

- AOOS is participating in development of the international Sustained Arctic Observing Network, as well as the Bering Sea case study included in the Arctic Council's Arctic Marine Shipping Assessment led by former board member **Dr. Lawson Brigham**.
- **Molly McCammon** serves on the state's Natural Systems Technical Working Group and Research Needs Working Group as part of the state's public process for developing a Climate Change Impacts Strategy. That process is led by AOOS board member and State Environmental Commissioner **Larry Hartig**.
- **Nora Deans** attended the National Marine Educators Association conference in Portland, Maine, July 26–27.
- Prince William Sound project lead **Dr. Carl Schoch** serves on the Alaska Geospatial Data Committee.
- AOOS UAF lead scientist **Dr. Mark Johnson** is participating on the national team developing national modeling standards and policies.
- **Dr. Johnson** addressed the Unmanned Aircraft Systems Workshop in Fairbanks in August.
- AOOS Data Manager **Rob Cermak** continues to take an active role in developing national data management standards as part of several national DMAC working groups.

AOOS celebrates World Ocean Day 2008 in Juneau

Carolyn Rosner represented AOOS at a World Ocean Day event at the NOAA Ted Stevens Marine Research Institute in Juneau in June 2008. Two hundred people gathered to explore the connections we all share with our ocean.

The day brought together groups whose work requires a connection with the ocean. Researchers from governmental and academic institutions, local and national environmental advocacy groups, federal and state agencies, commercial fishing and seafood processing organizations, and nature education and watershed partnerships were represented.

Activities included information tables hosted by twenty organizations that work directly with ocean and marine issues, beach walks with professional naturalists, film and speaker presentations focusing on ocean sciences or other ocean literacy issues, games, touch tanks, and educational displays. Presentations and other ocean-related films have been shown repeatedly on KTOO's *360 North* program.

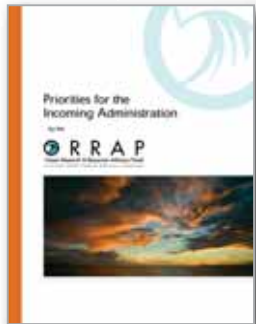


EVOS 20th Anniversary

On March 24, 2009 AOOS will join a host of Prince William Sound organizations and communities in events commemorating the 20th anniversary of the *Exxon Valdez* oil spill. **Dr. Scott Pegau** will demonstrate the ocean circulation and ecosystem models that AOOS has been developing to predict the drift trajectory of future oil or other hazardous material spills as well as search and rescue targets. Video feeds of the events will be available in Seward, Kenai, Cordova and Valdez, and at the Dena'ina Center in Anchorage. For more information, contact **Stan Jones** at jones@pwsrccac.org.



ORRAP: Ocean Research and Resources Advisory Panel



ORRAP is a federal advisory panel that provides advice to the nation's ocean research and management agencies, AOOS director **Molly McCammon** participated in developing a transition report for the Obama administration advocating for increased focus on ocean research, full implementation of the ocean observing system, and new programs for ocean energy.

Find the full report at www.aos.org.

COSEE Alaska: People, Oceans and Climate Change

In August 2008, the Ocean Sciences Division of the National Science Foundation announced the award of a Center for Ocean Science Education Excellence (COSEE) in Alaska. AOOS led the effort to bring COSEE north as a major component of its education and outreach effort, creating the 12th center in the national COSEE network, www.cosee.net.

COSEE Alaska is a partnership involving AOOS, the Alaska SeaLife Center, the University of Alaska Fairbanks (UAF) School of Fisheries and Ocean Sciences, the UAF Center for Cross-Cultural Studies, the Anchorage School District, and the Alaska Sea Grant Marine Advisory Program.

With both a regional (Alaska's arctic) and thematic (People, Oceans and Climate Change) focus, COSEE Alaska seeks to increase ocean literacy both within and outside Alaska and to weave together western science and traditional knowledge about ocean climate change to share with the nation.

The COSEE designation is especially timely, given the rapidly changing Arctic climate being blamed for storms that are eroding the seacoast, altering fisheries, thawing permafrost, and melting sea ice that polar bears, walrus and seals need for survival.

Ocean Science Fairs in Rural Coastal Communities

COSEE Alaska outreach activities will include workshops among scientists, teachers, and students, real and virtual field trips, and the creation of statewide Ocean Science Fairs. In October 2008, co-PI **Dr. Ray Barnhardt** and science fair consultant **Alan Dick** hosted an initial meeting of representatives from Alaska school districts to identify ocean science projects with substance and currency and to develop plans for establishing science fairs in remote rural coastal districts the first year. Three fairs are already underway: Lower Yukon-Kuskokwim, Unalaska and Sitka, and ocean scientists in the region are working on science fair project ideas for these communities.

SEANET: Scientists and Educators of Alaska NETWORK

COSEE Alaska will also expand the annual Communicating Ocean Science workshop at the Alaska Marine Science Symposium that draws more than 600 ocean scientists working in Alaska seas. We will use the workshop as an opportunity to formalize SEANET, a network of ocean scientists, marine educators, students, and community members involved in communicating about research in Alaska's seas. SEANET establishes long-lasting collaborations among these interest groups and strengthens communication among scientists and informal and formal educators and the public.

The COSEE Alaska grant culminates in a national ocean education and communication conference to be held in Alaska in 2012.



"[COSEE] provides a great opportunity to share with the world the dramatic changes we're experiencing in our region due to climate change and to help the Arctic research community connect directly with Alaskans, from fishermen, boaters, teachers and students to other marine stakeholders and the public."
Molly McCammon,
AOOS director and leader of
COSEE Alaska planning



UPDATE: National Ocean Observing Legislation



The US Senate's first action this January was passage of the Public Lands Omnibus Act, which included authorization for the National Integrated Coastal and Ocean Observing System (IOOS) and regional observing systems such as AOOS. The national and regional ocean observing systems are a vital tool for tracking, predicting, managing, and adapting to changes in our nation's waters. The Senate passed the legislation in recognition of the nation's need to provide predictions and forecasts necessary for safe maritime operations and to minimize losses from extreme storms, optimize ocean resources, sustain healthy ecosystems, and respond to climate change impacts.

The legislation has passed the Senate twice previously since 2002, but always stalled in the House until the summer of 2008 when it passed the House, but stalled in the Senate. Passage by the House is expected in the near future.

Prince William Sound Pilot Project: Forecasting Change in Alaska's Oceans



It's been twenty years since the *Exxon Valdez* veered off course and struck a reef, spilling oil into the pristine waters of Prince William Sound and severely damaging fisheries and livelihoods. Millions of dollars have been spent on studying the sound's oceanography and the health of its sealife. Complex ocean circulation and ecosystem models have been developed to predict the

drift trajectory of future oil spills as well as search and rescue targets.

This summer, researchers are releasing satellite buoys and using high-frequency (HF) Radar, as well as bringing a glider and an autonomous underwater vehicle (AUV) to the Sound. Data from these instruments will be used to field test real-time data against forecast models to evaluate how well we can predict the winds, waves and currents of Prince William Sound; to aid in responding to future oil spills, vessels and mariners in distress; and potentially to better understand the role of currents in larval fish transport and overall ecosystem health.

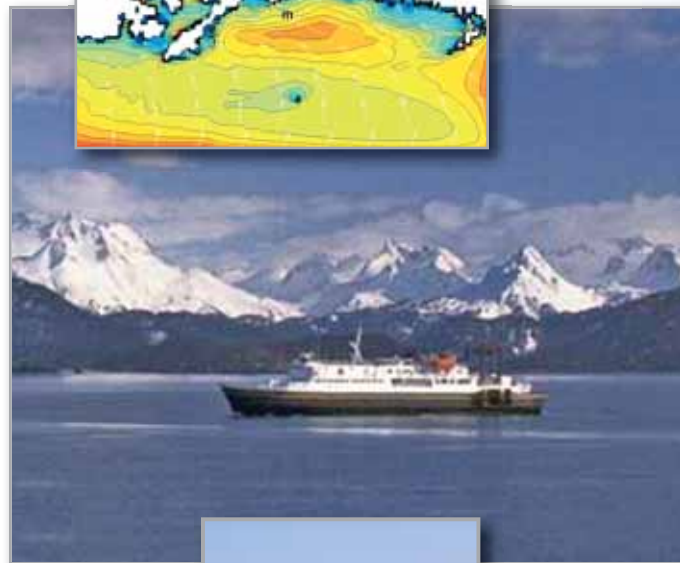
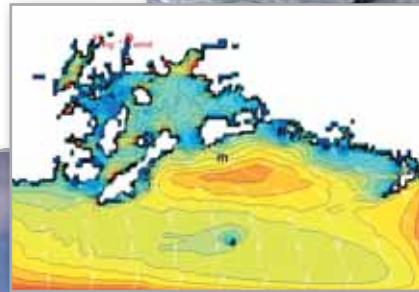
Visit www.aos.org/fieldexp/ to learn more.

Alaska Marine Information System



AOOS and the North Pacific Research Board have teamed up to develop the Alaska Marine Information System (AMIS), an integrated data system for Alaska marine and coastal projects, data and information products. AMIS builds upon the data management infrastructure developed at the UAF School of Fisheries and Ocean Science and the Alaska Supercomputer Center on behalf of AOOS as part of the national Integrated Ocean Observing System.

The system's goals are to provide a "one-stop shop" for tracking Alaska's marine research and monitoring projects with associated metadata; an archive for data and products that currently have no home; and display and visualization tools that add value to the data of use to stakeholders. Visit AMIS through the AOOS website, www.aos.org.



Pete Puffin's Wild Ride



Thank you for putting Alaska books into the hands of Alaska kids.
Susan Sillback, Glacier Valley Librarian
Thank you for your donation of Pete Puffin's Wild Ride. It is truly a wonderful book and will complement the first grade science curriculum series, "Alaska Animals." It is also a great addition to our library collection.
Beth Massengall, Mt. Spurr Librarian

AOOS provided financial support for a new children's book, *Pete Puffin's Wild Ride: Cruising Alaska's Currents* by Libby Hatton, published by Alaska Geographic.

The story features the adventures of Pete, a wooden Pacific horned puffin who accidentally slips off the side of a ship cruising to Alaska. Pete recounts his yearlong ride in Alaska's currents, while postcards to the grandfather who carved Pete recount the story of the little boy Eddy who lost Pete and what he learned in his search for his missing toy.

AOOS scientists **Phyllis Staben** and **Tom Weingartner** reviewed drafts of the book, and senior outreach manager **Nora Deans** worked closely with the author/illustrator to conceptualize the book and edit the text and illustrations. Web-based educational materials will appear on the AOOS and Alaska Geographic websites this spring.

A book signing for *Pete Puffin's Wild Ride* followed a talk about Alaska's seas by researcher and Alaska Sea Grant Marine Advisory Program agent **Reid Brewer** as part of the *Wildlife Wednesdays* lecture series held in Anchorage.

AOOS funds also ensured that every library and school in Alaska received a copy, to the delight of librarians and students around the state who shared their gratitude with us.

Arctic Data Collaborations

Three years of collaborative activities culminated during the 2009 Alaska Marine Science Symposium with a workshop hosted by AOOS and the North Pacific Research Board with the goal of sharing current Arctic research and monitoring activities among federal, state, local, academic, industry, and other partners. This workshop is an initial step toward developing a more comprehensive monitoring and assessment

plan for the Arctic which would allow each participating organization to focus on projects to meet its particular goals, while contributing to a larger data sharing and integration effort.

These efforts began with the Sea Ice Working Group, led by AOOS scientist **Dr. Mark Johnson** and the U.S. Arctic Research Commission, and was followed by a number of collaborative workshops hosted by UAF's International Polar Year program, AOOS, the North Slope Science Initiative, the Federal Climate Change Collaboration and other entities, including the oil and gas industry.

New observing initiatives, such as AOOS and the Arctic Observing Network, as well as the International Polar Year program, are resulting in significant environmental monitoring efforts of interest to industry for improving design criteria for specific locations and oil-spill mitigation and response efforts. At the same time, industry is collecting environmental data that in the short- or long-term are of significant value in helping us understand and adapt to the changing Arctic marine environment.

Several recent workshops have highlighted the importance of these collaborations: the Canadian/U.S. Forum on Oil and Gas and the MMS Information Transfer meeting; the Oil Industry and North Slope Stakeholders Conference in Barrow; and the Sea Ice and Stakeholder Needs Workshop in Barrow.

Alaska's Seas and Rivers Curriculum

Middle school teachers gathered in Kachemak Bay in June to develop case studies for grades 6-8 as part of the major revision of the Alaska Sea's and Rivers Curriculum. AOOS is supporting the new curriculum, and outreach manager **Nora Deans** shared AOOS web resources with the teachers at the Kasitsna Bay Lab during the workshop. Schools around Alaska are pilot testing the web-based curriculum this winter.

For more information, visit www.alaskaseasandrivers.org.

Sharing AOOS

AOOS staff, contractors, and board members highlighted Alaska ocean observing efforts at forums throughout the state and the nation.

- **Molly McCammon** and AOOS Senior Communications Team Lead **Nora Deans** celebrated the opening of the new Smithsonian Ocean Hall in December 2008.
- **Molly McCammon** was recently appointed to the National Academy of Science's Polar Research Board.