October 2011

Conservation in Action

Aleutian Bering Sea Islands Landscape Conservation Cooperative

Purpose

The Aleutian and Bering Sea Islands Landscape Conservation Cooperative (ABSI -LCC) is one of 21 Landscape Conservation Cooperatives (LCCs) identified nationally to complete a network of LCCs across the nation. The LCC concept was formed as land and resource managers recognized that dealing with the potential effects from climate change will require a stronger level of collaboration. They are designed to provide connections between researchers and managers seeking to address large landscape and seascape concerns. By identifying opportunities for collaboration, providing additional science-based information to inform management decisions and by working with the Alaska Climate Science Center and other partners, the LCC will help managers anticipate and respond to climate driven changes.

Photos: Bill Lamed and Laura Whitehouse/ USFWS

Wintering flock of threatened spectacled eiders in Bering Sea ice out of St. Lawrence Island.

The ABSI-LCC will facilitate conservation planning and inform resource management actions on broad geographic scales to address challenges that may be linked to climate change. The ABSI-LCC will be focused on science-based approaches rather than having any regulatory or policy role that belongs with LCC partners.

Ecological Resource Base

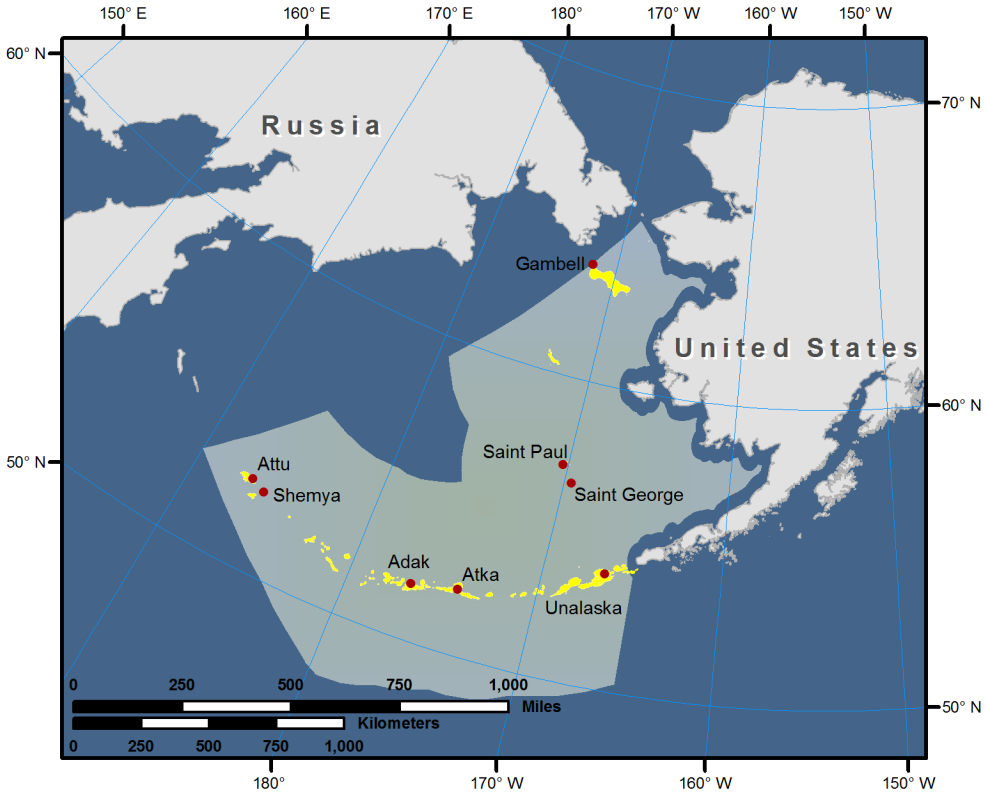
The Aleutian and Bering Sea Islands area supports an extraordinarily productive marine ecosystem. Pollock, cod, flatfish, halibut, crab, and salmon are abundant, and these Alaskan fisheries provide more than half of the seafood consumed in the United States. In addition to the commercial fishing industry, the region supplies food for more than 30 Alaska Native communities through subsistence hunting and fishing.

Millions of seabirds from more than 30 different species breed and summer here. Nearly half of Alaska's seabirds live in 10 colonies in the Bering Sea. Tens of thousands of marine mammals including Steller's sea lions, sea otters, seals and whales are found depend on this important region for habitat.

The islands of this vast region were mostly formed from volcanic activity that is still shaping the landscape today. There are 52 historically active volcanoes in the region and 14 have erupted since 1990. The Kasatochi eruption of 2008 completely buried the island in a new layer of ash that gives researchers an opportunity to understand the evolution of ecological systems on volcanic islands.

Potential Partners

Strong partnerships already exist to address many of the resource management related concerns throughout the area. The ABSI-LCC will not duplicate or assume the authority of any of the existing partnerships rather it will seek to find efficiencies through collaboration and through the collection of additional science to address conservation concerns shared by the cooperative's partners. Many shared goals have already been identified by existing partnerships.



For instance, the North Pacific Research Board (NPRB) and the National Science Foundation (NSF) entered into a historic partnership in 2007 to support the Bering Sea Project, a comprehensive investigation to understand how climate change is impacting the Bering Sea ecosystem, ranging from plankton to fish, seabirds, marine mammals, and ultimately humans. The project integrates two research programs, the NSF's Bering Ecosystem and the NPRB's Bering Sea Integrated Ecosystem Research Program (BEST-BSIERP) with substantial in-kind contributions from the National Oceanic and Atmospheric Administration and the U.S. Fish & Wildlife Service.

The Pribilof Collaborative, a group established by The Nature Conservancy and World Wildlife Fund is comprised of a large group of stakeholders interested in resource management around the Pribilofs - including commercial fishing, tribal governments, universities and government agencies.

Invasive species have been a long-standing concern throughout the area. Many partnership efforts have been developed to address invasive species on specific islands. In general, the climate change is expected to increase the likelihood of new introductions or expansions of invasive species. Changes in populations of commercially important fish and crab, marine mammals, and marine birds have been big news over the last three decades in the region. Active stakeholders include the fishing industry, local communities, management agencies (such as NOAA, USFWS, and Alaska Department of Fish and Game), and a number of NGOs. The North Pacific Fishery Management Council (NPFMC) has the lead in incorporating ecosystem considerations in federal fishery management plans while the Alaska Board of Fisheries has the lead in state waters. The NPFMC has recently commissioned the development of a Fishery Ecosystem Plan for the Aleutian Islands which was developed by interdisciplinary group of biologists from NPFMC, NMFS, FWS, and the NPRB with input from several NGOs.

The reduction in sea-ice is bringing new opportunities for shipping routes that would cross through the ABSI-LCC. A number of stakeholders have concern about oil spills including the Shipping Safety Partnership, the Marine Exchange of Alaska, various communities, U.S. Coast Guard, Alaska Department of Environmental Conservation, NOAA, and FWS.

Partnerships have been formed to address many of the big issues from community-based rat prevention to marine debris and commercial fisheries management. These longstanding partnerships are in place and have identified many shared goals.

Expected Products and Outcomes

With so many strong partnerships in place, the challenge for the ABSI-LCC will be to bring these multiple science efforts together to identify shared goals and consider how climate change may add new dimensions to existing resource challenges and to seek ways to appropriately integrate this science with on-going marine partnerships.

Collaboration among agencies, industry and other stakeholders is needed to help improve our understanding of how climate may impact this biologically rich area. Stakeholders in this region share the need to understand ecosystem processes in the marine ecosystem and how big drivers like climate change interact with fishery management and other issues. A need exists for effective ecosystem models that can be used for predicting impacts of physical change in ocean and oceanic island habitats which would benefit from input from the diverse partnerships already in place.

The ABSI-LCC may also help to create efficient monitoring programs that benefit multiple stakeholders throughout the LCC by linking terrestrial to ocean monitoring, and provide science-based decision support tools, and determine how to insure long-term data accessibility for all.

How to Participate

The ABSI-LCC will begin a pilot process to dialog with potential partners during the winter of 2010-2011. The ABSI-LCC is not anticipating full development until 2012, but will use this time period to establish an initial partnership of interested agencies and organizations.

Contact information:
Douglas Burn
douglas_burn@fws.gov
907/786 3807