



September 17, 2024

Ms. Elizabeth Chilton  
Fisheries Service, Office of Science and Technology  
1315 East-West Highway, F/ST4  
Silver Spring, MD 20910  
Via email: elizabeth.chilton@noaa.gov

Dear Ms. Chilton:

At its June 2024 meeting, the North Pacific Fishery Management Council (Council) reviewed and updated research priorities as recommended by its Scientific and Statistical Committee (SSC). This was done for two purposes: 1) to identify research needs to communicate to the Secretary as mandated under the Magnuson-Stevens Act, and 2) to update the research community and funding agencies on research needs in the North Pacific.

The Council bases its management decisions on rigorous analyses and the best available science on stocks, ecosystems, fisheries, and communities. A critical component of this operational approach is for the Council to regularly evaluate the appropriateness of ongoing data collection and research efforts, and communicate any emergent research needs to involved scientists and funding entities. At present, the Council engages in this comprehensive review on a triennial basis.

Research priorities designated as [Critical Ongoing Monitoring](#) are of the highest priority level for the Council. These priorities create and maintain indispensable data that substantially contribute to our understanding and management of fish populations, fisheries, and the communities dependent upon those fisheries. These essential projects include the surveys that provide fishery-independent data to stock assessments, among other things. Discontinuation or diminishment of the research that provides these data sets would leave a significant gap in the science needed to support sustainable and successful fisheries management in the North Pacific. The Council and its Scientific and Statistical Committee (SSC) continue to provide the utmost support for these priorities.

In addition to critical ongoing monitoring, the Council has identified the following research priorities which are similarly essential to the fulfillment of the Council's mission and obligations, but are time-limited in duration. The Council's Top Twelve List for 2024-2028 is provided below. Projects in the table are not listed in priority order – the Council did not assign differential ranks to projects within the top twelve.

#### **NPFMC Top Twelve Research Priorities for 2024 – 2028**

- Further research to reduce **western Alaska salmon bycatch** in Bering Sea groundfish fisheries (e.g. research on salmon and drivers of salmon distribution, as well as drivers of groundfish fishery behavior including avoidance of other PSC species).
- Quantify the magnitude of **fishing gear** (e.g., pelagic trawl vessels, derelict crab pots, and modified crab pots to reduce bycatch) **impacts on crab** and their associated benthic habitat and develop fishing gear innovations where needed.
- Evaluate direct **marine mammal-fishery interactions** (including feeding on discards and spatio-temporal trends in bycatch) and potential mitigation measures for marine mammal conservation.

- Examine the economic, social, and cultural **effects of fisheries and fishery management policy on communities** over time (including impacts from fishery policy changes and Tribal citizen and Tribal Nation reliance on, participation in, and impacts of federally managed fisheries).
- Develop actionable **ecosystem indicators** relevant to single-species stock assessments and ecosystem assessments that address climate change impacts to managed stocks
- Continue to acquire **basic life history information** with an emphasis on improved estimates of size/age at maturity to advance understanding of the mechanisms for how maturity changes over space and through time.
- Increased understanding of the spatial distribution, habitat requirements, and movement of **crabs relative to life history events and fishing**.
- Develop predictive tools and **models that evaluate the impact of multiple projected climate scenarios** on managed resources to inform management options related to ecosystem production and resilience and adaptation of fishing communities.
- **Retrospective and meta- analysis** regarding whether, how, when and why objectives and goals of fishery management plans are or are not achieved over time (e.g., Bmsy proxy evaluation).
- **Norton Sound Red King Crab** case study as a pilot study for the incorporation of Local Knowledge, Traditional Knowledge, and subsistence information in a relatively small scale fishery that is experiencing challenges related to both stock and climate change factors.
- Improve **surveys in untrawlable habitat**, particularly for rockfish, Atka mackerel, sculpins, and snow crab.
- Improve **discard mortality rate estimates** for scallops, crab, and groundfish stocks by gear types.

Thank you for the opportunity to provide you with our updated list of research priorities.

Sincerely,



David Witherell  
Executive Director

CC: NMFS AFSC: Dr. Robert Foy  
ADFG: Mr. Doug Vincent-Lang, Ms. Rachel Baker, Mr. Chris Siddon  
USFWS: Ms. Sara Boario, Ms. Holly Carroll  
NPRB: Ms. Lynn Palensky, Dr. Matthew Baker  
AOOS: Ms. Sheyna Wisdom  
UAF: Dr. S. Bradley Moran  
OSU: Dr. Selina Heppell  
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