HOBSERVER

Fall/Winter 2024

Researchers find new non-native species in Prince William Sound

Last year, researchers from the Smithsonian Environmental Research Center, or SERC, partnered with the Council to conduct the largest survey of non-native benthic marine invertebrate species in Prince William Sound since 2003.

The work is part of a larger survey being conducted by Dr. Gregory Ruiz and a team of researchers from SERC to document non-native species in ports and bays throughout the United States. The researchers have also recently surveyed in California, southeast Alaska, and other sites along the Pacific coast of the U.S. Researchers anticipate surveying Cook Inlet in 2025.

Species of interest to the Council's work

Researchers detected three nonnative species during the survey: two crustaceans, Caprella mutica and Monocorophium acherusicum, and a bryozoan, Schizoporella japonica.

One of the three, Schizoporella japonica, had been detected previously. The other two are new to Prince William Sound.

Continued on page 9

What are benthic invertebrates?

Benthic: Occurs at the bottom of a body of water. Invertebrate: An animal with no backbone. This opalescent nudibranch (left) is an example of a benthic invertebrate that is native to Prince William Sound.

Non-native: Monocorophium acherusicum

This tiny crustacean builds tubes out of sediment on ship hulls, docks, or other marine structures.



Non-native: Caprella mutica Commonly called the Japanese skeleton shrimp, this species can affect

aquaculture operations.

Images are not actual size.

IN THIS EDITION:

Volunteer Spotlight: Photographer focuses on fostering environmental stewardship, p. 2

Analysis of weather conditions will help improve spill response, p. 3

Schantz & Archibald: Good resource development depends on strong regulations, p. 4

Alyeska: Believe in Zero: Safety mindset helps prevent incidents, p. 5

New maps show winter hotspots for marine birds, p. 6

Whittier community engages with on-water oil spill response training, p. 8



Volunteer Spotlight: Photographer focuses on fostering environmental stewardship

Long-time Alaskan, and Council volunteer for over 16 years, Cathy Hart has always had a lot of different irons in a lot of different fires. Her passion for telling stories with photographs winds through almost everything she does, including her work on the Council's Information and Education Committee.

This passion ignited early, not long after her father's job as an engineer in the oil industry moved the family to Alaska in the late 1960s. The teenaged Hart was exploring her new home state when she spotted an eagle.

"I watched him dive down and get something on the ground," she recalls.

She was entranced and wanted to capture that



Cathy Hart is a member of the Council's Information and Education Committee. The committee supports the Council's mission by fostering public awareness, responsibility, and participation through information and education.

The committee sponsors projects such as Masters of Disaster, a special event for kids of all ages to learn about topics related to the Council's mission. At a recent event, Hart (center) taught Kodiak students about oil spill response. moment. She soon got her first camera as a gift from her father.

She found she was good at capturing action shots. She photographed kids' sports, theater, and dance, and sold the images. Her passion was for the outdoors though.

"Wildlife was always my true love."

After graduation, Hart went to work for the Alaska Marine Highway, where she worked for 32 years. While she worked there, the Exxon Valdez ran aground in Prince William Sound.

"We had so many cancellations for ferries," Hart says. "Everyone thought everything was dead." The spill spurred her to join the Prince William Sound Tourism Coalition, where she could take an active role in making sure visitors knew that wasn't the truth. She's been working to take care of the environment in one way or another ever since.

Photographs capture stories that can't be fully told with words

When Hart first had the phrase "conservation photographer" explained to her, she says she knew she had found her calling.

"Conservation photographers go out and try to save things." That's what Hart tries to do.

As a member of the Alaska Society of Outdoor & Nature Photographers, Hart stepped up when the World Wilderness Congress came to in Anchorage in 2005. This conference is the longest running environmental forum in the world. A fellow attendee was working on one of conference initiatives for that year: the creation of the International League of Conservation Photographers.

"150 of the best conservation photographers in the world landed in Anchorage," she says. Hart got involved and encouraged other photo club members to help.

"The league was created to work with scientists to bring scientists' message and projects to laymen," Hart says. "It's not all about showing pretty pictures," she adds. "Our photographs can make a difference."

Analysis of weather conditions will help improve spill response

A new study will help responders plan for the effects of weather on an oil spill. Dr. Rob Campbell, a researcher at the Prince William Sound Science Center, has been working with the Council to collect data about ocean currents, wind direction and speed, wave direction and heights, and other information from two buoys in Prince William Sound.

The buoys have been in place since 2019, and have collected enough information to begin to analyze trends. Dr. Campbell recently analyzed the nearly two million pieces of information.

Dr. Campbell found that the air and water temperatures generally followed a typical annual cycle for a subarctic region. Highest temperatures were seen in August, and the lowest in February. There were a few deviations, however:

- During the summers of 2019 and 2020, the region experienced a marine heatwave, referred to by locals as "The Blob." These unusually warm temperatures matched what was occurring in the Gulf of Alaska.
- Late 2020 brought impacts from a La Nina event. La Nina is a climate pattern associated with cooler temperatures in the Pacific Ocean.

Regional temperatures increasing

Temperature data has been collected in the region since 1908. Dr. Campbell was able to compare this historical data with data from

the buoys to confirm a warming trend of approximately 5 degrees Fahrenheit over the last 114 years.

Surface temperatures trending warmer in winter, cooler in summer

Interestingly, in the last few years Port Valdez has experienced cooler than average temperatures at the water's surface during summer. This appears to be related to melting glaciers, which have been melting much faster in the Gulf of Alaska region than the rest of the world. Most of this melting happens between May and October. Cold water from the Lowe River and Valdez Glacier Stream flows into the port, cooling the water's surface.

How does this affect oil spill prevention and response?

Understanding how factors such as wind, waves, currents, and temperatures are behaving and changing can help responders better prepare for an oil spill, and make sure spill contingency plans are tailored to real conditions in the region. Real-time weather data can also provide valuable information during a spill response.

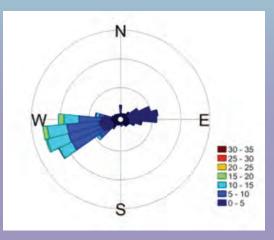
Find more details about the analyses in Dr. Campbell's report, available on our website:

www.tinyurl.com/Buoy-Data-2023

How to read a wind rose

This graphic, referred to as a "wind rose," helps researchers visualize average wind direction, frequency, and speed. This rose represents all of the data for June 2020. The bars point toward the direction the wind is blowing from, the length represents the frequency of wind from that direction, and the color indicates wind speed.

This particular rose shows that winds during June 2020 were generally from the west and some were from the east. The strongest winds came from the west and were between 10 to 20 knots (approximately 11.5 to 23 miles per hour).



From the President and Executive Director:

Good resource development depends on strong regulations

Nothing can change the damage that resulted from the 1989 Exxon Valdez oil spill. Since our creation, the Council's goal has always been to try to ensure it never happens again, at the same time making sure we are prepared with a strong response system in case prevention measures fail. We know that the more you tackle challenging issues and prepare ahead of time, the greater the likelihood of reducing the potential damage.

Our volunteers and staff put in countless hours fulfilling our mandates outlined in the Oil Pollution Act of 1990 and our contract with Alyeska Pipeline Service Company.

While much work continues to be done, we are still seeing concerning trends in the loss of experienced personnel, high attrition rates, and budget and staffing cuts in industry and the associated regulatory agencies. The Council has been raising concerns about the diminishment of agency oversight at the Valdez Marine Terminal for over a decade. We hope that a review of the adequacy of the present regulatory oversight of terminal operations, currently being conducted by the federal Government Accountability Office, will highlight any deficiencies that need to be addressed. And, while we are encouraged by Alyeska's response to our 2023 report "Assessment of Risks and Safety Culture at Alyeska's Valdez Marine Terminal," we diligently continue to try to move all its recommendations forward. We know that a strong regulatory structure benefits development in our state. It also is the cornerstone of protection for our people, communities, economies, and environment. After years of regulatory diminishment, we now need to see the actions necessary to not only stop the cutbacks, but also then restore these agencies to the levels put in place based



Donna Schantz Executive Director Robert Archibald President

on lessons learned from the 1989 oil spill. While the Council is always ready to listen to what industry and regulators are willing to share with us, we will also continue to closely watch what they do. And that is what we are here to do: we listen, we watch, and we advise. We sometimes say that "Trust, but verify" is our unofficial motto. We want to trust that the problems we are speaking out about will be addressed, but will not stop our inquiries and our work until we can verify that they have been.

We know that industry and regulatory agencies have the same goal in mind as the Council: the safe transportation of oil through our region. Our role in that shared goal is defined by and dependent on citizen engagement. We must watch what is happening – the decisions being made, risks being assessed, safety measures implemented – and never be afraid to speak up. Those with the most to lose from oil pollution must have a voice in the decisions that can put their livelihoods and communities at risk. We will continue to work hard to be that voice.

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Read more about the Council's recent work in our annual report, available on our website: www.tinyurl.com/PWSRCAC-Annual-Report-2024

From Alyeska: **Believe in Zero: Safety mindset helps prevent incidents**

Brandon Kilian SERVS Response Coordinator

At Alyeska's Ship Escort Response Vessel System, or SERVS, we believe in zero injuries or incidents every day. Working in a high-risk industry and marine environment, we not only strive to do better every day but also understand that all accidents are preventable through rigorous safety measures and a culture of vigilance. Mindsets are particularly critical in oil spill prevention and response, where the stakes for human safety and environmental health are exceedingly high.

Preventing spills requires many hours of instructor-led training, conducting exercises, meticulous equipment maintenance, stateof-the-art technology, and adherence to strict safety protocols. On average, SERVS performs more than 100 training exercises and deployments every year. One example, tug U and J boom deployments, are conducted in the Port of Valdez for each escort tug. These deployments are a collaborative effort between Alyeska and Edison Chouest Offshore team members.

Prior to the deployment, objectives, expectations, weather considerations, and other recreational activities within the port are discussed with the participating team members. Known and potential hazards are identified for mitigation efforts. The deployment involves all tug crew members, and each has a role for in

the deployment's success.

After the tug's work boat is splashed and boom deployed, the tug and work boat communicate and coordinate speed and heading while the boom forms U and J shapes between boats. The tug and work boat are expected to hold their 'U' formation and perform several 90-degree turns, then maneuver into a 'l' formation. Once the 'J' formation is complete, a skimmer is deployed to the water to simulate product recovery. Once all the objectives of the exercise are met, the exercise is complete and the crew works to recover, clean, and stow the response equipment. Team members meet afterwards to discuss post-deployment comments, concerns, and learning opportunities.

SERVS conducts these training evolutions so that in the event of an actual spill, a swift and coordinated response can be executed to mitigate impact to wildlife and the environment. We don't train until we get it right; we train until we can't get it wrong. Success in these endeavors hinges on something we all know working on TAPS, and that is teamwork; every team member at SERVS is completely committed to safety, collaboration, and clear communication. By working together and holding one another accountable, we can effectively prevent incidents and respond decisively. SERVS embodies the true spirit of Believe in Zero and the constant safeguarding of both people and Prince William Sound.



Over the summer, Alyeska employees submitted examples of why they "Believe in Zero" why they believe it is possible to operate TAPS without injuries, spills, or other incidents. Kilian detailed how the team put this mindset to work during a recent escort tug deployment. Left: The tug Courageous performs a "U" boom formation

New maps show winter hotspots for marine birds

Researchers have completed a new analysis that will help protect marine birds in Prince William Sound from oil spills. Anne Schaefer and Dr. Mary Anne Bishop from the Prince William Sound Science Center compiled data from surveys in Prince William Sound conducted during March between 2007-2014 and 2018-2023. These surveys documented numbers and locations of a variety of marine bird species.

The researchers cross-referenced the compiled data, including locations, with activity related to the transportation of oil through Prince William Sound.

Why is this information important?

Alaska winters are difficult for many species to survive. The weather can be extreme, water is cold, days are short, and food can be scarce. Many birds migrate south, but some remain year-round. Mapping where these birds are concentrated and where they might encounter pollution from the oil transportation industry allows us to make sure plans are in place to protect these species in case of a spill.

What attracts birds to these areas?

Researchers noted in the report that birds tended to congregate in the more sheltered bays and estuaries. Some species were particularly drawn to regions where herring spawn, as that is an important food source.

Locations for protection

The researchers analyzed the survey data and noted four main locations that would benefit from protection: bays on either side of Hinchinbrook Entrance, northeast Prince William Sound near the tanker anchorage, the head of Port Valdez, and the narrow passages among the islands in southwest Prince William Sound.

Hinchinbrook Entrance

At the southern end of Prince William Sound are two islands, Hinchinbrook and Montague. Tankers pass between these two islands through a narrow waterway called Hinchinbrook Entrance. The bays on either side of the entrance are hotspots for multiple species, including marbled murrelets and pigeon guillemots. The local populations of these two species were badly damaged by the Exxon Valdez oil spill and have yet to fully recover.

Northeast Prince William Sound between Ports Fidalgo and Gravina

In this area, researchers found near-high to high densities of almost all of the groups of

Scoters 🕹

Scoters can often be found in the mouths of bays and passages, particularly the southwest passages.

Pacific Loon \downarrow

The Pacific loon is the most common of the loon species in Prince William Sound. Herring are a favorite food for this species. species. Researchers noted that recent fish surveys documented the area as an important spawning ground for Pacific herring. This location could be threatened by the nearby tanker anchorage at Knowles Head, which is also designated as a place where a tanker in distress can anchor during a response.

Port Valdez

While the whole port is important habitat, the extensive mudflats at the head of Port Valdez are particularly important for many marine species. Nearby infrastructure includes the Valdez Marine Terminal, a busy harbor, and a fuel dock.

Southwest Passages

The passages between the small islands in southwest Prince William Sound are not particularly close to tanker activity, however the bays offer protection from the worst of the winter weather and many species can be found there. Many of these bays were heavily polluted with Exxon Valdez oil, remnants of which remain today below beach surfaces.



Black-legged Kittiwake 1

Porpoise Rocks, in the mouth of Port Etches at Hinchinbrook Island, supports important colonies of blacklegged kittiwakes, common murres, and tufted puffins. It is also a roost-site for cormorants and a haul-out site for endangered Steller sea lions.

Find more details about the hotspots in the report, available on our website: www.tinyurl.com/PWS-Marine-Birds

Pigeon Guillemots 🚽

The local population of pigeon guillemots has not yet completely recovered from damage inflicted by the Exxon Valdez oil spill. During the month of March, they can often be found in Zaikof Bay at Montague Island, near Hinchinbrook Entrance.

Prince Tanker Villiam anchorage Sound

Southwest

passages

Hinchinbrook Entrance

Port

Valdez

Valdez

Marine

Terminal

Gulf of Alaska

<u>Community Corner:</u> Whittier community engages with on-water oil spill response training

On September 30, the Council held a tour in Whittier for community members to observe the annual oil spill response training for fishing vessels. The tour has been an annual event since 2016, rotating through several communities in the region, and held most recently in Seward (2022) and Valdez (2023). The Whittier community was invited on board a Stan Stephens Glacier & Wildlife Cruises vessel to observe the local vessels as they practiced a variety of clean up tactics and skills. Narration was provided by staff from the Council and Alyeska Pipeline Service Company/Ship Escort Response Vessel System, or SERVS. The 96 passengers on board included community members, local students, volunteers, and Whittier and Anchorage-based partners. Whittier resident, Chase, age 12, stated about the event, "There are so many people participating and wanting to learn on this boat, learning about this to help protect our environment. Plus watching all those boats

do their job in helping protect the environment. I think it's pretty cool."

The local fishing crews and other vessel operators participating in the training are contracted by SERVS to respond in the event of an oil spill from a Prince William Sound tanker or the Valdez Marine Terminal. SERVS is Alyeska's oil spill removal organization and coordinates annual spill response exercises in multiple southcentral Alaska communities, including Whittier. During the tour, Whittier residents learned about oil spill response technology, methods for collecting and skimming oil, and how this program



Maia Draper-Reich Outreach Coordinator

helps Alyeska operate safely in Prince William Sound. "I think that's very cool for [students] to see people from their community taking part in an activity like this," said Whittier school teacher Jennifer Childress. "Knowing what a special and important place Prince William Sound is, it's important to have people be trained and ready to go in case an awful event like an oil spill happens. To have local people involved in that and as a teacher to have students see that they could have a place in that and be a part of that as they get older, is very important." Alyeska's contracted fishing fleet is the backbone of their oil spill response system. It is essential to the system operating as it

Continued on page 10

This educational boat tour helps keep communities informed on what oil spill prevention and response measures are in place in Prince William Sound and downstream communities, especially those involving their local fishing crews. Below: Whittier tour participants watch the Ross Chouest, one of SERVS' spill response tugs, practice response tactics with local mariners.

Researchers find new non-native species in Prince William Sound

Continued from page 1

Another new non-native species, Ciona savignyi, was found by volunteers for the PlateWatch program, a separate monitoring program also sponsored by the Smithsonian. This tunicate has now been reported in both southeast Alaska and Prince William Sound.

Evidence of the non-native Polydora onagwaensis was found using genetic analysis on a single settlement plate in southwest Prince William Sound. The report noted that this marine worm could be of concern as it has caused damage to oyster populations in locations where it has invaded. Further evaluation is needed to confirm this identification.



To find the specimens, researchers suspended hard plates at 11 different sites around Prince William Sound. The plates were retrieved after three months and examined to see what nearby species settled on the plate.

Half of the plates from each site were examined under microscope, while the other half were analyzed using a genetic testing method. This survey brings the total number of non-native benthic marine invertebrate species confirmed in Prince William Sound to seven. The species Schizoporella japonica and Mya arenaria, a clam originally from the east coast of the U.S., are confirmed to be established in the area. Researchers do not know if any of the other five are established.

How do non-native species migrate around the world?

Non-native marine species travel from region to region in several ways. Some species can travel on their own as adults, others have larvae that can drift with the tides. Species that don't naturally travel far on their own can migrate through tanker ballast water and hull fouling. Ballast water is sea water taken into the hold of a ship such as an oil tanker to help stabilize the vessel while traveling. If the water is released into the destination port with no prevention measures, larvae of these species can grow and become established in the new port.

Hull fouling is when a marine species such as a barnacle or tunicate attaches itself to the outside hull of a vessel.

Many of the tankers that call at the Valdez Marine Terminal in Prince William Sound come directly from ports along the Pacific coast. One of these, San Francisco Bay, has over 300 non-native marine species, more than any other estuary in the world.

What can we do to prevent or slow the spread of other invaders?

Fortunately, the tanker companies that visit Prince William Sound have been installing management systems that treat ballast water while in the hold during the trip to reduce the number of organisms released in our waters. The hulls are also covered in special paint that discourages tunicates and barnacles from attaching. These systems help prevent the spread of non-native species.

Find out more about the survey in the full report on our website: www.tinyurl.com/Smithsonian-PWS-survey

Photographer focuses on fostering environmental stewardship

Continued from page 2

Mentoring others to make a difference

Today, she spends a lot of her time volunteering and mentoring younger photographers in a variety of programs.

In 2013, Hart took 15 high school students, mostly from Alaska, to a World Wilderness Congress in Spain.

"The kids had to do a conservation project of their choice, and then present about it at the conference," Hart says. "Members of the league worked with the kids to help them get their presentations ready, and then the students spoke in front of representatives from 92 different countries."

More recently, a young student she introduced to photography gave a presentation in Europe about the student's project documenting salmon spawning grounds in the Kenai River. Hart traveled to watch her presentation. The pride in her voice is apparent as she lists off her mentee's accomplishments.

"I've been on cloud nine ever since!"

She's currently serving as president of the Alaska Society of Outdoor & Nature Photographers, where she encourages other members to volunteer with her. The group recently worked with Girls Who Click, a nonprofit that hosts free workshops for teen girls to learn about wildlife and nature photography. Hart and other volunteers from the photo club helped the teens learn how to capture images and use them to tell a story. Some of the teens were shy. A few were not fluent in English. "My goal was to make them smile," Hart says. "By the end, they were smiling and laughing and stood up in front of the class and talked through her photos."

Hart also volunteers her time on the Council's Information and Education Committee, where she and other volunteers plan outreach projects that support the Council's mission.

One of Hart's favorite projects is the annual tour of the on-water spill response training. Alyeska's Ship Escort Response Vessel System pays local mariners to be available to help response to a spill, should one occur. The Council sponsors a vessel in a different community each year and takes residents out on the water to see the training up close. Committee members help develop the project, and as part of her work with the committee, Hart helps tell the story through her photos.

When she first joined the Council, she heard a lot of scientific jargon and felt like she was hearing a foreign language. She leaned on her dad to help her understand.

"He helped me with all the language and the lingo, he was like my secret weapon," Hart says. "Some of what we see is very dry and hard to understand what they're talking about," Hart says of the Council's projects. "But if you can attach images to that, it helps people understand."

See Hart's photos from the response training tour on pages 1, 8, 11, and the cover of this newsletter.

Whittier community engages with on-water oil spill response training

Continued from page 8

was designed to do and part of what makes the Prince William Sound system world-class. These contracted vessels and their crews help ensure the most comprehensive oil spill response measures are in place for both open water and nearshore resources. A major lesson of the Exxon Valdez oil spill was that incorporating local mariners into the spill response system helps ensure a quick, efficient and effective response. "It's especially important for local fishing vessels to participate in the system," said Kathy Shea, one of several representatives from the Alaska Department of Environmental Conservation's Spill Prevention and Response Division on board the tour. "They know the water, they're out here fishing on a regular basis and they rely on the ocean for their livelihoods. They want to pass down a clean environment to their families in the future, so having them on our team is hugely advantageous for spill response."

THE OBSERVER

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Citizens promoting the environmentally safe operation of the Alyeska terminal and associated tankers

Who we are

The Council is an independent, nonprofit corporation formed after the 1989 Exxon Valdez oil spill to minimize the environmental impacts of the Trans Alaska Pipeline System's terminal and tanker fleet.

A voice for citizens: The Council is a voice for the people, communities, and interest groups in the region oiled by the Exxon Valdez spill.

Those with the most to lose from oil pollution must have a voice in the decisions that can put their livelihoods and communities at risk.

What we do

Combatting complacency: Investigations into the Exxon Valdez oil spill found that complacency on the part of industry and the government contributed to the accident. The Oil Pollution Act of 1990 mandated independent, nonprofit, citizen oversight councils for Prince William Sound and Cook Inlet.

We combat the complacency that led to the 1989 spill by fostering partnerships among the oil industry, government, and local communities in addressing environmental concerns.

More about the Council and its history at: www.pwsrcac.org/about

Photo credits:

Cover: Orcas in Prince William Sound. By Cathy Hart.

Page 1: Local Whitter fishing vessels participate in annual training to response to an oil spill. By Cathy Hart.

Opalescent nudibranch by Nelli Vanderburg, Monocorophium acherusicum courtesy Smithsonian Open Access Media, Caprella mutica by Eric A. Lazo-Wasem via Wikimedia Commons.

Page 2: Cathy Hart teaching Kodiak student about oil spills. Photo by Amanda Johnson.

Page 5: Tugs in response formation. Courtesy of Alyeska.

Pages 6-7: Black-legged kittiwake by Amanda Bauer, Pacific loon by Kevin Cole via Wikimedia Commons, Scoter courtesy of Alaska Region U.S. Fish & Wildlife Service, Pigeon Guillemots by Eliezg via Wikimedia Commons.

Page 8: Response training tour by Cathy Hart.

Page 9: Retrieving a settlement plate by Nelli Vanderburg.

Page 11: A local resident watches spill response training during the Council's annual tour. More about the tour on page 8. Photo by Cathy Hart.

Board of Directors

The Council's member entities are communities and interest groups affected by the Exxon Valdez oil spill:

Alaska State Chamber of Commerce Community of Chenega • Chugach Alaska Corporation City of Cordova • City of Homer • City of Kodiak City of Seldovia • City of Seward • City of Valdez City of Whittier • Community of Tatitlek Cordova District Fishermen United Kenai Peninsula Borough • Kodiak Island Borough Kodiak Village Mayors Association Oil Spill Region Environmental Coalition Oil Spill Region Recreational Coalition Port Graham Corp. • Prince William Sound Aquaculture Corp.

Advisory Committees

Much of the Council's work is done through permanent volunteer committees made up of Board members, technical experts, and local citizens with an interest in making oil transportation safer in Alaska.

Our committees provide an avenue for public participation in the Council's work.

Terminal Operations and Environmental Monitoring (TOEM): TOEM identifies actual and potential sources of episodic and chronic pollution at the Valdez Marine Terminal.

Port Operations and Vessel Traffic Systems (POVTS):

POVTS monitors port and tanker operations in Prince William Sound. The committee identifies and recommends improvements in the vessel traffic navigation systems and monitors the vessel escort system.

Scientific Advisory Committee (SAC):

SAC sponsors independent scientific research and provides scientific assistance and advice to the other council committees on technical reports, scientific methodology, data interpretation, and position papers.

Oil Spill Prevention and Response (OSPR):

OSPR works to minimize the risk and impacts associated with oil transportation through research, advice, and recommendations for strong and effective spill prevention and response measures, contingency planning, and regulations.

Information and Education Committee (IEC):

IEC supports the Council's mission by fostering public awareness, responsibility, and participation in the Council's activities through information and education.

THE OBSERVER

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Inside:

- Researchers find new non-native species in Prince William Sound, p. 1
- Analysis of weather conditions will help improve spill response, p. 3 New maps show winter hotspots for marine birds, p. 6
- And more...

Alaska State Chamber of Commerce - Chenega - Chugach Alaska Corp - Cordova Cordova District Fishermen United - Homer - Kenai Peninsula Borough - Kodiak Kodiak Island Borough - Kodiak Village Mayors Association - Oil Spill Region Environmental Coalition Oil Spill Region Recreational Coalition - Port Graham Corp - Prince William Sound Aquaculture Corp Seldovia - Seward - Tatitlek - Valdez - Whittier