Preamble

A Programmatic Environmental Impact Statement (Programmatic EIS) should constitute the central environmental document supporting the Federal Fishery Management Programs in the Alaskan Exclusive Economic Zone. The last time NOAA and the Council performed a programmatic review of federal fisheries management in the Alaska EEZ was completed in 2004 through the Programmatic Supplemental EIS (PSEIS) for the Groundfish fisheries of the Gulf of Alaska and the Bering Sea/Aleutian Islands and their respective Fishery Management Plans (FMPs) for each region.

The 2004 PSEIS, focused on the groundfish fisheries, was perhaps the most comprehensive analysis performed by NOAA Fisheries and the Council for the federal fisheries in Alaska. The objectives were intended to be durable, and the Council worked to implement specific policies adopted pursuant the 2004 PSEIS over the next several years, through the groundfish work plan, resulting in a number of important and groundbreaking fishery management policies and programs.

While the PSEIS was comprehensive for its time, the escalating and far ranging effects of climate change were not anticipated during the preparation and adoption of the 2004 PSEIS. The effects of climate change affect all species and fisheries managed pursuant to federal FMPs and regulations in all geographic regions that make up the Alaska EEZ, and we now understand that the current rate of change is substantially faster than was previously known. In light of this reality, the Council needs a broad analysis that evaluates both the effects of climate change on the ecosystems and fisheries in the Alaska EEZ, and also how those effects impact the processes used by the Council and NOAA to engage the public, including Indigenous communities and tribes. Unlike the 2004 PSEIS, this new analysis should encompass a scope beyond just the groundfish fisheries, but should also consider the Council's management framework across the all of its managed fisheries. Federal fishery management programs for the Alaska EEZ are intertwined and interconnected in a manner not envisioned in 2004, and the analysis needs to consider the interactions between the various components of the management system for numerous fisheries, species and geographical areas.

In the early 2000's, NOAA Fisheries and the Council chose to develop a programmatic analysis in recognition of the "significant changes [that] have occurred in the resource and its environment over the past 20 years." At that time, the EIS documents supporting the groundfish FMPs were roughly 20 years old with outdated analyses and data. While the NEPA documents that support recent individual Council actions are more robust that pre-2000, the situation is strikingly similar in that the environmental condition is substantially different; the fisheries have evolved as limited access privilege programs and other allocation mechanisms have been implemented; new participants and interests have emerged; and the socio-economic landscape is markedly

different than in 2004 including the growing interest and capacity of Alaska Native Tribes and tribal entities who are seeking a meaningful voice in the management process.

Need

There is an urgent need to evaluate potential changes to fishery management policies and procedures in the Alaska EEZ in light of the rapidly escalating effects of climate change on marine ecosystems in Alaska. This evaluation will include a comprehensive review of the individual and cumulative effects of all federal fishery management programs in the Alaska EEZ. Climate related environmental change has affected a broad range of ecosystem components. In the past decade alone, there have been several dramatic fishery collapses for target species such as Bering Sea crab and Gulf of Alaska cod, and numerous other target species have significant if less dramatic declines. Additionally, non-target species are also experiencing serious population declines. The dramatic declines of Western Alaska chinook and chum salmon stocks, which are not making enough escapement to meet biological requirements stands out. Other effects are less well known or prominent, such as the effects of warming on marine habitats, the slow march by some species northward, and effects on food webs and basic marine productivity.

The far reaching effects of climate change affect all species, and all regions, in the Alaska EEZ. They also affect multiple aspects of the fishery management process. Rights based fishery management programs are most successful under relatively static conditions, but changing conditions can have dramatic effects on how these programs perform. Climate related impacts to non-target species can have differential impacts on fishery participants and gear groups. Climate related impacts on subsistence resources can have dramatic impacts to the cultures, economies, and communities of Alaska's Indigenous peoples.

While the Council and NOAA Fisheries have conducted NEPA related analyses on individual actions, and other reviews have taken place such as the 2015 SIR review of the PSEIS, EFH 5-year reviews, or program and allocation reviews, there has not been a hard look at the individual and cumulative ecosystem effects and impacts to the human environment of the federal fisheries management programs off Alaska. A programmatic NEPA analysis and EIS provides the best avenue for taking a hard look at the matrix of fisheries, resources, and people affected by climate change, and the policies and procedures needed to address these issues, to inform potential changes to current fishery management policies and procedures.

## Purpose

The purpose is to examine and as necessary, revise the current fishery management policies and procedures affecting the human environment in the Exclusive Economic Zone off Alaska across all Council-managed fisheries. Given changing conditions in the fisheries and the environment that have occurred since 2004, is the current management framework including the policies and procedures that guide fishery management, adequate to meet the challenges of climate change? Does our management framework appropriately recognize the rights and needs of Alaskan tribes and subsistence cultures? Are our current allocation schemes and fishery limited access privilege programs (LAPPs) meeting the objectives that were envisioned when they were implemented? Is our science-management interface operating effectively? The analysis will develop and evaluate a reasonable range of alternatives for amending management policies and procedures so that an updated and robust NEPA document, considered in an MSA environment, can support, improve, and guide federal fishery management programs and actions now and into the future.

## Scope / Framework for alternatives

The federal action under consideration is amending the management policies and procedures in all federal fisheries managed under the Magnuson-Stevens Act and the Halibut Act for fisheries in the Gulf of Alaska, the Bering Sea and Aleutian Islands, and Arctic regions.

The analysis should focus on four foundational pillars of the federal fishery management regime most affected by climate related impacts:

1. Ecosystem effects and EBFM. The analysis could look at current policies and practices to determine if they meet the emerging challenges facing the marine ecosystems, fisheries, and management processes in Alaska. Are current policies forward looking, allowing the management regime to anticipate and proactively address ecosystem effects from climate change or other challenges? Do the current policies or practices account for the needs of non-target species or enhance ecosystem resilience? Have appropriate ecosystem indicators been identified, and are there improvements that can be made to the management system to utilize information regarding the status of these indicators to strengthen conservation and management? The analysis should consider and identify additional polices or practices to enhance the evolution of EBFM.
2. Current allocations and LAPP fishery management programs. The Council has performed evaluations of individual LAPPs and fishery allocations. But there has not been a review of these programs taken together, that looks at the cumulative effects of these programs, and whether they are meeting their original intent. The

promotion of LAPPs was a key component of the 2004 groundfish management policy. Are there challenges or unanticipated consequences from such programs to fishery participants, fishing communities, or fishing economies, particularly in the context of rapid environmental change? Have federal fishery management programs resulted in unanticipated and/or unnecessary restrictions or impediments to participation in entry level fisheries, or do fishery management programs provide opportunities for entry level participants to work their way up in the fisheries? Do LAPPs and sector allocations provide opportunities for improved fishery practices such as bycatch avoidance or improved efficiencies? The analysis should explore the performance of existing programs as well as the challenges and opportunities arising from LAPPs and allocations. The analysis should consider and identify potential conservation benefits through improved fishery practices as well as opportunities or challenges to entry level participation in federal fisheries.

3. Tribal and Indigenous engagement. The impacts of federal fisheries on the cultures, economies, and subsistence ways of life in rural Alaska communities are a rapidly growing area of concern in the federal fishery management process. Concerns regarding the impacts of federal fisheries on subsistence resources and the Indigenous cultures and communities supported by those resources have dramatically escalated in recent years. This is true for all regions of the Alaska EEZ. The recognition of Tribes in Alaska, coupled with the growing interest and capacity of Tribal entities were not anticipated in 2004, and warrant special attention. The Council has taken several steps and actions to improve and facilitate engagement with Tribes and Indigenous peoples, especially in rural Western Alaska. But current engagement with Indigenous peoples and Tribes has largely been through an ad hoc mix of committees, work groups and task forces. The analysis should review these initiatives to consider and identify policies and procedures that can build on these initial steps to ensure that Indigenous peoples and Tribes have a meaningful role in the fishery management process.
4. The Intersection of Science and Management. There is an urgent need to better understand the effects of climate change on the ecosystems and fisheries of the Alaska EEZ. Developing a more robust knowledge base is necessary to fully understand, anticipate, and address the effects of climate change. This knowledge base should include both western science as well traditional Indigenous knowledge. There are several processes at play to inform the scientific process regarding the needs and priorities for federal fishery management in Alaska. The Council's SSC provides a list of research priorities, which are approved by the Council and then forwarded to the Alaska Fishery Science Center and entities like the NPRB. In addition, NOAA develops its own research priorities which may or may not align with the research priorities of the Council and the interested public. The role of Indigenous knowledge remains unclear, but IK certainly offers opportunities to improve the overall understanding of climate change related impacts. Would improved communication, coordination and expanded funding for research and

analysis benefit the scientific and management processes? How can IK be better incorporated into the process? What mechanisms might be employed to accomplish these goals? The analysis should look at opportunities for building a stronger and more robust knowledge base to inform fishery management.