

FISHERIES AND ECOSYSTEM MODELING SERVICES
REQUEST FOR PROPOSAL

Overview:

The Alaska Marine Conservation Council (AMCC) seeks a consultant with expertise in population dynamics modeling, fisheries stock assessment, and fisheries management strategy evaluation to analyze two management actions being developed by the North Pacific Fishery Management Council (Council): (1) abundance-based Prohibited Species Catch (PSC) limits for Pacific halibut in the Bering Sea/Aleutian Islands (BSAI) groundfish fisheries, and (2) a Fishery Ecosystem Plan (FEP) for the Bering Sea. The goal of the project is to better inform AMCC's policy positions on these management actions.

Background:

AMCC works to protect and restore the marine environment through sustainable fishing practices, habitat protection, and local stewardship. We support an ecosystem approach to research and marine resource management that incorporates the best available science, experiential knowledge, and the wisdom of tradition.

1. Abundance-based halibut PSC limits

In June of 2015, the Council took final action on BSAI halibut PSC limits, recommending reductions of 21% to the BSAI groundfish fishery. The Council also identified the potential efficacy of an abundance-based approach to halibut PSC management and initiated the process to begin exploring that concept. Among other things, the Council has created an inter-agency workgroup of Council, National Marine Fisheries Service (NMFS), and International Pacific Halibut Commission (IPHC) staff (hereinafter "Workgroup"), which is presently considering a number of issues related to indexing halibut PSC to abundance. The Workgroup prepared a discussion paper for the April 2016 Council meeting, which provides information on current usage of BSAI halibut bycatch, data sources available to inform an abundance index, candidate indices and control rule considerations. The Workgroup's current focus is determining an index for halibut abundance that can, among other things, be used to effectively capture the impact of bycatch removals on Bering Sea halibut. The Workgroup will continue analyzing various indicators used to measure halibut abundance and will be holding a public workshop at the Alaska Fisheries Science Center in Seattle, on September 12th. Abundance-based halibut management will likely be on the Council's agenda in October 2016.

2. Bering Sea Fishery Ecosystem Plan

Last year the Council initiated work on a new Bering Sea FEP. The first phase is to develop a strategic document identifying goals and policies, and to generate action plans as a step toward implementing specific components of an FEP. The FEP is intended to be a tool to help the Council respond to climate change effects on fishery resources.

The Council staff has begun working on the FEP and will periodically have this work reviewed by the Ecosystem Committee and the Council. The FEP may come before the Council in October or December.

Scope of Work:

In order to achieve the goals of this request for proposal, AMCC seeks the following:

1. *Abundance-based halibut PSC limits*

Task 1: Analysis of the Workgroup's April discussion paper, with specific feedback related to:

- the feasibility of using the NMFS eastern Bering Sea shelf trawl survey and the biomass estimate from the IPHC stock assessment as indices for halibut abundance;
- the assumptions required with respect to the appropriate weighting of indices; and
- the potential advantages and challenges of incorporating additional surveys (e.g., the Bering Sea shelf, Aleutian Islands, NMFS sablefish longline survey, and Gulf of Alaska trawl surveys to develop an Alaska-wide index of abundance), and the Integrated Model-based index approach into the abundance-based management process.

Task 2: Analysis of the Workgroup's draft documents made available during the September 12th workshop.

2. *Bering Sea FEP:*

Task 1: Review and analyze work product from the FEP plan team or FEP process as requested by AMCC. These products will likely include a draft climate change module for Bering Sea FEP and other draft FEP action modules, as well as the next iteration of the FEP draft). Depending on the work product, specific feedback is requested on the product's:

- assessment of the social and economic values associated with ecosystem services, including considerations of changes in those services and their valuation under various climate change scenarios;
- consideration of ecosystem dynamics, such as predator-prey interactions; and
- development of ecosystem indicators for fishery management, including biological indicators, habitat requirements, and socioeconomic conditions.

Deliverables:

1. *Abundance-based halibut PSC limits*

The consultant shall provide AMCC with a written report for each task listed above. Prior to developing the reports, the consultant will discuss the scope of each report and a format that will be most useful.

- The report for Task 1 shall be delivered by August 30th;
- the report for Task 2 shall be delivered by October 1st.

AMCC will use the reports for internal purposes, but may share the analysis or components of the analysis with stakeholders, and/or appropriate state and federal agencies.

2. Bering Sea FEP:

The consultant shall provide AMCC with a written report for each task listed above. Deliverable timeline will be based upon the workflow of the FEP plan team, but will be no later than December 15, 2016. Prior to developing the reports, the consultant will discuss the scope of each report and a format that will be most useful.

Term of Project:

This is a five-month project, with the potential for additional work, contingent upon availability of funds and work performance. The budget for the project, including consultant fees and any travel needed is \$20,000. Rate and terms of pay will be negotiated with successful applicants.

Consultant Capabilities:

The consultant selected will have:

- a PhD in fisheries science, with a specialization in fisheries population dynamics modeling, fisheries stock assessment, and fisheries management strategy evaluation;
- ideally possess a background in fisheries management and policy, with preference for experience with the Council and IPHC processes;
- sufficient time and capacity to dedicate to project in the timeframe identified and ability to attend the Workgroup workshop on September 12 (in Seattle); and
- an appreciation for the social, biological, and economic dimensions of fisheries management.

Submitting a Proposal:

Please submit a brief proposal, not to exceed two pages, including qualifications for the project, envisioned approach for completing the tasks, ability to dedicate time to the project in the timeframe outlined, any potential conflicts of interest. A CV should be attached to the proposal.

Process:

All proposals shall be submitted as soon as possible, but no later than July 31, 2016. Proposals should be submitted via email to Shannon Carroll (shannon@akmarine.org).

Inquiries:

You may direct questions on this RFP to: Shannon Carroll at shannon@akmarine.org