

Alaska Fisheries Science Center Resource Ecology and Fisheries Management Division







Economic and Social Sciences Research Program

Goal

The goal of Economic and Social Sciences Research program is to maximize the economic growth of the United States by improving the competitiveness of Alaska seafood industry in the world market and by maximizing the income and employment of Alaska fishermen and American workers, as per <u>Executive Order 13921</u> (May 7, 2020).

What We Do

The Economic and Social Science Program (ESSR) staff provide <u>economic and</u> <u>community information to resource managers</u>, industry leaders, communities, and other agencies.

Each year, economic data are compiled and synthesized in the <u>Groundfish</u> and <u>Crab</u> Economic Status Reports to provide empirical information on the economic value of the federal groundfish and <u>crab</u> fisheries of the North Pacific, the economic status of associated fishing and processing industries, and their contributions to regional income and employment. Together with the fishing community-level participation and vulnerability information provided through the <u>Annual Community Engagement and</u> <u>Participation Overview (ACEPO) report</u>, these are used to support resource management decisions and inform stakeholders and the public.

We collect and analyze data and develop models for assessing the effects of changing markets, environmental conditions, and fisheries management strategies on fisheries and fishing communities. Human dimensions-related objectives in the Magnuson-Stevens Act covered by the ESSR Program include:

- Commercial profits and employment
- Fishery stability and community resilience
- Recreational and subsistence opportunities
- Seafood markets and trade
- Community economic impacts

We also provide economic and social science to improve conservation and management decisions under the Endangered Species Act, the Marine Mammal Protection Act, the National Environmental Protection Act, the Regulatory Flexibility Act, and the National Marine Sanctuaries Act, and numerous executive orders, policy guidances, and strategic initiatives.

2024 Accomplishments

- <u>Documented the socio-economic impacts</u> of ongoing international, domestic, and environmental challenges facing Alaska seafood companies and communities.
 - Our analysis of seafood trade and trade policy supports ongoing regional, state, and federal action on Alaska seafood.
 - Compiled official U.S. trade statistics to evaluate effects of tariffs, and describe global demand for Atka mackerel, Pacific cod, Pacific ocean perch, northern rock sole, and yellowfin sole.
- Integrated economics into stock assessment projections.
- Collected 227 socioeconomic surveys from Alaska fishing participants and businesses.
- Conducted community assessments of groundfish and crab fisheries participation and social vulnerability through our updated Annual Community Engagement and Participation Overview Report (ACEPO).
- Assessed the bioeconomic effects and regional economic impacts of marine heatwaves, ocean acidification, and tariffs, on Alaska fisheries, and integrate this information into climate-enhanced stock assessment models.
- Contributed data and analyses to support North Pacific Fishery Management Council catch share program reviews for Crab Rationalization and Amendment 80.
- Began work to advance AI/ML approaches to collect fishing trip characteristics and price information from public-facing marine charter fishing websites.
- Collaborating to develop new methods to assess lost values to recreational and subsistence fisheries now eligible under the disaster relief program.
- Developed innovative science and tools for understanding and communicating fishing community vulnerability, and provided stakeholders with the best available information needed to address ecosystem and resource management challenges now and into the future.
- Worked with communities, and fisheries managers to identify best practice Local and Traditional Knowledge protocols and onramps into decision-making.
- Facilitated 11 workshops with Alaska fishing communities on topics including resilience, food security, energy innovation, workforce development, fisheries access and sustainability. Resulted in novel projects for moving forward with resilience initiatives in Alaska.
- Examined the spatial distributions of the economic multipliers for Southwest AK fisheries
- Conducted zip-code level economic impact analysis for Alaska fisheries.

2025 Preview

- Conduct assessment of multi-regional economic contribution of Alaska fisheries.
- Multiregional economic impact analyses of snow crab collapse, rebuilding and, and multilateral tariffs of change in Gulf of Alaska fisheries from environmental change.
- Develop AI/ML approaches to collect fishing trip characteristics and price information from public-facing marine charter fishing websites.
- Develop and test surveys of Alaska saltwater anglers to inform management issues in the Pacific halibut charter fishery and patterns of Alaska visitation and associated economic activity.
- Collaborate on development of national geospatial inventory of physical and human capital supporting the fishing and seafood industry and working waterfronts, including subsistence fishing in Alaska.
- Co-produce community-led resilience initiatives focused on workforce development, energy innovation, fisheries access and sustainability, environmental stewardship, and localized science.
 - Work on bioeconomic models to forecast effects of ocean acidification on Alaska crab and groundfish.
 - Monitor the status of global markets and the U.S. trade balance for Alaska seafood products including Alaska pollock, flatfish, rockfish, king crab, and snow crab.



Howard Lutnick Secretary of Commerce

Vice Admiral Nancy Hann

Acting Under Secretary of Commerce for Oceans and Atmosphere

Emily Menashes

Acting Assistant Administrator for Fisheries

February 2025

www.fisheries.noaa.gov

OFFICIAL BUSINESS

National Marine

Fisheries Service

Alaska Fisheries Science Center 7600 Sand Point Way N.E. Seattle, WA 98115-6349