiated as soon as practicable. The Office of Subsistence Management will maintain a list of all closures.

DECISION MAKING

The Board will:

- Proceed on a case - by - case basis to address each particular situation regarding closures. In those cases for which conservation of healthy populations of fish and wildlife resources allows, the Board will authorize non-wasteful subsistence taking.

- Follow the statutory standard of "customary and traditional uses." Need is not the standard. Established use of one species may not be diminished solely because another species is available. These established uses have both physical and cultural components, and each is protected against all unnecessary regulatory interference.

- Base its actions on substantial evidence contained within the administrative record, and on the best available information; complete certainty is not required.

- Consider the recommendations of the Regional Advisory Councils, with due deference (ANILCA § 805 (c)).

- Consider comments and recommendations from the State of Alaska and the public (ANILCA § 816(b)).

CONDITIONS FOR ESTABLISHING OR RETAINING CLOSURES

The Board will adopt closures to hunting, trapping or fishing by non-Federally qualified users or Federally qualified subsistence users when one or more of the following conditions are met:

- Closures are necessary for the conservation of healthy populations of fish and wildlife:

    a) When a fish or wildlife population is not sufficient to provide for both Federally qualified subsistence users and other users, use by non-Federally qualified users may be reduced or prohibited, or

b) When a fish or wildlife population is insufficient to sustain all subsistence uses, the available resources shall be apportioned among subsistence users according to their:

1) Customary and direct dependence upon the populations as the mainstay of Livelihood,

2) Local residency, and

3) Availability of alternative resources, or

c) When a fish or wildlife population is insufficient to sustain any use, all uses must be prohibited.

- Closures are necessary to ensure the continuation of subsistence uses by Federally qualified subsistence users.

- Closures are necessary for public safety.

- Closures are necessary for administrative reasons.

- Closures are necessary "pursuant to other applicable law."

CONSIDERATIONS IN DECIDING ON CLOSURES

When acting upon proposals recommending closure of Federal public lands and waters to hunting, trapping, or fishing, the Board may take the following into consideration to the extent feasible:

- The biological history (data set) of the fish stock or wildlife population.

- The extent of affected lands and waters necessary to accomplish the objective of the closure.

- The current status and trend of the fish stock or wildlife population in question.

- The current and historical subsistence and non-subsistence harvest, including descriptions of harvest amounts, effort levels, user groups, and success levels.

- Pertinent traditional ecological knowledge.

- Information provided by the affected Regional Advisory Councils and Alaska Department of Fish and Game.

- Relevant State and Federal management plans and their level of success as well as any

relationship to other Federal or State laws or programs.

- Other Federal and State regulatory options that would conserve healthy populations and provide a meaningful preference for subsistence, but would be less restrictive than closures.

- The potential adverse and beneficial impacts of any proposed closure on affected fish and wildlife populations and uses of lands and waters both inside and outside the closed area.

- Other issues that influence the effectiveness and impact of any closure.

REVIEWS OF CLOSURES

A closure should be removed as soon as practicable when conditions that originally justified the closure have changed to such an extent that the closure is no longer necessary. A Regional Council, a State or Federal agency, or a member of the public may submit, during the normal proposal period, a proposal requesting the opening or closing of an area. A closure may also be implemented, adjusted, or lifted base on a Special Action request according to the criteria in 50 CFR 100.19 and 36 CFR 242.19.

To ensure that closure do not remain in place longer than necessary, all future closures will be reviewed by the Federal Subsistence Board no more than three years from the establishment of the closure and at least every three years thereafter. Existing closures in place at the time this policy is implemented will be review on a three-year rotational schedule, with at least one-third of the closure reviewed each year.

Closure reviews will consist of a written summary of the history and original justification for the closure and a current evaluation of the relevant considerations listed above. Except in some situations which may require immediate action through the Special Action Process, closure review analysis will be presented to the affected Regional Council(s) during the normal regulatory proposal process in the form of proposals to retain, modify, or rescind individual closures.

Chair, Federal Subsistence Board

Board Member, U.S. Fish and Wildlife Service

Board Member, Bureau of Indian Affairs

Board Member, U.S. Forest Service

Board Member, National Park Service

Board Member, Bureau of Land Management

FEDERAL SUBSISTENCE BOARD POLICY ON CLOSURES TO HUNTING, TRAPPING AND FISHING ON FEDERAL PUBLIC LANDS IN ALASKA

SUGGESTED REVISIONS

On August 29, 2007, the Federal Subsistence Board (Board) clarified policies addressing Federal closures to hunting, trapping, and fishing on Federal public lands and waters in Alaska. In this policy, it set forth a process for periodic review of regulatory closures. Specifically, it required that closures be reviewed "at least every three years". The Policy has been implemented over the last decade as the Federal Subsistence Management Program (Program) has continued to develop. Due to programmatic changes, there may now be a need to revise the existing closure policy to reflect this development.

In 2009, the Program changed from an annual wildlife and fisheries regulatory cycle, to a biennial cycle, with the wildlife proposal regulatory cycle commencing in even years, and the fisheries cycle commencing in odd years. As a result of these changes, many wildlife closures have been reviewed during "off cycle" years, with others being reviewed during the regulatory cycle, resulting in a staggered review process. In addition, some regulatory proposals addressed areas and species involving existing closures, and as a result, these closures were reviewed as part of the proposal process, further complicating the closure review and regulatory process. The existing closure policy requires that at least one-third of closures be reviewed each year. As a result of the changes to the regulatory process, this has become impractical to implement due to the biennial cycle and complicated to track. In addition, the closure policy states that "all future closures will be reviewed by the Federal Subsistence Board", but this is not what has taken place in all cases. While the Board has reviewed regulatory proposals that called for closures to be rescinded, review of other closures has begun and ended with review by the affected Regional Advisory Councils (Councils).

The following are some suggested changes to the closure policy along with the reasons the proposed changes are needed:

1. All closures would be reviewed every four years instead of every three years, with wildlife closure reviews commencing in January of odd years and fisheries closure reviews commencing in January of even years. All completed closure review analyses will be presented to the affected Council(s) during the winter Council meetings to coincide with the call for proposals for that cycle. This change is recommended so that closure review analyses are brought before the affected Councils at a time when they can have the opportunity to submit proposals if they feel that a closure is no longer needed. This also allows the public to be updated on the status of closures at Council meetings and also allows for publically-generated proposals to open closures. Reviewing closures every four years also provides a realistic amount of time to pass to review data for any changes to biological conditions for the species subject to the closure.

2. Half of all closure reviews could be completed every four years. This would ensure a more even workload and allow for easier incorporation of additional closures in the event that more are adopted by the Board in subsequent regulatory cycles.

3. During the wildlife and fisheries regulatory Federal Subsistence Board meetings, staff from the Office of Subsistence Management will present an overview of all closure reviews conducted during that regulatory cycle to the Board. This will allow the Board to be kept up to date on the biological conditions in areas of closures and allow the Board to ask questions of staff, if desired. This will also provide opportunity for the Board to discuss possible changes/revisions to the existing closure policy if needed.

Wildlife Closure Table

Closure Number	Area of Closure	Species	Year Initiated	Notes
1	Unit 2 – Prince of Wales Island, excluding the southeast portion (land south of the West Arm of Cholmondeley Sound draining into Clarence Strait)	Deer	2003	Last addressed by Proposal WP14-03.
2	Unit 5A, except Nunatak Bench	Moose	1991	Last addressed by closure review WCR15-02.
3	Unit 7 - that portion draining into Kings Bay	Moose	1997	Last addressed by Proposal WP14-11.
4	Unit 9C remainder	Caribou	1999	Last addressed by closure review WCR14-04.
5	Unit 9C - that portion draining into the Naknek River from the south	Moose	1992	Last addressed by closure review WCR15-05
6	Unit 9E	Caribou	1999	Last addressed by closure review WCR14-06.
7	Units 17A and 17C, that portion of 17A and 17C consisting of the Nushagak Peninsula south of the Igushik River, Tuklung River and Tuklung Hills, west of Tvativak Bay	Caribou	1994	Last addressed by Proposal WP16-25/26.
8	Unit 18	Moose	1991	Closure rescinded 2007.
9	Unit 22A	Moose	1996	Last addressed by closure review WCR15-09abc.
10	Unit 22B	Muskox	2002	Last addressed by Proposal WP14-39.
11	Unit 22B west of the Darby Mountains (fall season)	Moose	2003	Last addressed by closure review WCR14-11/12.
12	Unit 22 west of the Darby Mountains (winter season)	Moose	2003	Last addressed by closure review WCR14-11/12.
13	Unit 22D – that portion within the Kougarok, Kuzitrin and Pilgrim river drainages	Moose	2003	Last addressed by WCR14-13.

Closure Number	Area of Closure	Species	Year Initiated	Notes
14	Unit 22D – that portion west of the Tisuk River drainage and Canyon Creek	Moose	2003	Last addressed by closure review WCR14-14.
15	Unit 22D remainder	Moose	2003	Closure rescinded 2007.
16	Unit 22E	Moose	2003	Addressed by Proposal WP16-46.
17	Unit 22	Coyote	1995	WP10-72 submitted to lift the closure. Adopted with modification to adopt the closure language but allow for incidental harvest for subsistence purposes. No Federal open season.
18	Unit 23 - south of Rabbit Creek, Kiyak Creek and the Noatak River, and west of the Cutler and Redstone Rivers (Baird Mountains)	Sheep	1999	Last addressed by Proposal WP16-53/54.
19	Unit 23 south of Kotzebue Sound and west of and including the Buckland River drainage	Muskox	1996	Last addressed by Proposal 14-41.
20	Unit 24B remainder	Moose	1992	Last addressed by Proposal 16-42.
21	Unit 25A - Arctic Village Sheep Management Area	Sheep	1991	Last addressed by Proposal WP14-51.
22	Unit 25D West	Moose	1990	Last addressed by closure review WCR15-22.
23	Unit 26A – that portion of the Colville River drainage downstream from and including the Chandler River	Moose	1991	Closure rescinded 2006.
24	Unit 26A – south of the Colville River and east of the Killik River	Caribou	1995	Closure rescinded 2006.

Closure Number	Area of Closure	Species	Year Initiated	Notes
25	Unit 26C	Muskox	1990	Last addressed by closure review WCR15-25.
26	Unit 6D	Goat	1993	Closure rescinded 2006.
27	Unit 23 Cape Krusenstern National Monument	Muskox	2005	Last addressed by closure review WCR14-27.
28	Unit 22D – that portion west of the Tisuk River drainage and Canyon Creek	Muskox	1996	Original closure was in 1996. Closure was rescinded in 2010 but closed again by the Federal Subsistence Board in 2014 via Proposal WP14-35.
29	Unit 22D remainder	Muskox	1996	Last addressed by Proposal WP14-38.
30	Unit 22E	Muskox	1996	Original closure was in 1996. Closure was rescinded by the Federal Subsistence Board in 2010 but closed again in 2014 by Proposal WP14-36.
31	Unit 26B remainder and 26C	Moose	2004	Last addressed by Proposal WP14-54.
32	Unit 9D	Caribou	2008	Closure rescinded in 2012.
33	Unit 11, that portion outside of Wrangell-St. Elias National Park and Preserve	Goat	2008	No Federal open season. This area is not explicitly closed to non-Federally qualified users and will no longer be undergoing closure review by OSM.
34	Unit 11	Caribou	1992	No Federal open season. This area is not explicitly closed to non-Federally qualified users and will no longer be undergoing closure review by OSM.
35	Unit 12 – that portion east of the Nabesna River and the Nabesna Glacier and south of the Winter Trail running southeast from Pickeral Lake to the Canadian border	Caribou	2012	Last addressed by Proposal WP16-60.

Closure Number	Area of Closure	Species	Year Initiated	Notes
36	Unit 15	Caribou	?	No Federal open season. There is no indication that this area was ever explicitly closed by the Federal Subsistence Board and will no longer be undergoing closure review by OSM.
37	Unit 15A – Skilak Loop Wildlife Management Area	Moose	1992	Closed to all hunting. No Federal open season. This is a Refuge-specific closure and does not fall under the purview of the Federal Subsistence Board. It will not be subject to closure review by OSM.
38	Unit 18 - Kuskokwim	Moose	1992	Last addressed by Proposal WP14-27.
39	Unit 19A north of the Kuskokwim River, upstream from (but excluding) the George River drainage, and south of the Kuskokwim River upstream from (and including) the Downey Creek drainage, not including the Lime Village Management area	Moose	2007	Addressed by closure review WCR14-39.
40	Unit 18 – south of and including the Kanektok River drainages to the Goodnews River drainage	Moose	2008	Addressed by WSA14-01.
41	Unit 6C	Moose	2014	Closure established by Proposal WP14-18.

Closure Number	Area of Closure	Species	Year Initiated	Notes
42	Unit 12 – that portion within Wrangell-St. Elias National Park and Preserve that lies west of the Nabesna River and Nabesna Glacier	Caribou	2012	Established by Proposal WP12-66.
43	Unit 19 remainder	Moose	2007	Established by Proposal WP07-35.
44	Unit 22D, that portion within the Kuzitrin River drainages	Muskox	1995	Last addressed by Proposal WP14-33.

Fisheries Closure Table

Closure Number	Area of Closure	Species	Year Initiated	Notes
1	*Norton Sound/ Port Clearence Area*– Unalaklet River upstream of the Chirosky River	Chinook	2009	No taking of Chinook Salmon (7/1-7/31) by any user. Last Review 2010.
2	*Yukon/ Northern Area* – Kanuti River upstream from a point 5-miles downstream of the State highway crossing.	All fish	1990	No Federal subsistence fishing.
3	*Yukon/ Northern Area* – Bonanza Creek.	All fish	1990	No Federal subsistence fishing.
4	*Yukon/ Northern Area* – Jim River, including Prospect and Douglas Creeks.	All fish	1990	No Federal subsistence fishing.
5	*Yukon/ Northern Area* – Delta River.	All fish	1990	No Federal subsistence fishing.
6	*Yukon/ Northern Area* – Toklat River	All fish	1990	No Federal subsistence fishing from August 15 to May 15.
7	*Yukon/ Northern Area*– Beaver Creek downstream from confluence of moose Creek	Salmon	2002	May only subsistence fish with nets with 3" mesh or smaller from June 15 to September 15.
8	*Yukon/ Northern Area*– Nome Creek in Beaver Creek Drainage	Grayling	1990	No Federal subsistence fishing for grayling.
9	*Aleutian Islands Area* – Unalaska Lake, its tributaries and outlet stream.	Salmon	1990	No Federal Subsistence salmon fishing at any time.
10	*Aleutian Islands Area* – Summers, Morris, and McLees Lakes including tributaries and outlet streams.	Salmon	1999	No Federal Subsistence salmon fishing at any time.
11	*Aleutian Islands Area* – All streams supporting anadromous fish runs that flow into Unalaska Bay south of a line from the northern tip of Cape Cheerful to the northern tip of Kalekta Point.	Salmon	1999	No Federal Subsistence salmon fishing at any time.
12	*Aleutian Islands Area* – All freshwater on Adak and Kagalaska Islands in the Adak District.	Salmon	1990	No Federal Subsistence salmon fishing at any time.

Closure Number	Area of Closure	Species	Year Initiated	Notes
13	*Alaska Peninsula Area* – Russell Creek and Nurse Lagoon and within 500 yards outside the mouth of Nurse Lagoon.	Salmon	1990	No Federal Subsistence salmon fishing at any time.
14	*Alaska Peninsula Area* – Trout Creek and within 500 yards outside its mouth.	Salmon	1990	No Federal Subsistence salmon fishing at any time.
15	*Bristol Bay Area*–Tazimina River (and within 1/4 mile of terminus of those waters)	All		No nets Allowed (9/1-6/14)
16	*Bristol Bay Area*–Within 300' of Stream Mouth Used by Salmon	All		No Federal subsistence take of fish.
17	*Kodiak Area*– Womens Bay: all waters inside a line from the tip of the Nyman Peninsula (57°43.23' N. lat. 152°31.51' W. long.), to the northeastern tip of Mary's Island (57°42.40' N. lat., 152°32.00' W. long.), to the southeastern shore of Womens Bay at 57°41.95' N. lat., 152°31.50' W. long..	Salmon	2001	No Federal subsistence salmon fishing at any time.
18	*Kodiak Area*–Buskin River: all waters inside of a line running from a marker on the bluff north of the mouth of the Buskin River at approximately 57°45.80' N. lat., 152°28.38' W. long., to a point offshore at 57°45.35' N. lat., 152°28.15' W. long., to a marker located onshore south of the river mouth at approximately 57°45.15' N. lat., 152°28.65' W. long.	Salmon	2001	No Federal subsistence salmon fishing at any time.
19	*Kodiak Area*–All waters closed to commercial salmon fishing within 100 yards of the terminus of Selief Bay Creek.	Salmon	1990	No Federal subsistence salmon fishing.
20	*Kodiak Area*– Afognak Bay: all waters north and west of a line from the tip of Last Point to the tip of River Mouth Point.	Salmon	1990	No Federal subsistence salmon fishing at any time.
21	*Kodiak Area*– All freshwater systems of Afognak Island.	Salmon	1990	No Federal subsistence salmon fishing at any time.

Closure Number	Area of Closure	Species	Year Initiated	Notes
22	*Kodiak Area*– Little Kitoi Creek all waters 500 yards seaward of the mouth.	Salmon	1990	No Federal subsistence salmon fishing at any time (8/15-9/30)
23	*Kodiak Area*–The waters of the Pacific Ocean enclosed by the boundaries of Womens Bay, Gibson Cove, and an area defined by a line ½ mile on either side of the mouth of the Karluk River, and extending seaward 3,000 feet	King Crab	1994	RFR94-03. Last reviewed in 2010. Closed to the harvest of king crab, except by Federally qualified subsistence users:
24	*Kodiak Area*–All waters within 1,500 feet seaward of the shoreline of Afognak Island	King Crab	1994	RFR94-03. Last reviewed in 2010. Closed to the harvest of king crab, except by Federally qualified subsistence users:
25	*Southeastern Alaska Area*–Makhnati Island waters as defined in §100.3(b)(5)	Herring	2015	Closed to the harvest of herring, except by Federally Qualified users
26	*Southeastern Alaska Area*– Klawock River	All	2015	No gill nets or seines in July and August.
27	*Southeastern Alaska Area*–Stikine River	Salmon	2004	FP04-40 No salmon fishing at any time for non federally qualified users.
28	*Southeastern Alaska Area*–Taku River	Salmon	1990	Transboundary river; management is governed by international treaty. No Federal subsistence salmon fishing at any time.
29	*Southeastern Alaska Area*–Sarkar River System-above bridge	All fish	2001	Closed to use of all nets by both Federally qualified and non-federally qualified users
30	*Southeastern Alaska Area*– salmon Streams flowing across or adjacent to the road systems within the city limits of Petersburg, Wrangell, and Sitka	All Fish	1999	No Nets allowed.

Closure Number	Area of Closure	Species	Year Initiated	Notes
31	*Cook Inlet Area*–Entire Cook Inlet Area	Burbot and Grayling	2002	No Federal subsistence fishing for burbot and Grayling.

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Section 5: Regional Advisory Council (RAC) Appointment Vetting & Charter Revisions Update

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Department of the Interior
U. S. Fish and Wildlife Service

Southeast Alaska Subsistence Regional Advisory Council

Charter

1. **Committee's Official Designation.** The Council's official designation is the Southeast Alaska Subsistence Regional Advisory Council (Council).

2. **Authority.** The Council is renewed by virtue of the authority set out in the Alaska National Interest Lands Conservation Act (ANILCA) (16 U.S.C. 3115 (1988)) Title VIII, and under the authority of the Secretary of the Interior, in furtherance of 16 U.S.C. 410hh-2. The Council is regulated by the Federal Advisory Committee Act (FACA), as amended, 5 U.S.C. Appendix 2.

3. **Objectives and Scope of Activities.** The objective of the Council is to provide a forum for the residents of the Region with personal knowledge of local conditions and resource requirements to have a meaningful role in the subsistence management of fish and wildlife on Federal lands and waters in the Region.

4. **Description of Duties.** Council duties and responsibilities, where applicable, are as follows:

    a. Recommend the initiation, review, and evaluation of proposals for regulations, policies, management plans, and other matters relating to subsistence uses of fish and wildlife on public lands within the Region.

    b. Provide a forum for the expression of opinions and recommendations by persons interested in any matter related to the subsistence uses of fish and wildlife on public lands within the Region.

    c. Encourage local and regional participation in the decision-making process affecting the taking of fish and wildlife on the public lands within the region for subsistence uses.

    d. Prepare an annual report to the Secretary containing the following:

        (1) An identification of current and anticipated subsistence uses of fish and wildlife populations within the Region;

        (2) An evaluation of current and anticipated subsistence needs for fish and wildlife populations within the Region;

(3) A recommended strategy for the management of fish and wildlife populations within the Region to accommodate such subsistence uses and needs; and

(4) Recommendations concerning policies, standards, guidelines, and regulations to implement the strategy.

e. Appoint one member to the Wrangell-St. Elias National Park Subsistence Resource Commission in accordance with Section 808 of the ANILCA.

f. Make recommendations on determinations of customary and traditional use of subsistence resources.

g. Make recommendations on determinations of rural status.

h. Provide recommendations on the establishment and membership of Federal local advisory committees.

i. Provide recommendations for implementation of Secretary's Order 3347: Conservation Stewardship and Outdoor Recreation, and Secretary's Order 3356: Hunting, Fishing, Recreational Shooting, and Wildlife Conservation Opportunities and Coordination with States, Tribes, and Territories. Recommendations shall include, but are not limited to:

(1) Assessing and quantifying implementation of the Secretary's Orders, and recommendations to enhance and expand their implementation as identified;

(2) Policies and programs that:

(a) increase outdoor recreation opportunities for all Americans, with a focus on engaging youth, veterans, minorities, and other communities that traditionally have low participation in outdoor recreation;

(b) expand access for hunting and fishing on Bureau of Land Management, U.S. Fish and Wildlife Service, and National Park Service lands in a manner that respects the rights and privacy of the owners of non-public lands;

(c) increase energy, transmission, infrastructure, or other relevant projects while avoiding or minimizing potential negative impacts on wildlife; and

(d) create greater collaboration with states, tribes, and/or territories.

j. Provide recommendations for implementation of the regulatory reform initiatives and policies specified in section 2 of Executive Order 13777: Reducing

Regulation and Controlling Regulatory Costs; Executive Order 12866: Regulatory Planning and Review, as amended; and section 6 of Executive Order 13563: Improving Regulation and Regulatory Review. Recommendations shall include, but are not limited to:

Identifying regulations for repeal, replacement, or modification considering, at a minimum, those regulations that:

(1) eliminate jobs, or inhibit job creation;

(2) are outdated, unnecessary, or ineffective;

(3) impose costs that exceed benefits;

(4) create a serious inconsistency or otherwise interfere with regulatory reform initiative and policies;

(5) rely, in part or in whole, on data or methods that are not publicly available or insufficiently transparent to meet the standard for reproducibility; or

(6) derive from or implement Executive Orders or other Presidential and Secretarial directives that have been subsequently rescinded or substantially modified.

At the conclusion of each meeting or shortly thereafter, provide a detailed recommendation meeting report, including meeting minutes, to the Designated Federal Officer (DFO).

5. **Agency or Official to Whom the Council Reports.** The Council reports to the Federal Subsistence Board Chair, who is appointed by the Secretary of the Interior with the concurrence of the Secretary of Agriculture.

6. **Support.** The U.S. Fish and Wildlife Service will provide administrative support for the activities of the Council through the Office of Subsistence Management.

7. **Estimated Annual Operating Costs and Staff Years**. The annual operating costs associated with supporting the Council's functions are estimated to be $195,000, including all direct and indirect expenses and 1.15 staff years.

8. **Designated Federal Officer.** The DFO is the Subsistence Council Coordinator for the Region or such other Federal employee as may be designated by the Assistant Regional Director – Subsistence, Region 7, U.S. Fish and Wildlife Service. The DFO is a full-time Federal employee appointed in accordance with Agency procedures. The DFO will:

(a) Approve or call all of the advisory committee's and subcommittees' meetings;

(b) Prepare and approve all meeting agendas;

(c) Attend all committee and subcommittee meetings;

(d) Adjourn any meeting when the DFO determines adjournment to be in the public interest; and

(e) Chair meetings when directed to do so by the official to whom the advisory committee reports.

9. **Estimated Number and Frequency of Meetings**. The Council will meet 1-2 times per year, and at such times as designated by the Federal Subsistence Board Chair or the DFO.

10. **Duration**. Continuing.

11. **Termination.** The Council will be inactive 2 years from the date the charter is filed, unless prior to that date it is renewed in accordance with the provisions of section 14 of the FACA. The Council will not meet or take any action without a valid current charter.

12. **Membership and Designation.** The Council's membership is composed of representative members as follows:

Thirteen members who are knowledgeable and experienced in matters relating to subsistence uses of fish and wildlife and who are residents of the region represented by the Council.

To ensure that each Council represents a diversity of interests, the Federal Subsistence Board in their nomination recommendations to the Secretary will strive to ensure that nine of the members (70 percent) represent subsistence interests within the region and four of the members (30 percent) represent commercial and sport interests within the region. The portion of membership representing commercial and sport interests must include, where possible, at least one representative from the sport community and one representative from the commercial community.

The Secretary of the Interior will appoint members based on the recommendations from the Federal Subsistence Board and with the concurrence of the Secretary of Agriculture.

Members will be appointed for 3-year terms. A vacancy on the Council will be filled in the same manner in which the original appointment was made. Members serve at the discretion of the Secretary.

Council members will elect a Chair, Vice-Chair, and Secretary for a 1-year term.

Members of the Council will serve without compensation. However, while away from their homes or regular places of business, Council and subcommittee members engaged in Council, or subcommittee business, approved by the DFO, may be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in Government service under section 5703 of title 5 of the United States Code.

13. **Ethics Responsibilities of Members.** No Council or subcommittee member will participate in any Council or subcommittee deliberations or votes relating to a specific party matter before the Department or its bureaus and offices including a lease, license, permit, contract, grant, claim, agreement, or litigation in which the member or the entity the member represents has a direct financial interest.

14. **Subcommittees.** Subject to the DFOs approval, subcommittees may be formed for the purpose of compiling information or conducting research. However, such subcommittees must act only under the direction of the DFO and must report their recommendations to the full Council for consideration. Subcommittees must not provide advice or work products directly to the Agency. Subcommittees will meet as necessary to accomplish their assignments, subject to the approval of the DFO and the availability of resources.

15. **Recordkeeping.** Records of the Council, and formally and informally established subcommittees or other subgroups of the Council, shall be handled in accordance with General Records Schedule 6.2, and other approved Agency records disposition schedule. These records shall be available for public inspection and copying, subject to the Freedom of Information Act, 5 U.S.C. 552.

Secretary of the Interior

DEC 0 1 2017

Date Signed

DEC 0 4 2017

Date Filed