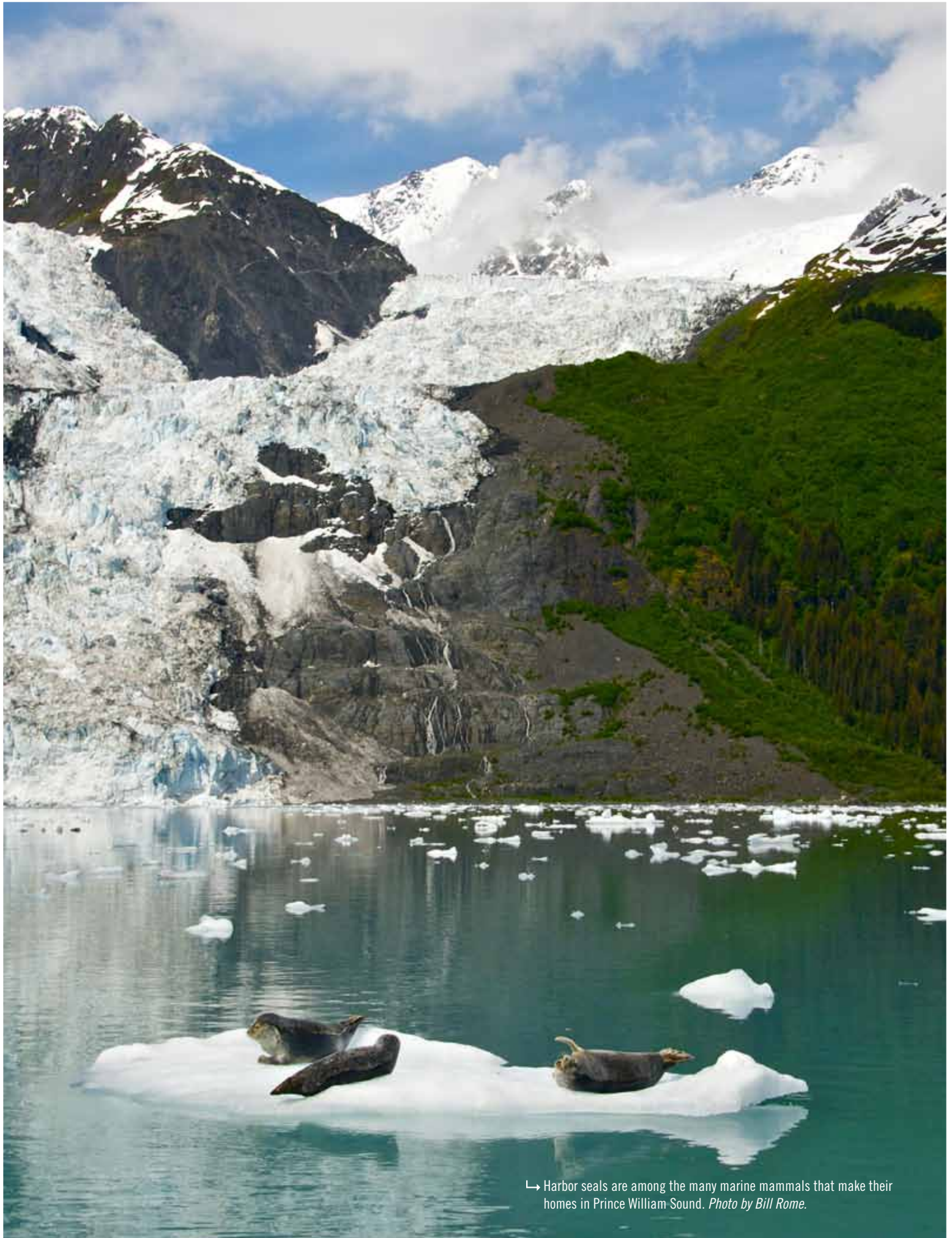


2010-2011 ANNUAL REPORT



Prince William Sound

REGIONAL CITIZENS' ADVISORY COUNCIL



↳ Harbor seals are among the many marine mammals that make their homes in Prince William Sound. *Photo by Bill Rome.*

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Note: This report covers the period from July 2010 through June 2011.



- ↳ Front Cover: Two powerful tugs are required by federal law to escort loaded oil tankers in Prince William Sound. Here, a Polar Tankers vessel with a tug tethered to its stern passes through Valdez Narrows on its way out of the Sound. *Photo by Tom Kuckertz.*
- ↳ Back Cover: Prince William Sound is ringed by mountains and glaciers. *Photo by Bill Rome.*

letter from the executive director

This has been a very dramatic and exciting year for the council. Far and away the most significant event was the passage of the U.S. Coast Guard Authorization Act of 2010, which contained a provision that will preserve the system of dual escort tugs for loaded oil tankers in Prince William Sound.

The citizens' council has long recognized the importance of this system for preventing disasters like the Exxon Valdez spill of 1989. While working to ensure we have solid and well-practiced response measures in place is important, ensuring appropriate safeguards are in place to aid in the prevention of another spill is perhaps the most important task the council can focus on.

The Prince William Sound escort system was developed by the oil industry in concert with the U.S. Coast Guard, the Alaska Department of Environmental Conservation, and the council. The tugs can rescue tankers in danger of groundings or other types of accidents, and they can also begin oil spill response should the worst happen.

Though the escorts have sometimes been characterized as unnecessary, they have proved their worth many times since the Exxon Valdez spill by providing assistance to tankers in distress. Thanks in considerable part to the escort tugs and this federal legislation, Prince William Sound has and will continue to have one of the safest marine oil transportation systems in the world.

Also on the prevention side of things, this year we embarked on a major advisory audit of the Valdez Marine Terminal. A series of failures, accidents and near misses on the trans-Alaska pipeline in 2009 and 2010 precipitated this comprehensive examination of the maintenance practices at the terminal by experts in the field. The council and our contractors have received excellent cooperation from Alyeska on this audit and we look forward to sharing the results with the company and providing recommendations as appropriate to maximize safety at the terminal.

In terms of response preparedness, this year also saw the significant examination of various elements of the response plans for terminal and for the oil tankers that use it.

In the fall of 2010, the council staff assisted in pre-planning and in providing observers and evaluators in support of the environmental conservation department in conducting two no-notice drills of response plans for tanker spills. These were intended to review the industry's ability to muster sufficient personnel to manage



Mark Swanson
Executive Director

Thanks in considerable part to the escort tugs and this federal legislation, Prince William Sound has and will continue to have one of the safest marine oil transportation systems in the world.

the early hours of an oil spill response and to conduct a multi-day exercise of near-shore response activities. Both exercises were extraordinarily insightful, providing an opportunity for all parties to examine what was working and to identify areas requiring further attention.

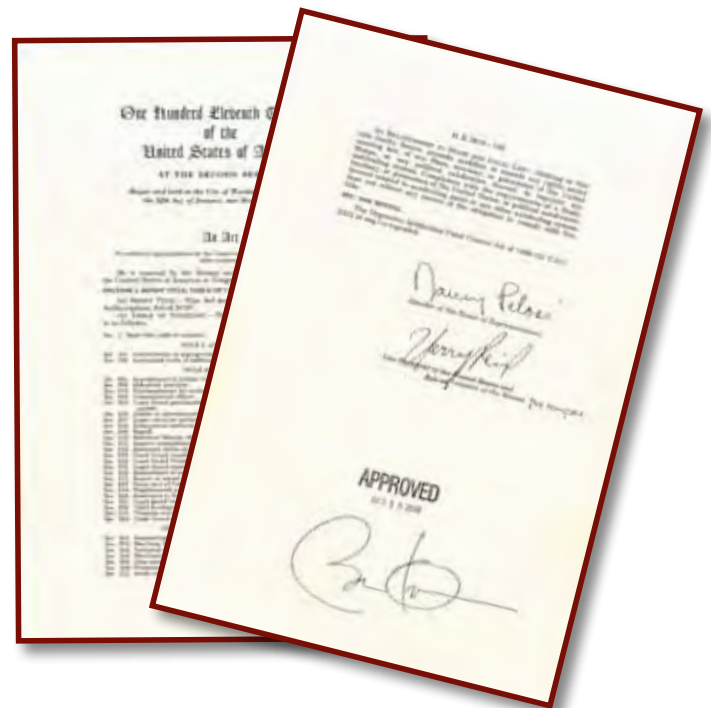
In the spring of 2011, following significant work on the issues identified in the fall drills, the council assisted the state, the Coast Guard and the companies in observing and evaluating two additional follow up drills.

While much remains to be addressed, both spring exercises showed a marked improvement in response preparedness. The council applauds the industry, the regulators, and the exercise participants for stepping up with the time, energy and resources needed to address some long-standing response preparedness issues in these areas.

Also of note, this year two of our staff members, Joseph Banta and Linda Robinson, reached remarkable milestones: twenty years of employment with the council in service to our mission of “citizens promoting environmentally safe operation of the Alyeska terminal and associated tankers.”

There are a few volunteers on our board and technical committees who were involved at the inception of the council and still serve the organization today, but I believe Joe and Linda hold the record for continuous involvement. We salute their long and tireless service. In January, the report of the National Commission on the Deepwater Horizon Oil Spill and Offshore Drilling was released. Among the many recommendations in that report is a call for citizens’ advisory councils in the Gulf of Mexico and on Alaska’s North Slope. The report found that such councils would provide an effective and lasting safeguard against the complacency and systematic lack of critical oversight that precipitated the spill in the Gulf. We agree.

Finally, this past year also entailed a major recertification for the council. The Coast Guard solicits public comments for this process on a triennial basis, and this year we received an unprecedented outpouring of written support from around the region affected by the Exxon Valdez spill and from around the nation. The



→ The Coast Guard Authorization Act of 2010 will, among many other things, ensure that two powerful tugs continue to escort every loaded oil tanker traveling in Prince William Sound. The Act was signed into law by President Obama in October 2010.

depth and breadth of that support frankly astounded us. Some 67 letters—all of them positive—were sent, and a record 65 letters arrived by the deadline for entry into the Coast Guard’s public docket on our recertification. We are honored and humbled by these expressions of appreciation and this high level of awareness of our work and achievements.

In conclusion, much has been done to reduce the risks of an oil spill in Prince William Sound. With continued ice flow into the shipping channels, continued mechanical reliability issues with aging tankers, and the changing economic and physical conditions resulting from reduced flow rates in the pipeline, we have many challenges to face. The risks of oil transportation in the marine environment and the need for citizens to have an advisory voice in the oversight of those risks remain as clear and compelling today as in 1989 when the Exxon Valdez grounded on Bligh Reef.

Enjoy this edition of our annual report, follow our efforts, and work with us in the coming year as we strive to further reduce the risks of oil spills and to protect Prince William Sound and the rest of the region affected by the Exxon Valdez spill.

mission & responsibilities



→ The escort tug Nanuq is tethered to the stern of the tanker Polar Endeavor as it travels out of Prince William Sound with a load of oil. This photo was taken from the tanker's other escort tug. *Photo by Tom Kuckertz.*

The Prince William Sound Regional Citizens' Advisory Council is an independent non-profit corporation guided by its mission: promoting environmentally safe operation of the Alyeska terminal in Valdez and the oil tankers that use it.

The council's 19 member organizations are communities in the region affected by the 1989 Exxon Valdez oil spill, as well as Alaska Native, aquaculture, commercial fishing, environmental, recreation, and tourism groups.

Consistent with its mission, the council's structure and responsibilities stem from two documents. The first is a contract with Alyeska, which operates the trans-Alaska pipeline as well as the Valdez terminal. Most of the council's operating funds come from this contract.

The second guiding document, enacted after the council was created, is the Oil Pollution Act of 1990, which required citizen oversight councils for Prince William Sound and Cook Inlet. Their purpose is to promote partnership and cooperation among local citizens, industry and government, to build trust, and to provide citizen oversight of environmental compliance by oil terminals and tankers.

The Act allows pre-existing organizations to fulfill its requirement for citizen oversight, and our council has done so for Prince William Sound since 1990. Each year, the U.S. Coast Guard certifies that the council fosters the general goals and purposes of the Act and is broadly representative of the communities and interests as envisioned in the Act.



↳ Columbia Glacier is the source of icebergs that pose risks to oil tankers and other vessels in Prince William Sound. *Photo by Dave Janka.*

Citizens Promoting Environmentally Safe Operation of the Alyeska Terminal and Associated Tankers.

The council's contract with Alyeska pre-dates the Oil Pollution Act, but the similarities in the powers and duties given the council in the two documents are not coincidental. Many people involved in the establishment of the council also promoted citizen involvement requirements in the federal law.

In accordance with the provisions of the two documents, the council performs a variety of functions aimed at reducing pollution from crude oil transportation through Prince William Sound and the Gulf of Alaska:

- We monitor, review, and comment upon oil spill response and prevention plans prepared by Alyeska and by operators of oil tankers.
- We monitor, review, and comment upon the environmental protection capabilities of Alyeska and the tanker operators, as well as on the environmental, social and economic impacts of their activities.
- We review and make recommendations on government policies, permits, and regulations relating to the oil terminal and tankers.

As part of these undertakings, the council regularly retains experts in various fields to conduct independent research and technical analysis on issues related to oil transportation safety.

The Alyeska contract also calls for the council to increase public awareness of the company's oil spill response, spill prevention and environmental protection capabilities, as well as the actual and potential environmental impacts of terminal and tanker operations.

The contract states that the council may work on other related issues not specifically identified when the contract was written.

The council was initially funded at \$2 million a year. The funding is renegotiated every three years; current Alyeska funding is approximately \$3.3 million a year. The council's total annual budget is about \$3.7 million.

Although the council works closely with and is funded chiefly by Alyeska, the council is an independent advisory group. The contract is explicit: "Alyeska shall have no right...to have any degree of control over the formation or operation of the corporation."



2010-2011 activities

OIL SPILL PREVENTION

To ensure a maximum level of safety, the council reviews all aspects of the oil transportation system in Prince William Sound. These include operations of oil tankers and the Valdez Marine Terminal, oil spills and other incidents, and the adequacy and maintenance of the Coast Guard's Vessel Traffic Service.

TANKER SAFETY

Dual Escort System

Preservation of the dual tugboat escort system for loaded oil tankers in Prince William Sound has long been a priority for the council. The Sound's escort system is recognized by numerous individuals and communities as being one of our best and most enduring safeguards against future environmental disasters.

Use of dual escort tugs was mandated by the Oil Pollution Act of 1990 for loaded single-hulled oil tankers in the Sound. Although actual practice was to escort all loaded tankers, the dual-escort requirement did not cover double-hulled tankers until federal law was changed in 2010 after a long effort by the citizens' council.

The council and many others feared the dual-escort system would fade as single-hulled tankers were removed from service. While double hulls on tankers can prevent or reduce the magnitude of some oil spills, they do not provide complete protection from a catastrophic spill. The Coast Guard estimated that a double-hulled version of the Exxon Valdez would still have spilled some 4.4 million gallons of crude oil in the Bligh Reef grounding of 1989.



↳ Escort tug crew members prepare to retrieve the towline after a tanker towing exercise in Prince William Sound. *Photo by Alan Sorum.*

Building on several years of effort, the requirement that all loaded tankers in the Sound—single-hulled and double-hulled alike—be escorted by at least two highly capable towing vessels was institutionalized in Section 711 of the Coast Guard Authorization Act of 2010, which was signed by President Obama on October 15, 2010.

“Successful passage of the Coast Guard Authorization Act demonstrates the effectiveness of having a unified stakeholder voice participating in crucial decisions about oil transportation safety,” said Walter Parker, president of the council when the measure was approved.

Final Report on the Grounding of Ice Scout Tug Pathfinder

Icebergs discharged by Prince William Sound's retreating Columbia Glacier pose a substantial



Successful passage of the Coast Guard Authorization Act demonstrates the effectiveness of having a unified stakeholder voice participating in crucial decisions about oil transportation safety.

↳ Escort tugs are tethered to the sterns of tankers in order to provide instantaneous assistance should the tanker have steering or engine problems. *Photo by Tom Kuckertz.*

navigational risk to oil tankers in the Sound. Alyeska's Ship Escort and Response Vessel Service routinely conducts ice scouting operations to provide information on the extent and concentration of ice crossing shipping lanes.

On December 23, 2009, the Crowley Maritime Corporation tug Pathfinder was serving as an ice scout in the Sound. Shortly after 6 p.m., an extensive web of human errors combined to cause the 136-foot vessel to run aground on Bligh Reef, some twenty years after the Exxon Valdez met the same fate.

While Crowley almost immediately released considerable information on its investigation of the accident, results of Coast Guard investigations into the grounding were not released until May 2011, nearly a year and a half later. Coast Guard officials said that delays in releasing the reports stemmed from the complexity of the investigation and the need for thorough vetting of information before it was released.

The Coast Guard cited a number of factors that led to the grounding. The vessel's position was not verified at shift changes or during normal operations. Not knowing their actual location on the water affected the crew's situational awareness. The captain did not communicate effectively with the second mate, especially during watch changes. In the minutes leading up to the grounding, the captain ordered full speed ahead to return to port in Valdez without knowing exactly where the Pathfinder was or charting its intended course. As a result, the tug headed straight for Bligh Reef. Both the captain and second mate were facing the rear when the Pathfinder struck the reef.

The Coast Guard made eight safety recommendations to Crowley soon after the incident and before the investigational report was released. Crowley adopted the recommendations.

Performance evaluation for Prince William Sound escort tugs

The Prince William Sound tanker escort tugs are a vital component of the safety system built up since the Exxon Valdez spill, and the council wants to confirm they are the optimum vessels for the job they are assigned to do. To help in this effort, the council has retained a Norwegian firm to evaluate the tugs' capabilities with respect to both human and environmental safety.





↳ The black oystercatcher is one of the many seabirds found in Prince William Sound. *Photo by Bill Rome.*

Most large vessels in commercial service, especially international trade, undergo numerous engineering and operational certifications by organizations known as classification societies. This helps ensure the vessels meet internationally recognized safety and operating standards.

Tugs have traditionally been used primarily for assisting ships with docking and undocking, and for towing vessels unable to propel themselves. Classification societies have well established procedures for certifying a tug's ability to perform such basic functions.

Because of growing concern over the environmental consequences of maritime accidents, tugs are increasingly being utilized to assist ships navigating sensitive or difficult waters or carrying cargoes of particular hazard. Such escort duty often entails the tug being attached—or tethered—to a very large ship moving at moderate speed. To safely and capably assist a moving vessel of significant weight and momentum, the tug must be able to apply a controlled amount of force in any direction without being rolled over by the advance of the larger ship.

Coincident with the increase in this new type of tug duty, many international classification societies have developed safety and technical standards aimed at quantifying the capability of various tugs to safely perform vessel escort duties. The result of such an evaluation is called an “escort notation.” It quantifies

how much force a tug can safely apply to a larger vessel traveling at a given speed.

While British, French, Italian, German, and Norwegian classification societies have developed such standards, none are presently offered by the American Bureau of Shipping, which is the classification society used by Crowley Marine Services, operator of the Prince William Sound escort tugs under contract to Alyeska. This has prompted the council's interest in quantifying the capabilities of the tugs used in the Sound.

Crowley uses two escort tug designs, and the council wants to make sure each is suitable for such service. To accomplish this technical analysis, the council has contracted with Det Norske Veritas, a major Norwegian classification society, to evaluate the performance data available for the two designs and estimate their capabilities in light of the best and most widely accepted safety and operating standards available for escort tugs. Alyeska and Crowley have been cooperative in providing the performance data requested by Det Norske Veritas for the analysis, with a report anticipated by late summer of 2011.

The council hopes this evaluation will enable it to better inform and advise both the users of the system, and our own member entities as concerned stakeholders, on the level of escort capability available today, and on what adjustments, if any, would be appropriate to ensure the safest and best use of the world-class escorts tugs we rely upon to protect the Sound.

2010-2011 activities



↳ Participants in fishing vessel training discuss how to use boom to clean up spilled oil. *Photo By Jeremy Robida.*

OIL SPILL PREPAREDNESS & RESPONSE

The council devotes considerable resources to preventing oil spills, but the risk cannot be eliminated entirely. We must be prepared to respond quickly and effectively if prevention measures fail. Two council programs address emergency preparedness and response: Oil Spill Prevention and Response Planning, and Oil Spill Prevention and Response Operations.

OIL SPILL PREVENTION AND RESPONSE PLANNING

State and federal laws require the operators of oil tankers and the Valdez Marine Terminal (as well as the trans-Alaska pipeline) to prepare detailed plans showing how they will respond to oil spills should prevention measures fail. The council devotes much time and attention to oversight of these all-important plans for the tankers and their terminal.

In many cases, the council participates with government and industry in work groups that develop and improve

contingency plans. The council conducts independent reviews and submits comments and recommendations from these reviews.

The council promotes compliance, enforcement, and funding for state and federal regulations and oversight, and also supported the Alaska Coastal Management Program when it was still in existence. Along with local communities, the council encourages incorporating local knowledge of sensitive areas into contingency planning.



➔ These tanks at Alyeska's Valdez terminal store oil that comes in from the trans-Alaska pipeline until it can be loaded onto tankers for shipment south. *Photo by Stan Jones.*

Tanker Contingency Plans

The Prince William Sound Tanker Oil Discharge Prevention and Contingency Plan was renewed in November 2007 for a period of five years. The next renewal is slated for November 2012.

As part of the 2007 approval, the Alaska Department of Environmental Conservation committed to partner with the council and the Sound's oil shippers in a steering committee to guide a workgroup process continuing to improve the plan. Within the past year, a workgroup was formed to address the changing properties of the Alaska North Slope crude oil handled at the Valdez terminal and hauled out of Prince William Sound by tankers.

Phase 1 of this workgroup was completed earlier this year and focused specifically on oil properties. Phase 2 will also look at oil properties, but will take into account emulsification and the effects of skimmers. It is anticipated this information will be used by the shippers when the contingency plan is renewed in 2012. Shippers are required to submit paperwork well in advance of the deadline.

The environmental conservation department called an unannounced three-day near-shore drill in October 2010. This drill represented the response to a worst case scenario, a spill of 809,080 barrels of oil to water. The drill was coordinated by staff from the department, the U.S. Coast Guard, and the council.

Valdez Marine Terminal Contingency Plan

The Valdez terminal contingency plan was approved in May 2008 and expires in May 2013. The Council has participated in the continuous improvement of this plan over the course of several years.

A workgroup consisting of the council, the state-federal Joint Pipeline Office, the Coast Guard, and Alyeska Pipeline meets on a regular basis in an effort to continuously improve the contingency plan. The council considers the cooperation that has taken place between these various entities one of the most successful processes in which the council has participated.

The Valdez Marine Terminal workgroup continues to work on re-writing the contingency plan in a format similar to the tanker plan, namely, a technical

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↳ Mini barges like these are stored on land until needed, then launched and used for storing spilled oil recovered by booming and skimming. The ones shown here are being used in a training exercise near Cordova, one of the council's member communities. *Photo by Linda Swiss.*

manual that contains response details and tactics, and a core plan that contains oil spill prevention and response activities. This workgroup is also dealing with issues such as oil storage tank status and inspections, status of maintenance and repair projects at the terminal, and drill and exercise design. This cooperative effort is expected to continue.

For the past year, the council has also been working on verification of prevention commitments contained in the terminal contingency plan. These commitments range from monthly leak tests on crude oil tanks and fuel tanks, to annual inspections of overfill alarms and fuel transfer piping, to annual corrosion inspections on facility piping.

The environmental conservation department conducted an unannounced drill at the terminal in July 2010. That drill focused on personnel verification, and represented a spill of 48,000 barrels of oil to land and 155,000

barrels to water. These no-notice drills provide a more realistic snapshot of response readiness than pre-announced drills, and the council supports calling them to obtain this level of veracity.

Geographic Response Strategies

These are map-based oil-spill response strategies specific to sensitive areas and resources, such as salmon streams and clamming beaches. These pre-established defense plans can save critical time during the first hours of a response. They are customized to protect specific sensitive areas from impacts following a spill, showing responders where the sensitive areas are located and where to place spill protection resources.

The council is finishing up work done during the past couple of years in Prince William Sound, and will focus its efforts on Kodiak, Seward, or Southeastern Cook Inlet Zones in the next fiscal year. Twenty additional sites have been identified in Prince William Sound during



↳ The escort tug Tan'erliq is tethered to the stern of the oil tanker Sierra during a towing exercise in Prince William Sound. *Photo by Alan Sorum.*

the past year and will be included in the Prince William Sound Subarea Plan which is slated for an update in 2012. All told, 327 strategies have been completed since the program began in 2001.

Weather and Sea Current Data Collection

Weather conditions and sea currents affect nearly every aspect of oil transportation safety. They can play a role, sometimes the determining role, in efforts to prevent or to clean up oil spills. Consequently, the council promotes constant improvement in the system for collecting weather and sea current information for Prince William Sound.

In the past year the council has continued its efforts to improve equipment used to detect and predict barrier jets near the tanker lanes.

Barrier jets are localized high winds formed when a low pressure storm system approaches a barrier

such as the mountain ranges along the Gulf of Alaska coast. The mountains block the general pressure flow and concentrate it into jets of wind paralleling the coast. Much steeper ocean waves can also be created by barrier jet conditions. After installing the Cape Saint Elias station in July of 2009 and last year doing data formatting for import into the National Weather Service, in 2011 the council is initiating additional data formatting to allow the station data to be imported into the Alaska Ocean Observing System.

Also under this subject, a council report on collecting saline layering data is ready for peer review. Saline layering—meaning different salt concentrations at different water depths—can affect how best to respond to an oil spill and the likelihood of oil successfully being dispersed into the water. The report provides graphical presentation of seasonal saline layering in the region.



↳ Barges like this one are loaded with equipment and kept moored at the Alyeska response base in Valdez, ready to go into service supporting the cleanup of spilled oil in areas near shore. *Photo by Tom Kuckertz.*

OIL SPILL PREVENTION AND RESPONSE OPERATIONS

It takes more than volumes of carefully written and reviewed contingency plans to respond effectively to an oil spill or to an emergency that could cause one. It also takes equipment, trained people and a management system to implement the plan. And it takes practice, practice, practice. The council's oil spill response operations program monitors the operational readiness of Alyeska's Ship Escort Response Vessel System and the tanker companies, and makes sure the council itself is prepared to respond to oil spills and other emergencies.

Council staff members, volunteers and contractors monitor and report on spill response drills, exercises and training throughout the region to provide citizens, regulators and responders with information about the state of readiness and to make recommendations for improvement. Most of the monitoring work is done by council staffers, who present annual reports summarizing each year's activities, lessons learned, recommendations, and outstanding issues.

A total of 14 drills were observed and reported on by the council staff during the year covered by this report. These included three unannounced drills initiated by the Alaska Department of Environmental Conservation.

Alyeska's Valdez Marine Terminal was required to conduct an unannounced personnel-focused drill in July 2010, with a follow-up unannounced drill in April 2011. Alyeska was able to demonstrate that deficiencies identified in the number of trained personnel during the first drill had been addressed.

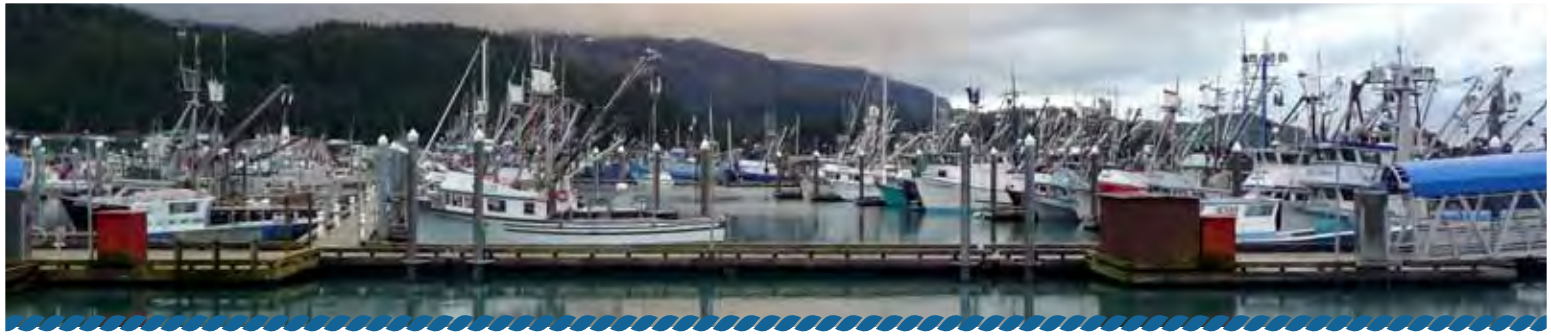
Two 72-hour near-shore spill response drills were conducted during the year. The first was an unannounced drill in October 2010, and it demonstrated that many of the operational proficiencies and best practices gleaned from past exercises had eroded over time. The time frames described in the Prince William Sound Tanker Contingency Plan were not met during the drill and a number of areas that needed additional training were identified.

In April 2011, a second 72-hour near-shore drill was conducted as a follow-up to demonstrate that problems identified during the first drill had been corrected. While not all of the time frames for the near-shore response were met during the second exercise, there was considerable improvement over the first drill. Near-shore barge operations and the response tactics conducted by fishing vessels were significantly improved.

Other drills conducted during the year included a dispersant exercise that combined vessel and helicopter application of simulated dispersants, tanker towing exercises, incident management team tabletop and field equipment deployment exercises for the Valdez Marine Terminal, and a tanker lightering barge exercise.

Monitoring the Fishing Vessel Response Fleet

The council continues to monitor the health of the fishing vessel spill response program. These vessels are on contract with Alyeska/SERVS and in the event of a spill would be assigned such tasks as running skimmers, positioning boom and handling oiled wildlife. Each year, fishing vessel captains and crews undergo training covering tactics, equipment, and personal safety and protection, among other things. This training allows



↳ Cordova is heavily dependent on commercial fishing, as this shot of its small boat harbor suggests.
Photo by Linda Swiss.

hands-on time with the equipment and actual practice on the water. There are currently over 400 vessels on contract.

In March 2011, the council met with fishing vessel owner representatives from Kodiak, Cordova, Seward, Homer, Whittier, and Valdez, and listened as the captains discussed issues concerning the fleet as a whole and their individual ports.

The program had faced challenges about a year ago because participants were concerned about compensation. Alyeska addressed this matter and the vessel captains reported that participants were now generally satisfied with the program, and that participation had grown over the past year. The captains also felt there was a continuing need to address such longer-term unresolved concerns as training, insurance, and communications with Alyeska.

They suggested a process for addressing issues and negotiating contract terms, such as setting up a committee for those purposes. Captains felt that communication with Alyeska was generally insufficient, and they saw this process as a way to improve it. The captains also sought clarification on insurance terminology and on when their coverage started and stopped.

The council feels that these concerns from the fleet are important and will work to detail the main meeting issues and related suggestions in a final report to Alyeska.

Researching New Technology for Spill Response

The council collaborated with BP and the Cordova-based Oil Spill Recovery Institute to field test a new technology for aerial observation of oil spill response: a tethered helium balloon carrying video and infrared cameras. The council funded much of the field testing and BP and the Oil Spill Recovery Institute contributed significantly as well.

The balloon was tested in Cordova and then demonstrated in Valdez, with results indicating such a system could prove valuable in spill response. The council sees this technology as complementary to more traditional over-flights. For example, helicopters and small airplanes are limited by fuel capacity. The balloon can stay in the air almost indefinitely, and is far cheaper and easier to operate.

Council staff
members, volunteers
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monitor and report
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recommendations for
improvement.





↳ Balloon-borne aerial cameras may someday be used for monitoring oil-spill response. The system shown here was tested in Cordova and demonstrated in Valdez during the summer of 2011. *Photo by Donna Schantz.*

Additionally, because the balloon is more stationary, it can provide an ongoing picture of a single task or area, which is difficult for aircraft.

The tested balloon is 12 feet in diameter, 8 feet tall, and can operate up to 500 feet above the water. It is equipped with a fabric wing to provide stability in windy conditions and when under tow. The balloon easily handled towing speeds over 15 mph during testing, and similar systems have been tested at wind speeds of over 100 mph.

The camera package carried under the balloon features powerful zoom lenses and rotates to provide a 360-degree view of activities below. The system is controlled wirelessly from its tow boat with a video-

game-style controller, with a laptop computer showing a geographic overlay in addition to what the cameras see. The incoming data and camera imagery can be recorded to the laptop's hard drive for later review. Because the video files are stamped with geographical reference, they could serve as part of the overall incident documentation.

The final report will comment on lessons learned, considerations for setting up a system such as this, and operational limitations. The council hopes that industry will continue to test and refine this promising tool for aerial observation.

2010-2011 activities

ENVIRONMENTAL PROTECTION & SCIENCE

The Oil Pollution Act directs our council to review, monitor, and comment on Alyeska's environmental protection capabilities, as well as the actual and potential environmental impacts of terminal and tanker operations. The Act also calls on us to develop recommendations on environmental policies and permits. The council carries out this work through two major programs: Terminal Operations, and Environmental Monitoring. Under the leadership of the Scientific Advisory Committee and the Terminal Operations and Environmental Monitoring Committee, the council commissions scientific studies to determine actual or potential risks, to document levels of pollution and biological effects, and to better understand new technologies and the environmental costs or benefits that might be associated with their use.

OPERATIONS AT THE VALDEZ TANKER TERMINAL

Besides posing the risk of a major oil spill caused by earthquake or accident, Alyeska's Valdez tanker terminal produces ongoing air and water pollution from routine operations, as allowed by its permits from regulatory agencies. The council monitors terminal operations with the goals of minimizing the risk of spills and ensuring that permitted pollution is within or below regulatory limits and that those limits are set at the lowest feasible levels.

Oil Flow in Barrels and Dollars

The council has monitored oil loading at the Valdez Marine Terminal since January 2003. At that time, an average of 968,000 barrels of North Slope crude moved onto tankers every day, down from a peak of about 2 million barrels per day in the early 1990s. Oil flow has continued to decrease, reaching a rate of only about 541,000 barrels per day during the first five months of 2011.

Economically, the decline in production has been more than offset by increasing oil prices. In 2002, the oil moving through Valdez was valued at about \$700 million per month. In May 2011, the oil loaded at the Valdez terminal was worth about \$2 billion, almost three times as much.

The council continues to monitor storage of incoming crude at the Valdez Marine Terminal. The storage tanks where the oil is held until it can be loaded onto

Under the leadership of the Scientific Advisory Committee and the Terminal Operations and Environmental Monitoring Committee, the council commissions scientific studies to determine actual or potential risks, to document levels of pollution and biological effects, and to better understand new technologies and the environmental costs or benefits that might be associated with their use.





↳ Crewmembers of the escort tug Attentive retrieve a towline after an emergency assist towing exercise in Prince William Sound in May 2011. *Photo by Alan Sorum.*

tankers have a total working capacity of 6.9 million barrels. Inventories during the second half of 2010 generally ranged from 30 percent to 80 percent of capacity. Maintaining adequate storage capacity is important as a shock absorber to give the terminal sufficient flexibility to cope with fluctuations in pipeline or tanker operations.

In January 2011, leaks in the piping at Pump Station 1 at Prudhoe Bay prompted the shutdown of the pipeline for two extended periods while temporary fixes were implemented. During these shutdowns, some tanker loading continued at the terminal, with the result that storage tank inventories were drawn down to the point—about 7 percent of capacity—below which Alyeska prefers not to go for fire safety and other reasons. However, inventories increased again as normal operations resumed, and, by the end of the first half of 2011, were approaching the 90 percent level of approximately 6.2 million barrels.

Inventories are not permitted to exceed 95 percent, and inventory levels above 80 percent are deemed problematic by Alyeska, regulators and the council. When needed, the company directs North Slope oil producers to cut back on production to prevent overfilling the Valdez storage tanks.

During 2010 and 2011, storage inventories ranged from 80 percent to 85 percent on 14 occasions and were between 85 percent and 90 percent on two occasions. High inventories are typically due to restricted loading attributable to either adverse weather conditions or berth maintenance. On occasion, the lack of availability of a tanker may cause a spike in inventory.

Air and Water Quality

For many years, the council has been concerned about emission of hazardous air pollutants from the Ballast Water Treatment Facility at the Valdez terminal. This facility services tankers arriving in Valdez with oily ballast water in their cargo tanks, and, as recently as 2003, processed 10 million gallons of it per day. Though the use of oily ballast has declined with the advent of double-hulled tankers—which carry ballast water in dedicated tanks between their hulls rather than in their oil tanks—the facility still treats an average of 2 million gallons per day of oily ballast as well as fresh water that collects in the man-made containment ponds—known as secondary containment cells—around the crude oil storage tanks.

Emissions from the ballast water facility were greatly reduced when vapor controls were installed on the first stage of water treatment in 2008. Additional reductions occurred in 2010 and 2011 when vapor control was expanded to encompass the entire treatment process. The council estimates air pollution from the ballast water facility has been reduced by 98 percent from 2003 levels.

System Integrity Issues at the Terminal

The council monitors operations at the Valdez terminal with several goals in mind.

One is to ensure that system issues having the potential to increase the risk of spilling oil to the environment or to increase air or water pollution during routine operations become known to the council in timely fashion. Areas of concern include:

- liner breaches in the secondary containment cells surrounding the oil storage tanks
- biological treatment of ballast water



↳ Sea lions rest on a buoy near Alyeska's tanker terminal in Valdez. *Photo by Stan Jones.*

- pipe and tank corrosion
- stability of rock slopes behind the power generation and ballast water facilities, and
- uncontrolled venting of oily vapors from the storage tanks.

Another goal is to ensure that proper procedures are developed and implemented to resolve new issues as they are identified.

One example of the council's work at the terminal is its continued monitoring of resolution of a set of ongoing secondary containment issues that are both old and new. They include repair of leaking manholes, repair of leaking industrial waste water sewer piping and the integrity of the secondary containment liners.

The integrity of the liners for the secondary containment cells around the oil storage tanks is important because these cells are intended to capture any oil spilled from the tanks themselves. The liners, made of special-

purpose asphalt, appear to be fragile, with multiple instances of damage having been discovered in 2010 and 2011 during routine excavations. While it's unclear where Alyeska is in the process of developing and implementing measures to remedy the situation, regulators have indicated they expect permanent repairs to be complete by October 2012. The council continues to monitor the process to ensure the future integrity of the secondary containment system.

As a part of its efforts to assure compliance with new air quality regulations on emissions of particulates and carbon monoxide from its power boilers, Alyeska is exploring design changes to its electrical power generation system. At the company's invitation, the council participated in review of these design changes.

Maintenance Advisory Audit

The council became concerned about the condition of some of the equipment at the Valdez Marine Terminal after a number of issues apparently related to a lack



➡ Mist shrouds the small boat harbor at Seldovia, one of the council's member communities.
Photo by Serena Lopez.

Emissions from the ballast water facility were greatly reduced when vapor controls were installed on the first stage of water treatment in 2008. Additional reductions occurred in 2010 and 2011.

The council estimates air pollution from the ballast water facility has been reduced by 98 percent from 2003 levels.

of timely maintenance came to the council's attention. The issues included ongoing testing and repairs of the secondary containment cells around the oil storage tanks, the failure of a valve used to prevent the vapor pressure from becoming either too high or too low inside an oil storage tank, an actuator failure on a flow valve in the firewater system that would have prevented it from closing on demand, a washed-out protective berm on a slope above the building where oil being loaded to tankers is metered, and concerns about the condition of ground strapping for some of the terminal's high-voltage electrical distribution systems.

At its September 2010 meeting, the council board voted to review Alyeska's maintenance processes and activities at the terminal. The council contracted with a maintenance audit team consisting of experts intimately familiar with Alyeska's maintenance practices for the purpose of determining the extent to which Alyeska's maintenance activities are backlogged, and the extent to which such activities are in compliance with Alyeska's internal procedures and all applicable technical, legal, and regulatory requirements.

Alyeska's work to fix the leaks discovered in January 2011 at Pump Station 1 limited the company's ability to participate in the maintenance audit until March 2011. Once Alyeska was able to support the on-site activities of the maintenance audit team, three visits to company facilities were made from March through June to examine maintenance procedures and maintenance records, and to select specific systems and process equipment for detailed scrutiny. Numerous personnel, including managers responsible for maintenance, were interviewed for the purpose of developing an understanding of actual maintenance practices and comparing them with maintenance requirements and procedures for implementing the requirements as dictated by state federal regulations and good engineering practice.

In August 2011, as the contractors neared completion of their report, Alyeska Pipeline and regulatory agencies received briefings on the council's findings. It was anticipated the audit report would be completed in time for council board review and approval in September 2011.



2010-2011 activities

ENVIRONMENTAL MONITORING & SCIENCE

The council monitors the environment of Prince William Sound and adjoining waters for impacts from oil-industry operations. Scientific research into such impacts, as well as research into the effects of some oil-spill response tactics, makes up a large part of the work done under this program.

Chemical Dispersants

Chemical dispersants are substances designed to disperse spilled oil into the water column, rather than leaving it floating on top in a slick. The council promotes research and testing to increase knowledge about chemical dispersants and the environmental consequences of their use in Alaska waters.

The council has raised concerns about the efficacy and toxicity of dispersants for years, urging regulatory agencies to be conservative in their use. Because outstanding questions have not been answered and research has not demonstrated that dispersants would work at all in the waters of Prince William Sound, these concerns remain largely unaddressed and the council continues its advocacy for research into dispersant use in cold seawater. The council has taken the position that chemical dispersants should not be used in oil-spill response in our region until they are demonstrated to be effective and shown to minimize environmental harm. In early 2009, the council accepted two valuable literature surveys—"A Review of Literature Related to Oil Spill Dispersants 1997-2008" and "A Review of Literature Related to Oil Spill Solidifiers 1990-2008." (Oil spill solidifiers are products that combine with oil to produce a more solid, less sticky, rubbery compound that is easier to pick up and remove from the environment.)



→ A mini barge and fishing vessel participate in a training exercise at Seward.
Photo by Jeremy Robida.

These reviews were complemented by a searchable Excel database of all the recent research reports identified in the reviews. This database was updated in early 2010 to include research reports from 2009 and again in 2011 to include research reports from 2010. Council representatives continue to participate in the Alaska Regional Response Team's Science and Technology Committee as it prepares to update the Alaska dispersant use guidelines. Information on the council's work on dispersants is available online at www.tinyurl.com/pwsrccacdisp.



➔ A trio of harbor seals basks on an iceberg in Prince William Sound. *Photo by Bill Rome.*

The council monitors the environment of Prince William Sound and adjoining waters for impacts from oil-industry operations.

Scientific research into such impacts, as well as research into the effects of some oil-spill response tactics, makes up a large part of the work done under this program.

Hydrocarbon Toxicity

This project researches and addresses the gaps in knowledge about the long-term toxic effects of oil, dispersed oil, and residue from in-situ burning under study conditions closely approximating the marine waters in the council's region. The biggest toxicity data gap is on the long-term effects. Thus, the project focuses on the components most involved in those effects, such as polycyclic aromatic hydrocarbons.

Two contracts under the project are under way, one with the Department of Fisheries and Oceans Canada and the other with the National Marine Fisheries Service.

Invasive species

Invasive species, long a major concern for the citizens' council, refers to the problem of non-indigenous plants, animals, or microorganisms reaching Alaska and establishing themselves here. Such invasions can harm native species, including commercially valuable ones such as salmon.

For the council, the primary concern is non-indigenous organisms arriving via oil tankers—either attached to hulls or riding in the ballast water that the tankers discharge into Prince William Sound before loading North Slope crude at the Alyeska terminal in Valdez.

The ballast water problem arises from the fact that most modern tankers employ segregated ballast tanks where “clean” seawater is used for stability. This “clean” ballast, taken in at ports of origin, teems with living organisms. While some are removed during the tanker's trip north, many remain to be discharged into Prince William Sound with the ballast water as the tankers approach the Alyeska terminal for loading.

Hull fouling occurs when organisms grow on oil tanker hulls in one port, and then are carried to different ports where they may fall off or reproduce and cause an invasion.

Because of the potential for invasions by harmful species, the council has made this issue a high priority since 1996.





↳ A fishing vessel pulls oil-spill boom off a reel during a training exercise near Valdez. Photo by Jeremy Robida.

For the third year in a row, the council supported an effort in the state legislature to create an Alaska Council on Invasive Species to serve as a statewide clearinghouse and coordinating body. Seats would be held by commissioners of state departments, and by representatives of soil and water conservation districts, conservation organizations, farmers, landscapers, commercial fishermen, commercial shippers, the University of Alaska agricultural program, Native corporations, and the public at large. No bill was introduced in the 2011 session so the council is searching for other options.

The council continued to provide leadership to citizen monitoring efforts, particularly for the European green crab. This crab, a known ballast-water-borne invader, is an efficient and voracious predator that has invaded the west coast from San Francisco to Vancouver Island. It is feared that the green crab will find its way to Alaska waters.

The monitoring program has evolved into a self-sustaining grassroots system since it was initiated by the council in 2000. Many communities now run their own operations. In Homer and Seward, they're handled by local science centers. The council continues to support some of the smaller communities to encourage participation for those areas. No green crabs have yet been captured in the council region by these trapping efforts.

Regional Environmental Monitoring

In 1993, the council established a Long-Term Environmental Monitoring Program, called LTEMP. The program assesses the status of hydrocarbon levels in the Sound, as well as long-term trends and any new developments that could have an effect on those levels. Samples are collected at ten intertidal sites in Prince William Sound and the Gulf of Alaska. Mussel tissues and sediments from the sites are analyzed in a laboratory to determine whether hydrocarbons are accumulating, and, if so, their source. The result is the largest chronological data set ever compiled for hydrocarbons in Prince William Sound.

LTEMP sampling is conducted once per year at the two Port Valdez sites and at one site in eastern Prince William Sound. Every fifth year, all ten sites will be sampled. Before the current schedule was adopted in 2009, the sampling frequency was as high as three times annually at all ten sites.

The council's LTEMP reports, along with additional information on the program, are available online at www.tinyurl.com/ltemp.

2010-2011 activities



→ Council representatives periodically visit Washington, D.C., to confer with Alaska's Congressional delegation and with officials of federal agencies. Here, from left to right: Patience Andersen Faulkner, council board member; Stan Jones, council director of external affairs; Congressman Don Young; Walter Parker, board member; and Mark Swanson, council executive director. *Photo courtesy of Congressman Don Young.*

OUTREACH

Member Relations

The council has a full-time staff position, called Outreach Coordinator, to maintain productive relations with its 19 member communities and organizations. The coordinator visits communities in the council region, attends member group functions, gives presentations, coordinates special events involving the council and its member groups, and generally encourages citizen involvement in the council's work.

Over the past year, the council participated in outreach activities at local and national levels. Some of those included:

- Alaska Forum on the Environment in Anchorage
- Copper River Delta Science Symposium in Cordova
- Kodiak Area Marine Science Symposium
- Cook Inlet Regional Citizens' Advisory Council meetings
- Tatitlek Heritage Festival
- Chenega Bay Memorial for victims of the 1964 Good Friday earthquake
- Copper River Nouveau, a fundraiser for the Prince William Sound Science Center in Cordova

The council staff accompanied a Seward board member to visit several Seward city administrators and the Alaska Vocational Technical Center's Alaska Maritime Training Center, and went with a Kenai Peninsula board member to meet with organizations on the Kenai Peninsula, including a tour of the Cook Inlet Spill Prevention and Response center.



↳ Each year, residents of Chenega Bay travel to the village's old site on Chenega Island to commemorate those who died there in the Good Friday earthquake and tsunami of 1964. The community, one of the council's member organizations, was later reestablished on Evans Island, which is better protected from tsunami waves. *Photo by Alan Sorum.*

The council information booth was set up at:

- Kodiak ComFish (the largest state fisheries trade show)
- The Alaska State Chamber of Commerce trade show
- The Alaska Municipal League conference

Youth educational expeditions visited Valdez and were given presentations by staff. These students were part of educational learning experiences partly funded by the council. Their expeditions included learning about the Exxon Valdez Oil Spill as well as science, invasive species and the Chugach Forest.

National events in which the council participated included:

- Pacific Marine Expo in Seattle, Washington
- The Society for Environmental Toxicology and Chemistry's North American annual meeting in Portland, Oregon
- The Clean Gulf conference and exhibition in Tampa, Florida which focused on the Deepwater Horizon incident
- The International Oil Spill Conference in Portland, Oregon.

One group from Kazakhstan, one from Korea, one from Argentina, and three groups affected by the Deepwater Horizon spill in the Gulf of Mexico came to Alaska to learn about citizens' oversight. Most of the groups visited two or three communities and talked to residents and others affected by the Exxon Valdez oil spill.

INFORMATION AND EDUCATION COMMITTEE

The Information and Education Committee supports the council's mission by fostering public awareness, responsibility, and participation through information and education. The committee accepted three proposals to fund educational opportunities for students from the region affected by the Exxon Valdez oil spill. These proposals were funded under the council's Youth Involvement project, which assists educational groups in studying topics related to the council's mission. The successful proposers included Alaska Geographic, which brought students in for an International Youth Eco-Forum, a Valdez high school science class field trip to Peterson Bay in Kachemak Bay, and the Wrangell Institute for Science and Environment's Copper River Watershed project.

The Observer is our free quarterly newsletter distributed throughout Prince William Sound, the northern Gulf of Alaska, lower Cook Inlet and the Kodiak archipelago, as well as by request to interested citizens around the world, including regulators and industry.





↳ Linda Robinson, the council's outreach coordinator, talks with Homer High School students about geographic response strategies during an educational event hosted by Kachemak Bay Research Reserve and sponsored by the council. *Photo by Amanda Johnson.*

The Science of Oil Spills curriculum was provided by the Prince William Sound Science Center, and an educational kit was provided by the Kachemak Bay Research Reserve following a month long focus on oil spills. This project was in response to a proposal to fund one month of a public “discovery lab” approved by the council.

Google Advertising Grant

This past year, the council was awarded a grant for free advertising by Google, the Internet search engine giant. Brief ads created by the council appear when Google users search for terms related to the Exxon Valdez oil spill, tanker safety, citizen oversight, dispersants, or other topics related to council issues. Users who click on the ads are taken to the council website.

PUBLICATIONS

The council increases public awareness on a wide range of issues pertaining to crude oil transportation through printed and electronic publications.

The Observer is a free quarterly newsletter with nearly 5000 copies distributed throughout Prince William

Sound, the northern Gulf of Alaska, lower Cook Inlet and the Kodiak archipelago, as well as by request to interested citizens around the world, including regulators and industry. In addition, it is posted on the council website at www.pwsrcc.org/newsroom. This year, the council began distributing The Observer as an email newsletter. To sign up, visit: bit.ly/TheObserverByEmail

The Observer covers council activities, developments in the oil transportation industry, and news about policy and operational issues related to marine oil transportation. Major oil spill drills are covered, and Alyeska is invited to submit a column for each issue. In the course of preparing articles for The Observer, the council frequently invites feedback from industry and regulatory personnel.

The council makes available a 14-minute video about its origins, mission and activities. This video, titled “A Noble Experiment: The Story of the Prince William Sound Regional Citizens’ Advisory Council,” is distributed free to member entities for use in informing their constituents about the council. The video can also be viewed on the council’s YouTube Channel, www.youtube.com/user/pwsrcc.



↳ The council and the Wrangell Institute for Science and Environment co-sponsored an educational trip for students from the Copper River watershed area. The trip included meeting with the council staff and learning about the council and its issues. *Photo courtesy of Copper River Stewardship 2011 Team.*

The council also makes available a “then and now” report and DVD on improvements to the Prince William Sound safety system since the Exxon Valdez spill. They were created in 2009 for the 20th anniversary of the spill. Each year, the council summarizes its work in an annual report such as this one.

State Government Relations

The council monitors state actions, legislation and regulations that relate to terminal or tanker operations, or to oil spill prevention or response. To track developments in the state capital, the council retains a monitor under contract during the legislative session. This area of council activity is coordinated by a Legislative Affairs Committee made up of members of the council board.

In the past year, the council continued its support for the idea of a statewide council to coordinate efforts by various agencies and organizations to combat the problem of non-indigenous species establishing themselves in Alaska and jeopardizing native species and ecosystems. No legislation passed during the 2011 legislative session, but the council anticipates continuing its push for some form of coordinating body to address the invasive species threat.

Federal Government Relations

The council also monitors federal government actions and issues through its Legislative Affairs Committee and a contract representative in Washington, D.C.

The past year saw one of the most significant legislative events in council history, thanks the efforts of a great many council volunteers and supporters, as well as Alaska’s congressional delegation. As discussed elsewhere in this report, Congress passed and President

Obama signed in the fall of 2010 a measure that will preserve the system of dual tug escorts for loaded oil tankers in Prince William Sound.

In the coming year, the council anticipates monitoring work in Congress on legislation to address problems revealed by BP’s Deepwater Horizon oil spill in the Gulf of Mexico during the spring and summer of 2010. The council’s goals will be to look for lessons from the Gulf spill that might be relevant in Prince William Sound, and to review any provisions that would affect existing citizen advisory groups or establish comparable groups in the Gulf or in Alaska’s Arctic.

Recertification

The Coast Guard certifies the council as the federally approved citizens’ advisory group for Prince William Sound, pursuant to the Oil Pollution Act of 1990. The council has been the certified group since 1991. Under the annual recertification process, the Coast Guard assesses whether the council fosters the general goals and purposes of the Act and is broadly representative of the communities and interests as envisioned in the Act.

As part of its recertification process, the Coast Guard considers comments from industry, interest groups, and citizens. The council fulfills the Act’s requirement for an industry-funded citizens advisory group, but it was established before the law was enacted.

As discussed earlier in this report, 2010-2011 recertification process resulted in over 60 supportive comments, the highest in council history. No critical comments were submitted.

our board & who we are

WHO SERVES ON THE BOARD?

The names and faces change, but current and recent board members have included commercial fishermen, a schoolteacher, the chief executive of a regional Native corporation, tour-boat operators, an oilfield engineer, and a village mayor.

The council is an organization of organizations. Our 19 member entities include state-chartered cities and boroughs, tiny Alaska Native villages with tribal governments, Native corporations, commercial fishing organizations, an environmental consortium, and groups representing the tourism industry.

Each member entity chooses one representative to our board. The lone exception is Valdez. It has two representatives, giving our board a total of 20 members. The board meets three times a year. The January meeting is in Anchorage, the May meeting is in Valdez, and the September meeting rotates among other member communities in the oil spill region.

EXECUTIVE COMMITTEE



President:
Dorothy M. Moore,
City of Valdez



Vice president:
Pat Duffy,
Alaska State Chamber
of Commerce



Secretary:
Thane Miller,
Prince William
Sound Aquaculture
Corporation



Treasurer:
Sheri Buretta,
Chugach Alaska
Corporation



Members at large:
Blake Johnson,
Kenai Peninsula
Borough



Members at large:
Walter Parker,
Oil Spill Region
Environmental
Coalition



Members at large:
Stephen Lewis,
City of Seldovia





↳ Every September, the council board hits the road to meet in one of its far-flung member communities. The September 2010 meeting was held in Seldovia, where these slough-front homes are located. *Photo by Tom Kuckertz.*

OTHER DIRECTORS



Patience Andersen
Faulkner,
Cordova District
Fishermen United



Rochelle van den
Broek,
City of Cordova



Al Burch,
Kodiak Island
Borough



Jane Eisemann,
City of Kodiak



Larry Evanoff,
Community of
Chenega Bay



John French,
City of Seward



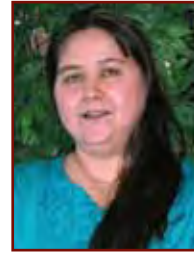
Cathy Hart,
Alaska Wilderness
Recreation & Tourism
Association



Marilynn Heddell,
City of Whittier



Iver Malutin,
Kodiak Village Mayors
Association



Diane Selanoff,
Port Graham
Corporation



Stan Stephens,
City of Valdez



Roy Totemoff,
Community of Tatitlek



John Velsko,
City of Homer



➡ Blake Johnson was one of several council board members who traveled to Seldovia by ferry for a board meeting in September 2010. Johnson represents the Kenai Peninsula Borough on the council board. *Photo by Serena Lopez.*

Our 19 member entities include state-chartered cities and boroughs, tiny Alaska Native villages with tribal governments, Native corporations, commercial fishing organizations, an environmental consortium, and groups representing the tourism industry.

EX-OFFICIO BOARD MEMBERS (NON-VOTING)

Ron Doyel, Alaska Department of Environmental Conservation
 Bradley Dunker, Alaska Department of Fish and Game, Division of Sport Fish
 Sharon Randall, U.S. Forest Service
 Katie Farley, Alaska Department of Natural Resources
 Joe Hughes, U.S. Bureau of Land Management
 Denise Hall, Alaska Division of Homeland Security & Emergency Management
 Chris Field, U.S. Environmental Protection Agency
 Doug Mutter, U.S. Department of the Interior
 Commander Ben Hawkins, U.S. Coast Guard, Marine Safety Unit, Valdez
 W. Scott Pegau, Oil Spill Recovery Institute, Cordova
 John Whitney, U.S. National Oceanic and Atmospheric Administration



➡ The council board and staff gather for a group portrait during a September 2010 board meeting in Seldovia. *Photo by Amanda Johnson.*



committees

Five standing committees advise the Board of Directors and the council staff on projects and activities. Committee volunteers also assist the staff on individual projects. The advisory committees are made up of interested citizens, technical experts, and members of the council board. Committee volunteers are selected through an annual application process. They are appointed to two-year terms and may serve consecutive terms.

ADVISORY COMMITTEE MISSIONS

Oil Spill Prevention and Response Committee

Minimize the risks and impacts associated with oil transportation through strong spill prevention and response measures, adequate contingency planning, and effective regulations

Port Operations and Vessel Traffic Systems

Monitor port and tanker operations in Prince William Sound

Scientific Advisory Committee

Promote the environmentally safe operation of the terminal and tankers through independent scientific research, environmental monitoring, and review of scientific work

Terminal Operations and Environmental Monitoring

Identify actual and potential sources of episodic and chronic pollution at the Valdez Marine Terminal

Information and Education Committee

Foster public awareness, responsibility and participation through information and education



→ A crow keeps a watchful eye on the world from atop a post in Seldovia, a council member community. *Photo by Serena Lopez.*



➡ Homes line a picturesque slough in Seldovia, one of the council's member communities. *Photo by Stan Jones*

Our advisory committees work to minimize the risks and impacts of oil transportation, to monitor port and tanker operations, to promote environmentally safe operations, to identify actual and potential sources of pollution, and to foster public awareness, responsibility and participation.

As of June 30, 2011

Oil Spill Prevention and Response Committee

Jerry Brookman
John French, chair
(council board member)
David Goldstein
Joe Jabas
John LeClair
Walter Parker
(council board member)
Gordon Scott
Scott Smith
John Velsko
(council board member)

Scientific Advisory Committee

John Kennish, chair
John French
(council board member)
Roger Green
Debasmita Misra
Dorothy Moore
(council board member)
David Musgrave
Mark Udevitz

Terminal Operations and Environmental Monitoring Committee

Bob Benda, chair
Jo Ann Benda
Rochelle van den Broek
(council board member)
George Skladal

Port Operations and Vessel Traffic Systems Committee

Robert Jaynes, chair
Duane Beland
Cliff Chambers
Bill Conley
Pat Duffy
(council board member)
Jane Eisemann
(council board member)
Pete Heddell

Information and Education Committee

Patience Andersen Faulkner, chair
(council board member)
Kate Alexander
Peter Armato
Jane Eisemann
(council board member)
Cathy Hart
(council board member)
Ruth E. Knight
Savannah Lewis



papers, presentations, reports & media releases

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Kodiak Area Marine Science Symposium Program and Abstracts. Kodiak Area Marine Science Symposium, 4/9/2011. 400.403.110409.KodMarineSciSympos.pdf

These are just a few of the many reports, papers, presentations, and media releases produced or compiled by the council in the past year. For further information, or to obtain copies, visit the council website or contact our Anchorage office (see back page).

staff & offices

The Prince William Sound Regional Citizens' Advisory Council was formed after the Exxon Valdez oil spill in 1989 to provide a voice for communities affected by oil industry decisions in Prince William Sound, the Gulf of Alaska, and Cook Inlet.



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