

## United States Department of the Interior



U.S. FISH AND WILDLIFE SERVICE 1011 East Tudor Road Anchorage, Alaska 99503-6199

FWS/AFES

Report # B-6: U.S. Fish and Wildlife Service Report to the North Pacific Fisheries Management Council, April 2017.

The following information is a summary of the major updates from the U.S. Fish and Wildlife Service (Service) that the Service is involved in related to the affairs of the North Pacific Fisheries Management Council.

## I. Assessing the Risk of Marine Invasive Species in the Bering Sea

Potential introductions of marine invasive species through ballast water exchange and hull fouling from global and regional vessel traffic is a heightened concern in Alaska and throughout the Arctic. The Bering Sea's history of geographic isolation has kept the potential for marine invasive species introductions relatively low, but new patterns in global shipping traffic and an expanding footprint of development in the Arctic may heighten the risk of introductions. The region's climate has also changed, resulting in warm water species moving northward and decreased seasonal sea ice that has served as a historic barrier to other species from the North Pacific. The Bering Sea is a high volume corridor for international shipping, is central to expanding Arctic commerce, and hosts substantial commercial fishing traffic from the northwest coast of the U.S. and Canada. These vectors, combined with its range of marine environments, make it a bellwether for more broadly assessing risk from marine invasive species in Alaska.

The Service is collaborating with the Alaska Center for Conservation Science to assess the risk of invasive species to the Bering Sea and has developed a quantitative invasiveness ranking system that has been applied to a list of more than 70 marine species that may threaten commercial fishing and subsistence activities vital to the region's communities. Using species-specific biological characteristics in relation to shipping traffic pathways and projected future water temperature profiles for the Bering Sea, the team has identified regions in the Bering Sea that are most likely to experience future increases in invasive species abundance. In addition, the team is developing outreach and engagement activities targeted for local communities and the maritime industry in order to raise awareness and promote early detection and prevention practices. The team expects to complete the analysis phase by late March 2017and will conduct outreach activities in local communities during the summer of 2017 as well as develop a booth

for the Marine Expo in Seattle in November 2017. This project is funded by the North Pacific Research Board.

For further information, contact Aaron Poe, Aleutian and Bering Sea Islands Landscape Conservation Cooperative Coordinator, at aaron\_poe@fws.gov (907-786-3834).

## II. Coastal Resilience and Adaptation in Alaska

Landscape Conservation Cooperatives (LCCs) are public-private partnerships primarily funded by the Service to address large-scale environmental conservation issues throughout the U.S. and much of Canada. Four of Alaska's LCCs, the Aleutian Pribilof Islands Association, and Alaska Sea Grant joined numerous local partners to host coastal resilience workshops in five regions of Alaska (Aleutians, Bering Strait, Bristol Bay, the northwest Arctic, and southeast Alaska) during the fall of 2016. Almost 260 participants from 52 tribes, 15 state and federal agencies, and several research institutions identified key vulnerabilities for coastal resources and communities. They also identified key data and information gaps associated with those vulnerabilities and opportunities for communities and agencies to come together to address them. Some findings of potential interest to the North Pacific Fisheries Management Council (Council) include:

- The desire for greater collaboration between local community members, industry, and agencies understand the distribution of key aquatic habitats in nearshore areas that sustain local subsistence harvest as well as commercial fisheries.
- The desire for greater participation by local communities and tribal governments in research on coastal resilience ranging from question development to data collection and dissemination of results.
- The desire for greater participation by local communities and tribal governments in the development of commercial harvest plans, policies, and regulations to ensure commercial fisheries do not impact subsistence resources.

Through this process, the LCCs have identified over 60 research and policy needs relative to the management of marine and coastal resources in Alaska. The Service is happy to share more about the process and these results with any interested Council technical committees or working groups.

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