Mr. John Kurland, Regional Administrator NOAA Fisheries, Alaska Region

709 West Ninth Street Juneau, AK 99802-1668

RE: Research Priorities Triennial Review

Ms. Angel Drobnica, Chair

North Pacific Fishery Management Council 1007 West Third, Suite 400 Anchorage, AK 99501-2252

Chair Drobnica and Regional Administrator Kurland —

Under Sixty Cod Harvesters (USCH) is a trade organization representing fixed gear vessels in the North Pacific. Our member vessels harvest Pacific cod, as well as a variety of other economically and culturally important species, including halibut, sablefish, salmon and crab. We appreciate this opportunity to comment on North Pacific research priorities.

USCH supports research priorities that will inform ecosystem-based fisheries management. This includes data collection and research that bolsters use of ecosystem indicators, and dynamic management frameworks, within stock assessments, fishery management plan development, and TAC setting processes. These approaches are increasingly critical considering the large-scale changes occurring in North Pacific ecosystems, the cascading effects of those changes, and the complexity of interactions/impacts between fisheries.

Specifically, we would ask that Council priorities include the following:

- Emphasize the ongoing urgency of priority #189 from the 2021 review: "Develop stock-specific ecosystem indicators and incorporate into stock assessments." This work should include precautionary responses to climate change factors.
- Research providing baseline data, and the ability to track change, for crab life cycles, movement patterns, and associated ecosystem characteristics. Emphasized in previous review under priority #148.
- Improved genetic information and sampling processes for salmon PSC.
- Improved mechanisms for estimating unobserved fishing mortality.
- Assessment of habitat and ecosystem impacts from fishing effort, including the cumulative impact of repeated effort over time. This should include benthic structures, habitat damage *and* disturbance, and "ecosystem component" fauna.
- Post-release mortality studies for discarded species, in which lack of existing research (i.e. crab), or emergence of additional mortality factors (i.e. halibut), indicate that current DMRs may be inaccurately capturing mortality estimates.
- Strategies for precautionary management addressing climate change impacts.

Sincerely,

Hannah Heimbuch, Executive Director, Under Sixty Cod Harvesters