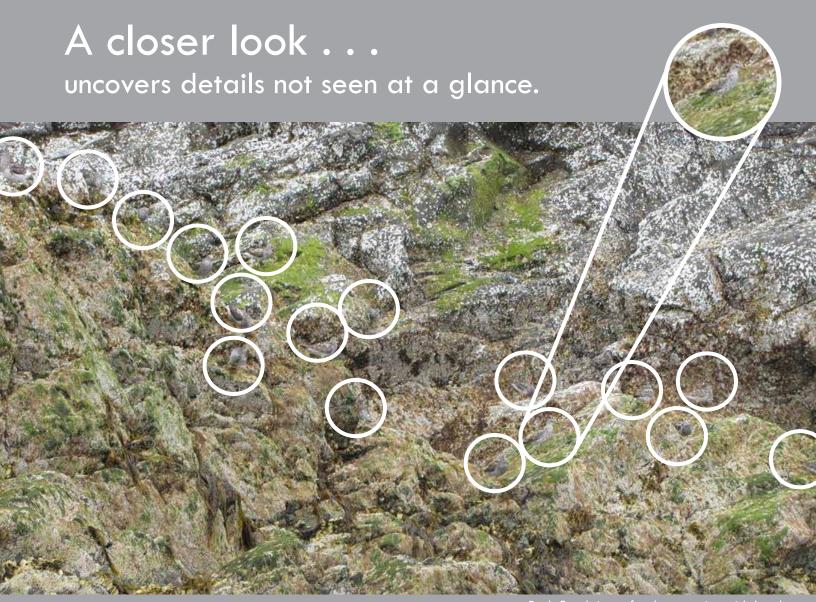
# A CLOSER LOOK



**COOK INLET REGIONAL CITIZENS ADVISORY COUNCIL** 

**2012 ANNUAL REPORT** 



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Rock Sandpipers teed among intertidal rocks

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## Message from the President and Executive Director

A closer look. Throughout this Annual Report you will see this theme. We chose it because it so accurately describes our approach to achieving our goals in 2012. With our thorough reviews, studies, on-site visits, initiatives, and environmental monitoring programs, we are taking closer looks in the field, at industry, at oil spill prevention and response, and at ourselves.

Our collaborative oversight continues to add value and improve industry and regulatory practices, as Cook Inlet RCAC is often the only non-agency entity reviewing oil discharge prevention contingency plans and regulations. Our close examinations in the field have turned up previously unknown species and are adding valuable scientific data to help us gauge the health of Cook Inlet's ecosystems. Our ShoreZone surveys have shown details of Alaska's coast that we are now revealing in new ways. Our new Cook Inlet Response Tool gives emergency responders better access to information to bring them closer to incidents that are in remote or inaccessible locations. We're improving access to data that is often difficult to retrieve from various outside sources, to take a closer look at environmental risks. Taking a closer look at operations through on-site visits and industry presentations has informed our decision-making and expanded our knowledge of what's working well and what can be better. One of our biggest accomplishments along this vein is our progress toward completing a comprehensive Cook Inlet navigational risk assessment. By isolating vessel traffic patterns and types, identifying highest risks, and closely analyzing the consequences of oil spills, we are providing Cook Inlet's navigation community with the most detailed picture to date of the Cook Inlet maritime environment. None of these accomplishments could have been done without our commitment to taking a close, hard look at the Cook Inlet region and those who rely on it.

As always, maintaining close relationships with our partners is critical to the success of our programs. Working diligently with citizens, stakeholders and industry, we are making progress to improve navigation, increase our knowledge of Cook Inlet's waters, inhabitants, and shorelines; and safeguard them for future generations.

John Williams
President

Michael Munger
Executive Director

## **Board of Directors**

John Williams, President City of Kenai

Grace Merkes, Vice President Kenai Peninsula Borough

Gary Fandrei Secretary/Treasurer Aquaculture Associations

Scott Smiley

Kodiak Island Borough

**Bob Flint** 

Recreational Interests

Rob Lindsey City of Kodiak

Deric Marcorelle

**Environmental Organizations** 

Molly McCammon

Municipality of Anchorage

Walt Sonen City of Seldovia

Michael Opheim

Alaska Native Organizations

Robert Peterkin, II

Alaska Chamber of Commerce

Carla Stanley City of Homer

Paul Shadura

**Commercial Fishing Organizations** 

## **Ex Officio Members**

Gary Folley

Alaska Department of Environmental Conservation

Kathleen King

Alaska Department of Natural Resources

Ginny Litchfield

Alaska Department of Fish & Game

Richard Prentki, Ph.D.

U.S. Bureau of Ocean Energy Management

Joe Dygas

U.S. Bureau of Land Management – Office of Pipeline Monitoring

Patricia Winn

U.S. Division of Homeland Security & Emergency Management

Matt Carr

U.S. Environmental Protection Agency

John Whitney

National Oceanic & Atmospheric Administration

Captain Paul Mehler, III

Captain of the Port of Anchorage

U.S. Coast Guard

Gary Lehnhausen

U.S. Forest Service

## **Our Mission**

To represent the citizens of Cook Inlet in promoting environmentally safe marine transportation and oil facility operations in Cook Inlet.



## **Corporate Funding Partners**

Hilcorp Alaska, LLC

Cook Inlet Energy Company

Marathon Oil Company

XTO Energy

ConocoPhillips

Cook Inlet Pipeline Company

Tesoro Alaska



## **Certified Participating Organizations**

As prescribed by the Oil Pollution Act of 1990 (OPA 90), certified stakeholder groups are those which have chosen to support our efforts on behalf of their organization, are open to offering members to serve on the Council, and want to be represented, kept informed, and consulted. On a three-year, rotating basis, these groups nominate and elect a representative and an alternate. We encourage interested groups to participate in the leadership of the Council through the one-time certification process. Contact Cook Inlet RCAC for more information.

#### **RECREATIONAL INTERESTS**

Alaska Sportfishing Assn.

Deep Creek Charter Boat Assn.

Alaska Charter Assn.

Kenai River Sports Fishing Assn.

Kenai River Professional Guide Assn.

#### **COMMERCIAL FISHING**

Alaska Whitefish Trawlers
Alaska Groundfish Data Bank
Kenai Peninsula Fishermen's Assn.
North Pacific Fisheries Assn.
Northern District Setnetters Assn.
United Cook Inlet Drift Assn.

#### NATIVE CORPS./VILLAGES/TRIBES

Kenai Natives Association, Inc.
Kenaitze Indian Tribe
Ninilchik Native Association, Inc.
Port Graham Village Council
Port Graham Corporation
Seldovia Village Tribe
Sun'aq Tribe of Kodiak
Cook Inlet Region, Inc.
Natives of Kodiak, Inc.
Nanwalek IRA Council
Seldovia Native Assn.

#### **AQUACULTURE**

Cook Inlet Aquaculture Assn. Kodiak Regional Aquaculture Assn.

#### **ENVIRONMENTAL INTERESTS**

Alaska Center for the Environment
Alaska Marine Conservation Council
Center for AK Coastal Studies
Cook Inletkeeper
Kachemak Bay Conservation Society
Kenai Watershed Forum
Kodiak Audubon Society
National Wildlife Federation
National Parks Conservation Assn.
ReGroup





## **Committees & Staff**

## PREVENTION, RESPONSE, OPERATIONS & SAFETY COUNCIL MEMBERS

Bob Flint
Rob Lindsey
Deric Marcorelle, Chair
Grace Merkes
Robert Peterkin, II
Carla Stanley
Michael Opheim
Paul Shadura
Barry Eldridge, Vice Chair

#### **PUBLIC MEMBERS**

Doug Jones
Jan Hansen
John Bauer
Robert Favretto
Scott Hamann
Ted Moore
Bill Osborn

## ENVIRONMENTAL MONITORING COUNCIL MEMBERS

Bob Flint
Deric Marcorelle
Molly McCammon, Co-Chair
Carla Stanley, Vice Chair
Michael Opheim
Elizabeth Chilton, Co-Chair
Jay Stinson

#### PUBLIC MEMBERS

Paul Blanche Steve Hunt Merritt Mitchell Kashif Naser Daniel Urban Craig Valentine James Showalter

#### **PROTOCOL CONTROL**

Bob Flint
Deric Marcorelle
Grace Merkes
Robert Peterkin, II, Chair
John Williams
Rob Lindsey

#### **CREDENTIALS**

Grace Merkes, Chair Robert Peterkin, II Gary Fandrei Paul Shadura (Alternate)

#### **EXECUTIVE**

Bob Flint Gary Fandrei Grace Merkes Molly McCammon Kristine Schmidt

#### **AUDIT**

Gary Fandrei Grace Merkes John Williams Robert Peterkin

#### **STAFF**

Michael Munger Executive Director

Susan Saupe Director of Science & Research

Steven "Vinnie" Catalano Director of Operations Jerry Rombach Director of Administration

Lynda Giguere Director of Public Outreach

Dinelle Penrod Office Manager Maritta Newgren Accounting & Grants Manager

Cindy Sanguinetti Transcriber



## A closer look at industry

Facility visits give us the opportunity to gain firsthand knowledge of industry operations, practices, and initiatives, and help us communicate Cook Inlet RCAC's priorities as part of the equation. In 2012, board and committee members and staff participated in two tours of very different operations.

#### **Drift River Oil Terminal**



In August, we toured the Drift River Oil Terminal and learned about Hilcorp Alaska's improvements and plans for future operations. After the 2009 eruption of Mt. Redoubt, the Drift River floodplain rose by 14 feet in some places, surrounding the facility with muddy debris from volcanic lahars. The tour focused on the tanks and work to reinforce protective berms with sheet pile, earth, and boulders to shield them from potential damage by mudslides from volcanic eruptions.

## **Endeavour, Spirit of Independence**

In September, Buccaneer Alaska invited us to tour the jack-up rig, Endeavour, Spirit of Independence, docked at the Homer Deep Water Dock. Our Science Director also reviewed a report summarizing findings of a survey of the rig following the discovery of several shells of a bivalve species known to be invasive in other ports.

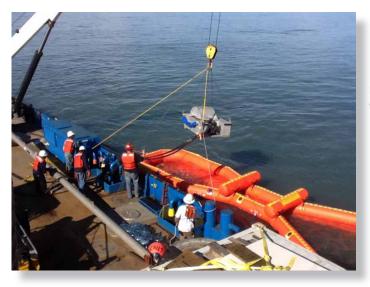
Board members tour the pump house at Drift River Oil Terminal (above). Endeavour, Spirit of Independence jack-up rig arrives in Homer (right).





#### **Drills and exercises**

As a representative of 13 stakeholder groups, Cook Inlet RCAC serves as an advisor to the Unified Command and integrates into the Incident Command System or Incident Management Team. The Unified Command consists of three entities: Responsible Party, Federal and State On-scene Coordinators. In drill exercises with Furie, Hilcorp, ConocoPhillips, Cook Inlet Energy, XTO Energy, and NordAq Energy, staff embedded in the Operations Section and Joint Information Center. Scenarios included well blow-outs, a 7.2 magnitude earthquake, a 4,000-gallon diesel spill, and a 5,000-gallon tank truck roll-over.



Deploying the Crucial 13 fuzzy disc skimmer (left).

## Easier access to industry data

We are working with contractors to make information that is typically buried in government databases or in file cabinets easier to access and use to understand potential environmental risks. One project is an on-line data tool for accessing monthly Discharge Monitoring Report (DMR) data on produced water discharges (including annual data compilations and summaries). Another is on-line reporting of ballast water data, such as source and discharge locations and volumes. This information will help Cook Inlet RCAC; local, state and federal government agencies; and industry to more clearly present and interpret information when called to evaluate associated permits and regulations.

## A closer look at oil spill prevention and response

#### **Expanding our Ice Forecasting Network**

Cook Inlet RCAC's Ice Forecasting Network of cameras and overflights delivers vital information to the National Oceanic and Atmospheric Administration (NOAA) ice forecaster to aid Cook Inlet mariners. With a boost from our Kenai delegation and the 2012 Alaska Legislature, Cook Inlet RCAC secured capital funding for two additional cameras to cover more area from Hilcorp Alaska's Granite Point and Cook Inlet Energy's Osprey offshore platforms. These join the six active cameras already in place at the XTO A platform, OSK (Offshore Systems Kenai) dock, ASRC Energy Services, Port of Anchorage, and Port MacKenzie.

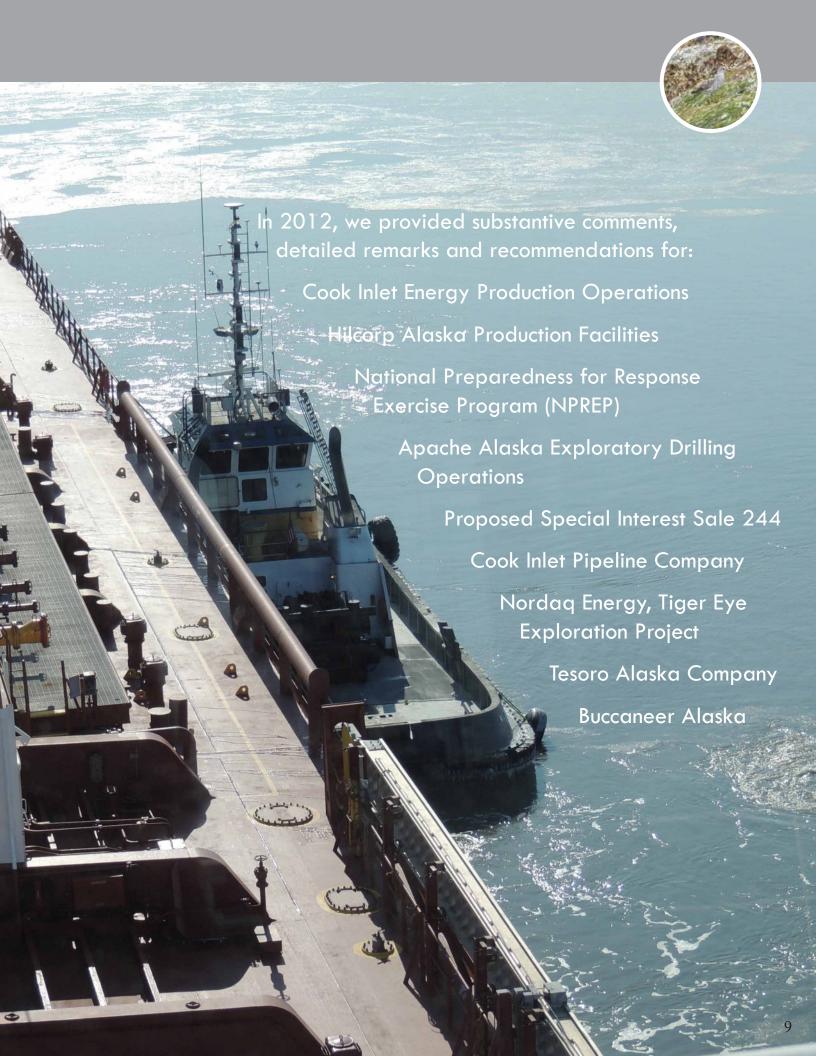
### Getting the best docking assist tugs for Cook Inlet

To prevent oil spills in Cook Inlet, one of our highest priorities has been to ensure the use of docking assist tugs as standard operating procedure for tanker traffic. Commendably, Tesoro Alaska has provided the best tugs to match Cook Inlet's demands. Cook Inlet RCAC called for a permanent docking assist tug following the *Seabulk Pride* incident in 2006, when the vessel broke away from the Kenai Pipeline Company dock during heavy ice conditions and grounded off the East Forelands on the Kenai Peninsula. Tesoro answered that call with the *Vigilant*. In December we welcomed the arrival of Tesoro's interim replacement tug, *Millennium Star*. We look forward to the arrival of the permanent replacement, the *Bob Franco*, which is currently under construction. That tug will feature increased ship handling abilities and response capabilities well suited for Cook Inlet's high currents and unpredictable winters.

### Providing expert and experienced contingency plan review

Contingency plan review is central to Cook Inlet RCAC's OPA 90 mandates. As a named reviewer under Alaska Statutes, Cook Inlet RCAC evaluates the region's oil discharge prevention and contingency plans (C-Plans) with our stakeholders' priorities and concerns in mind to promote responsible oil and gas development.

Cook Inlet RCAC staff, consultants, and Protocol Committee members thoroughly review each plan and craft detailed, relevant comments which are then integrated and submitted to the Alaska Department of Environmental Conservation (ADEC) for evaluation.



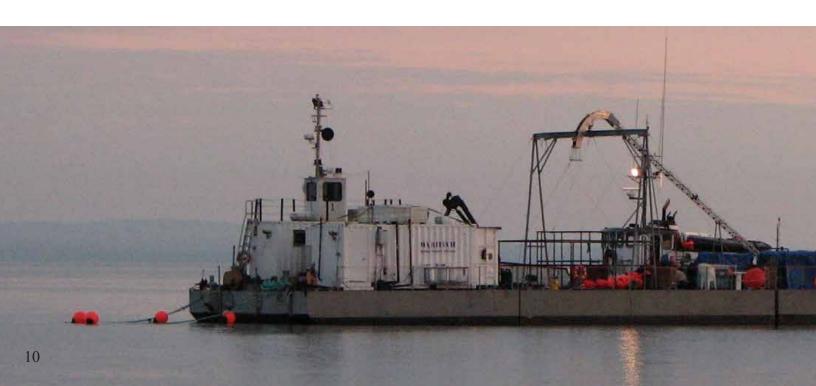
## A closer look at risks to navigation

## A Comprehensive Navigational Risk Assessment for Cook Inlet

Safe maritime navigation in the Cook Inlet region has always been among our highest priorities. For the past several years, we have worked to address the gaps in prevention with a comprehensive navigational risk assessment. The risk assessment will be among the most important contributions we can make to protect Cook Inlet mariners and our environment. The Alaska Department of Environmental Conservation, the U.S. Coast Guard and additional funding partners, including the Kenai Peninsula Borough, National Fish & Wildlife Foundation, Tesoro, and Prince William Sound RCAC have joined us in this endeavor.

We officially launched the risk assessment project in 2011, having already identified risks and potential mitigation measures through a Safety of Navigation Forum in 1999, the U.S. Coast Guard's Waterway Safety Assessment in 2000, and the Navigational Safety Forum in 2007. Since then, we have completed a number of important studies that have vastly increased our knowledge of the inlet. We now have a better understanding of vessel traffic, types and amounts of oil being moved, vessel activity levels throughout each region (upper, middle and lower inlet), and when and where traffic is busiest. We applied this information to historical data to characterize and forecast potential future spills. Throughout the process, we have benefited from a highly experienced advisory team with expertise and local knowledge in all issues pertinent to the assessment, such as infrastructure, relevant industries, waterways and their navigation, weather and habitats.

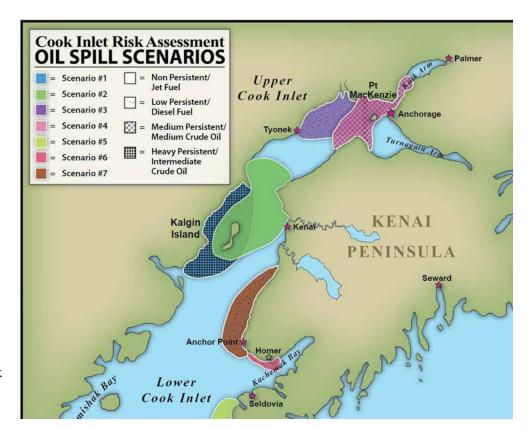
In October 2012, we led a Consequence Analysis Workshop, bringing together subject matter experts in the fields of oceanography, geology, biology, subsistence use, socioeconomics, fisheries, and resource management to discuss the impacts of oil spills on the region's environmental, cultural and socioeconomic resources.





Using six oil spill scenarios and aided by trajectory models prepared by NOAA, the group discussed resource values of importance, how spills would impact them and for how long. The advisory panel is applying the results of the consequence analysis and public input to identify risk reduction options for the region, including those that can be implemented immediately.

Each completed study is bringing us closer to achieving our goal of providing the most complete picture yet to guide us through Cook Inlet's dynamic, unpredictable, and demanding waters.





## A closer look at Cook Inlet safeguards

#### Promoting a safer mode of oil transportation in Cook Inlet

In 2012, the Cook Inlet RCAC Board of Directors adopted a formal position on the future use of the Drift River Oil Terminal, whose close proximity to Mt. Redoubt, an active volcano, contributes significantly to the risk of oil spills at the terminal. A subsea crude oil transmission pipeline is our preferred long-term option for transporting oil from Cook Inlet's west side production operations to the refinery on the east side. This option also would reduce tanker traffic in the Inlet and retention time at the dock. Cook Inlet RCAC will continue to actively promote a subsea crude oil transmission pipeline as the safest way to transport Cook Inlet oil from the Drift River Oil Terminal.

#### Improving response guidelines and protections in future lease sales

Cook Inlet operators and the Alaska response community are among the best prepared in the world, and are always looking for ways to improve. In 2012, Cook Inlet RCAC recommended revisions to the National Preparedness for Response Exercise Program (NPREP) Guidelines, including holding multi-regional exercises and requiring corrective action planning so that operators are held accountable for implementing improvement plans to address deficiencies identified during exercises.

Responding to the Bureau of Ocean Energy Management's requests for information on proposed 2012-2017 lease sales in the Cook Inlet Planning Area, we recommended BOEM implement robust prevention, mitigation, and protection measures to safeguard the Cook Inlet region for future commercial and recreational uses.





#### Creating the Cook Inlet Response Tool (CIRT)

In emergencies, better decisions are made when pertinent information is easily accessible and shared. One of our major goals is to make our project results readily available for emergency response, especially in the context of other needed information. In 2012, our partnership with the Alaska Ocean Observing System (AOOS) came to fruition with the development of the Cook Inlet Response Tool (CIRT), which merges high resolution shoreline video with natural resource data, ocean and atmospheric real-time sensor data, and ocean current and wind models. The tool can be accessed at <a href="www.aoos.org">www.aoos.org</a>. By 2013, we will be providing access and training to agencies and organizations which might benefit from its use.

## Participating in the Alaska Regional Response Team

We continue to participate in the Alaska Regional Response Team's technology committee dispersants work group, which recently reviewed the policy for applying dispersants in Alaska's waters in emergency situations.



## A closer look in the field

## Katmai National Park Nearshore Monitoring (June/July)

We continued our partnership with the National Park Service and joined their Southwest Area Network (SWAN) program for monitoring along the Katmai National Park, a coastline within our area of concern due to its location downstream of Cook Inlet. Our work will provide data on intertidal and nearshore habitats and species that are known to be sensitive to stranded oil and are a source of food for foraging birds and marine mammals, such as black oystercatchers and sea otters.

## Arctic Hanna Shoal Survey aboard the research icebreaker USCGC Healy (August)

Although quite a bit out of Cook Inlet RCAC's area of oversight, similar concerns about oil and gas development exist for both the offshore Arctic and Cook Inlet. Recognizing the parallels to our Cook Inlet research, especially related to benthic sediment studies, Director of Science & Research Sue Saupe accepted an invitation to participate on a research survey of Hanna Shoal in the northeastern Chukchi Sea.



Research scientists aboard the USCGC Healy (above).
Food-web samples (below).

The team left Dutch Harbor bound for the Arctic onboard the *USCGC Healy* on August 9, and finished 16 days later near Barrow Canyon. Ms. Saupe assessed benthic fish populations and collected samples to identify the food-web structure and major carbon (food) sources to the Hanna Shoal ecosystem. The knowledge gained in the field can be applied to our future Cook Inlet studies.









#### **Upper Cook Inlet Nearshore Fish and ShoreZone (September)**

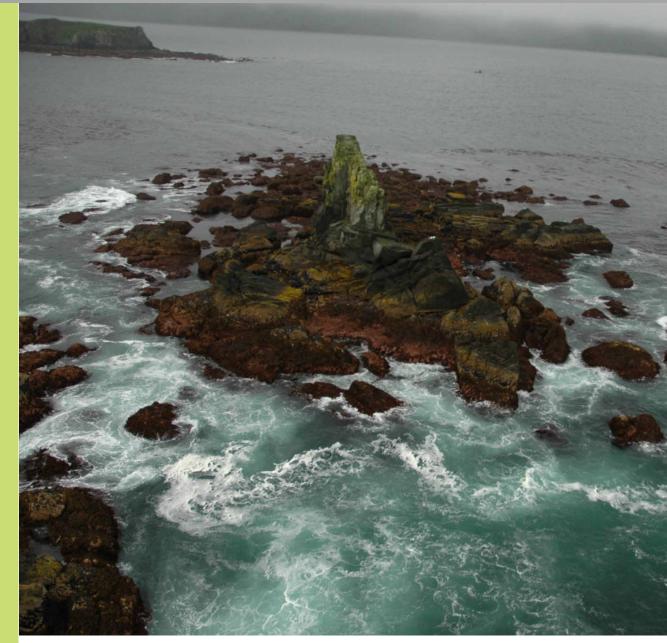
We continue to expand our knowledge of Cook Inlet's nearshore habitats and the species that live in them. In early September, we participated with the National Marine Fisheries Service (NMFS) during nearshore fish and intertidal surveys in the very upper inlet. While scientists from Auke Bay Laboratory conducted beach seine and trawl surveys near Fire Island and Point Mackenzie, Ms. Saupe worked with Mandy Lindeberg from NOAA's Auke Bay Laboratory to obtain on-the-ground habitat and species data for the Alaska ShoreZone database.

## Assessing Contaminants in Beluga Winter Habitat and Prey (April and October)

Collecting data about potential winter food sources of Cook Inlet beluga whales during winter has been a big challenge. Since ice covers the upper inlet during deep winter, we planned sampling in late fall and early spring. We canceled our first survey in November 2011 when ice clogged the upper inlet due to extreme winds and cold temperatures, and had to rely on sampling in April and October 2012 to meet our goals. We conducted trawl surveys and were successful at most sites south of the Forelands but less successful north, where currents and obstructions made it unsafe to sample. We are funding this project with the Kenai Peninsula Borough and conducting it in partnership with the Alaska Department of Fish & Game (ADF&G) and Motes Marine Laboratory, which is chemically analyzing the fish and invertebrate samples to assess tissue hydrocarbon levels to address data gaps identified in the Cook Inlet Beluga Whale Conservation Plan.

## Cook Inlet Benthic Invertebrates (April)

We collected samples of Cook Inlet bottom sediments to follow up on some interesting results from the Integrated Cook Inlet Environmental Monitoring and Assessment Program (ICIEMAP). Taxonomic assessments of sediment-dwelling invertebrates in samples collected in 2008 indicated the existence of numerous, previously undescribed species in Cook Inlet. Beluga whale prey study sampling in April gave us an opportunity to collect additional invertebrate samples using methods that will allow us to genetically analyze and describe the samples.



In July, we spent a day with U.S. Coast **Guard Admiral** Ostebo at our offices in Kenai. Following multiple presentations and demonstrations, we were then able to follow up by providing, at his request, ShoreZone imagery and mapped data for planning USCG overflights to survey tsunami debris (with **US Senator Lisa** Murkowski).

## A closer look at our coast

## Alaska ShoreZone Partnership

ShoreZone imaging and mapping surveys provide details about coastal features and habitats that increase our effectiveness in oil spill planning and response. The Alaska ShoreZone Program's statewide efforts grew from Cook Inlet RCAC's initial surveys in 2001 and now involve dozens of partnering organizations and almost the entire Gulf of Alaska, as well as portions of the Bering, Chukchi, and Beaufort seas. Although other organizations focused their ShoreZone survey efforts on the Arctic in 2012, there was still plenty of activity associated with existing data and imagery from our areas of concern. For example, high resolution video from our early surveys is now integrated into the Cook Inlet Response Tool (CIRT) described earlier in this report.



## Coastal Impressions: A Photographic Journey along Alaska's Gulf Coast

To encourage broader public awareness of our varied and dramatic coastlines, we distilled tens of thousands of digital photographs of the Gulf of Alaska's coast down to a series of 80 images, creating a museum-quality public exhibit. In 2012, thousands of Alaskans and out-of-state visitors viewed the stunning photographs at several exhibits throughout the state, ending with a three-month exhibit at the Alaska State Museum in Juneau. Other exhibits took place at the Alaska Science Symposium, the National Marine Educators Association's annual meeting and NOAA's Hydrographic Survey's annual meeting in Anchorage, and the Kachemak Bay Science Conference in Homer. Along with the exhibit, we published a booklet describing the coastal processes that shape the coast and posted an on-line flip-book and a down-loadable file on our website.



Coastal Impressions at the Alaska State Museum in Juneau moments before opening (left), and at the Islands and Oceans Center during the Kachemak Bay Science Conference in March (below).



## A closer look at public outreach

With audiences increasingly bombarded with information from all directions, getting attention is a constant challenge. Fortunately, we love talking about who we are and what we do. In addition to our tried and true methods of reaching out to our stakeholders through traditional media, we continue to explore new ways to heighten public awareness about our efforts to protect Cook Inlet through electronic tools, such as a monthly *Cook Inlet Navigator* e-newsletter, our website, and social media.

Seeking opportunities to broaden our knowledge of industry activities, emerging trends, scientific programs, training and studies, Cook Inlet RCAC Council and staff actively engage in conferences, forums, and community visits, as well as site visits and drill exercises. In 2012, our representatives presented findings or participated in:

Alaska Marine Science Symposium
Support Industry Alliance "Meet
Alaska" Conference
Kodiak ComFish
Pre-winter ice rules meeting
Clean Gulf and Clean Pacific
Conferences
National Marine Educators
Conference
Oil and Gas 101 for Emergency
Response

Kachemak Bay Science Conference ShoreZone Partners Annual Meeting Interstate Oil and Gas Compact

Commission

Arctic Marine Oilspill Program
Conference (AMOP)

Kenai Industry Appreciation Days Economic Outlook Forum (Soldotna) Kenai Chamber of Commerce Soldotna Rotary Club Aquatic Sciences Annual Meeting Kenai Peninsula Fish Habitat Partnership

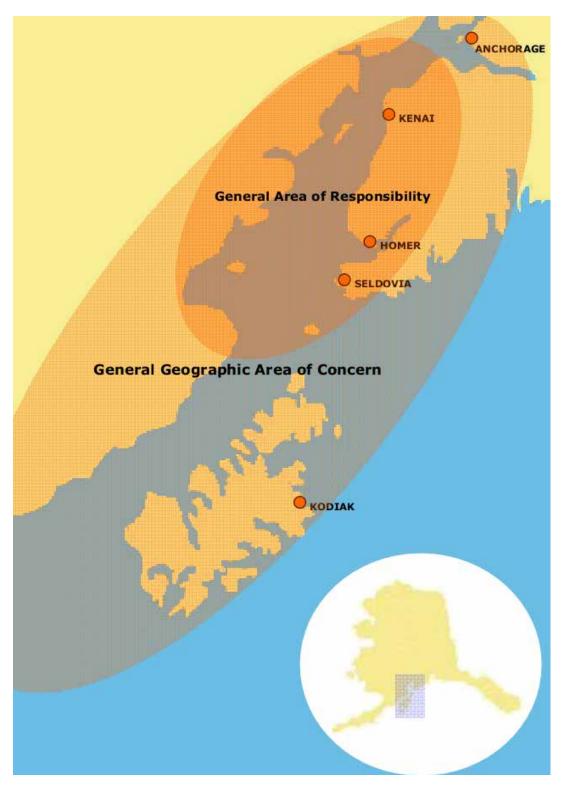


Board member Bob Flint and Director of Operations Steve "Vinnie" Catalano strike a pose during 2012 Clean Pacific Conference.

Society of Environment Toxicology and
Chemistry Annual Meeting
Alaska ShoreZone Partners Annual Meeting
Alaska Forum on the Environment
American Society of Limnology and
Oceanography (ASLO)



## Cook Inlet RCAC's Area of Concern



# Our area of concern is both geographic and programmatic.

- ♦ Geographically, our area of concern is Cook Inlet and the areas potentially impacted by oil industry activities within our OPA 90-defined area of responsibility.
- ♦ On the program level, our area of concern entails pursuing any project that helps meet and accomplish program goals and outcomes.

#### **Photo Credits**

Cover and inside photo of Rock Sandpipers (Susan Saupe)

- 3 Oil rigs in Cook Inlet ice (CIRCAC Archives)
- 4 (&5) Floats and net (Saupe)
- 6 Drift River tour (Lynda Giguere)
- 6 Endeavour, Spirit of Independence Jack-Up Rig (Carla Stanley)
- 7 Crucial 13 fuzzy disc skimmer (Steve "Vinnie" Catalano)
- 9 Millennium Star and Overseas Martinez (Giguere)
- 10 (&11) CISPRI barge 141 in background (CIRCAC Archives)
- 12 (&13) Boom (CIRCAC Archives)
- 14 Research scientists (inset); food-web samples (bottom) (Saupe)
- 15 Black oystercatcher (Saupe)
- 16 Kodiak's rugged coastline (ShoreZone Alaska Project)
- 17 Coastal Impressions Exhibit at Alaska State Museum (Mandy Lindeberg); Islands and Oceans Center (Terry Thompson)
- 18 Bob Flint and Steve "Vinnie" Catalano (Jerry Rombach)
- 21 Buckets of sea urchins (Saupe)

Back cover: Ice Tracks (Saupe)



