September 2023 Status Report

As of August 4, 2023

3100 - Public Information Program

Objectives: Inform members of the general public, member entities, and agency and industry partners of PWSRCAC projects. Support legal requirements for ongoing updates to the public.

Accomplishments since last report: Staff continues to inform the general public and others about PWSRCAC's projects and mission through publications and online presence.

3200 - The Observer

The Observer: The Council's newsletter, *The Observer*, is produced three times per year in both print and email format. Individual articles are posted to the Council's website. The article archive is available here: www.tinyurl.com/ObserverArchive.

3300 - Annual Report

Objectives: Prepare and publish PWSRCAC's Annual Report each year to:

- 1. Inform the general public, member entities, and agency and industry partners of PWSRCAC projects and activities; and
- 2. Support legal requirements for ongoing updates to the public.

Accomplishments since last report: Work to create the content and design for the 2022-2023 report was started. Staff are developing the text content and coordinating with the contracted graphic designer on the layout.

3410 - Fishing Vessel Program Community Outreach

Objectives: For bringing the realities of oil spill response tactics, equipment, and planning to life for citizens within the Exxon Valdez oil spill region communities, the fishing vessel community outreach program is a perfect venue. Each fall and spring SERVS holds its contracted fishing vessel program training in the following communities: Cordova, Valdez, Whittier, Seward, Homer, and Kodiak. The onwater portion of the training, viewed by the public during this outreach tour in partnership with Alyeska/SERVS, shows real-time capabilities of oil spill prevention and response equipment and tactics. This project contracts a local tour boat that will allow interested students, members of the public, and media to observe and learn about oil spill prevention and response.

Accomplishments since last report: The Spring 2023 tour was held in Valdez on Wednesday, May 3, aboard the Stan Stephens vessel Glacier Spirit. Alyeska and SERVS staff joined PWSRCAC staff to share information about the SERVS Fishing Vessel Program and other oil spill response measures with the public. There were 119 passengers total. In attendance were PWSRCAC volunteers, staff, and partners, local reporters, and Valdez community members including groups of students from Gilson Middle School, Valdez High School, and PWS College.

Hosting the tour in Valdez offered extra resources for the passengers to observe and learn about. Participants watched fishing vessels engaged in nearshore response tactics as well as practicing with the open water barge and tug. Narrators shared about local Geographic Response Strategies and a new purpose-built response barge at the dock. We also cruised just outside the security zone of the Valdez Marine Terminal to learn about the facilities and their purposes on site. The oil tanker Alaskan Navigator was at the berth preparing to depart so Angelina Fuschetto spoke about tanker vessels and answered questions about maritime careers. Kate Dugan, Mike Day, and Klint VanWingerden of Alyeska, Angelina Fuschetto of Crowley Alaska Tankers, and Maia Draper-Reich and Jeremy Robida of PWSRCAC contributed narration about their areas of expertise. Additional staff and volunteers circulated and engaged in conversation with smaller groups of passengers.

Fourteen participants filled out an online feedback survey which gathered overall very positive comments. Valdez High School student Izzy Kizer stated about the event, "We need to know how to prevent [oil spills], but when they do happen, it's very important to know how to clean them up. Some of these things, they work on a way larger scale than we're aware of and seeing that helps broaden your perspective."

"It takes a lot of coordination and cooperation from so many different entities in the community and that's really fun for the students to see," said Gilson Middle School teacher Ann Norris. This sentiment was echoed by Mo Radotich, one of several representatives from the Alaska Department of Environmental Conservation on board the tour. "I think it's good for us all to get together – from regulatory, industry, RCAC, community members that are here," said Radotich. "I think it's important to see us working together and keep developing those relationships."





Members of the Valdez community observe SERVS on-water training for contracted fishing vessels.

Photos: Dave Janka

3500 - Community Outreach Program

Objectives: Increase awareness of PWSRCAC and increase communications with member organizations and communities in the Exxon Valdez oil spill region.

Accomplishments since last report:

- May 2 Youth Involvement Bligh Reef Expedition, Valdez, AK
 - Five-hour boat trip for local high school and college students to learn about oceanography and oil spill topics.
 - PWSRCAC volunteers and staff, and Alyeska staff attended and participated in the marine science activities and career/education pathway discussions.

- May 2 Youth Involvement Independent Research Course Symposium, Valdez, AK
 - Poster-session style symposium at Prince William Sound College where students funded by PWSRCAC and others shared posters via casual conversation and five-minute presentations.
- May 3 Valdez Marine Terminal tour for PWSRCAC volunteers and staff
 - o First onsite tour for PWSRCAC members since COVID began.
- May 3 Fishing Vessel Program Community Outreach tour, Valdez, AK
 - Educational boat tour for the public to observe and learn about the SERVS contracted fishing vessel program and training.
 - o Details in the 3410 Fishing Vessel Program Community Outreach tour status report.
- May 3 Valdez Community Reception, Valdez, AK
 - Cohosted by Hilcorp, LLC, Alaska Tanker Company, and PWSRCAC at the Civic Center, this event included community attendance, food, and a fire-fighting demo by the SERVS tugs.
- May 15-16 Prince William Sound Natural History Symposium, Whittier, AK
 - Outreach Coordinator Maia Draper-Reich participated on the planning committee, presented on "Then & Now: 34 Years Since the Exxon Valdez Oil Spill," and hosted a PWSRCAC booth.
- May 25 Guides' Training Session, Valdez, AK
 - Staff members Jeremy Robida and Nelli Vanderburg hosted a free event for Valdez guides to learn about the Valdez Marine Terminal, oil spill prevention and response systems, and PWSRCAC's role.
- June 3 Presentation to Kenai Fjords Floating Teachers' Workshop, Seward, AK
 - Maia prerecorded a short talk for field course orientation and delivered "The Spill" books and PWSRCAC materials ahead of time for the participants and instructors.
 - o Alaska Geographic and Ocean Alaska Science & Learning Center (National Park Service) are the course facilitators.
- June 6 Presentation to Prince William Sound Teachers' Course, Anchorage, AK
 - Maia presented and distributed "The Spill" books and PWSRCAC materials during orientation to the participants and instructors.
 - Alaska Geographic and United States Forest Service are the course facilitators.
- **June 11** Copper River Nouveau, Cordova, AK
 - Board member Dave Janka, OSPR member Skye Steritz, and staff members Joe Lally and Danielle Verna attended the gala benefit for the Prince William Sound Science Center on behalf of the Council.
- June 29 Exxon Valdez oil spill and PWSRCAC overview for visiting youth, Valdez, AK
 - Staff members Donna Schantz and Sadie Blancaflor presented to a group of youth participating in a church intensive via the Epiphany Lutheran Episcopalian Church. The youth were visiting from Soldotna, Anchorage, and Fairbanks.
- August 4-6 Salmonfest, Ninilchik, AK
 - o Maia hosted the Council's booth in the nonprofit 'Cause'way section of the festival with help from Homer area volunteers.

3530 - Youth Involvement

Objectives: Select proposals for youth activities, in collaboration with partner agencies and organizations throughout the Exxon Valdez oil spill region. Coordinate activities to facilitate hands-on learning about topics related to the Council's mission. Where appropriate and feasible, participate in mission-relevant youth activities.

Accomplishments since last report: The Information and Education Committee completed a revision of the Youth Involvement Request for Proposals (RFP) in time to release the RFP in April/May 2023. The committee received and reviewed four proposals and then voted to fund all four proposed projects. The contracts are out for signature for these projects which will take place over the 2023/2024 school year with the following contractors: Alaska Marine Conservation Council/Kodiak Ocean Science Discovery Program (two projects, both in Kodiak), University of Alaska Anchorage/Prince William Sound College (Valdez), and Center for Alaskan Coastal Studies (Homer).

Two Youth Involvement projects were completed in June; one with University of Alaska Anchorage/Prince William Sound College (Valdez) and one with Gilson Middle School (Valdez).

There are currently four summertime Youth Involvement projects underway with their contracts set to close September 30, 2023. These projects are being facilitated by Alaska Geographic (Western PWS, serving youth from anywhere in Alaska), Copper River Watershed Project (project serving youth in Valdez/Glennallen), Center for Alaskan Coastal Studies (Homer), and Prince William Sound Science Center (Cordova and the Copper River region).

3600 - Public Communications Program

Objectives: This program disseminates information and increases awareness through the Observer newsletter and the Council's online presence. This program helps publicize information generated from the Council's technical committee projects. Project results and information are disseminated in a format that is easily understood by the general public.

The booklet "Stories of a Citizens' Council" is being prepared for a reprint this fall.

3610 - Web Best Available Technology

Objectives: This project helps ensure the Council's websites and web presence using the best and most up-to-date technology available by funding new features, repairs, and upgrades to the Council's websites. This includes regular maintenance and technical upgrades as well as upgrades to such aspects as user experience and branding.

Current projects: The Council's website recently moved to a new host and underwent a major technical upgrade. The technology that manages the library of PDF documents has been upgraded, allowing for improvements in search and promising features that can be implemented in future projects.

Website data: Website usage for www.pwsrcac.org is tracked through Google Analytics for information such as numbers of visitors, location of visitors, how visitors found the site, which pages are visited most often, how much time is spent on particular pages, whether visitors were engaged enough to visit more than one page and much more.

Due to our recent website upgrades coinciding with a major overhaul of Google's analytics program, the data on website usage was not available at the time this report was written. These stats will return in the January Board packet. Please contact Project Manager Amanda Johnson if you would like more details.

3810 - Illustrated Prevention & Response System Outreach

Objectives: Work with artist and author Tom Crestodina to develop artwork for a book and other materials showcasing the oil spill prevention and response system in Prince William Sound. This project hopes to educate stakeholders and the general public about the importance of spill prevention, why the PWS prevention/response system is one of the best in the world, and how it can be kept that way; and create new work partnerships with industry and regulators, similar to how groups collaborate during the fishing vessel training community outreach tours.

Accomplishments since last report: Crestodina's interest and availability were confirmed for fall of 2023. Alyeska and Crowley Alaska Tankers have confirmed their interest in participating, though staff are waiting for further details from Alyeska/SERVS on their level of participation. Once more input from Alyeska is confirmed, staff with work with Crestodina to confirm the scope of work and develop the contract.

5000 - Terminal Operations Program

Objectives: The goal of the Terminal Operations and Environmental Monitoring (TOEM) Program is to prevent hazardous liquid spills and minimize the actual and potential environmental impacts associated with the operation and maintenance of the Valdez Marine Terminal.

Accomplishments since last report:

Tank Vent Damage: During the July 2023 TOEM Committee meeting, the TOEM Committee reviewed and discussed Taku Engineering LLC's report titled "Crude Oil Storage Tank Vent Snow Damage," which found that following the vent damage several tanks had headspaces above the lower explosive limit. This indicates that the presence of a spark in these conditions could have caused an explosion or fire at the VMT, thought that did not occur. The TOEM Committee reviewed the report and recommended that the Board accept it as meeting the terms and conditions of the contract and for distribution to the public. The recommendation came via email vote, as there was not a quorum for the TOEM meeting where the report was reviewed and discussed.

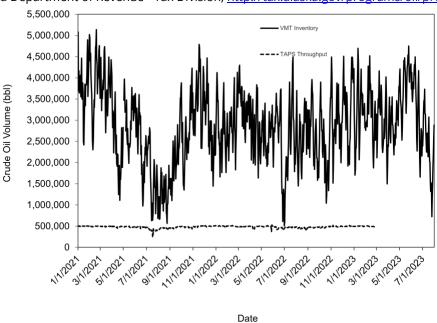
VMT Projects and Maintenance Monitoring: The initial VMT Title V Air Quality permit was set to be released for public comment on June 16, 2023, but has since been delayed. Currently, Alyeska is operating under a permit shield which allows Alyeska to utilize standards set forth in their 2012 Title V Air Quality Permit that expired in 2017. A limited bid for contractors to review the permit and provide comments was issued June 19, 2023, and the TOEM Committee is currently reviewing these proposals in preparation for when the permit is published and opened for public comment.

Council staff Sadie Blancaflor and Joe Lally also met with Alyeska staff on June 28 to conduct a tour of the VMT and monitor progress on Tank 8 and Tank 93. Tank 8 is currently in the process of being cleaned to API 653 inspection standards and awaits a decision as to when the tank bottom and cathodic protection system would be replaced and the tank brough back into service. Tank 93 is currently undergoing the replacement of the annular plate and installment of a drip ring.

Outstanding Alyeska responses to Council Recommendations and Information Requests: The Council is waiting for responses from Alyeska regarding multiple information requests and recommendations related to several TOEM projects. Some of the requested information is needed to make progress on current TOEM projects that are being delayed without the information.

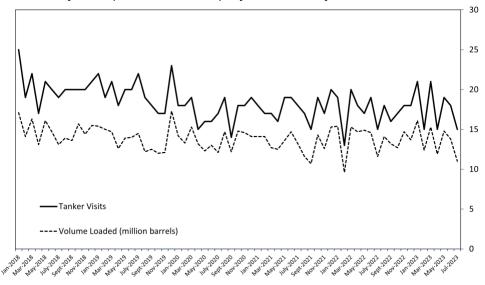
Attachments: Graphs depicting a variety of data related to the operation and environmental impacts of the Valdez Marine Terminal.

Daily Oil Inventory at the Valdez Marine Terminal and Trans-Alaska Pipeline Throughput (Source: Alaska Department of Revenue - Tax Division, http://tax.alaska.gov/programs/oil/production.aspx)



Number of tanker visits and crude oil volume loaded onto ships from VMT

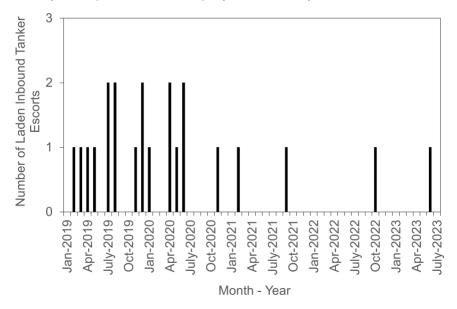
(Source: Alyeska Pipeline Service Company. Partitioned by VMT vessel arrival date.)



Month - Year

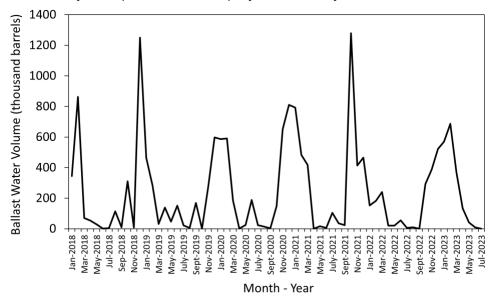
Inbound laden tanker escorts to VMT

(Source: Alyeska Pipeline Service Company. Partitioned by VMT vessel arrival date.)



Monthly ballast water deliveries to Ballast Water Treatment Facility from tanker ships

(Source: Alyeska Pipeline Service Company. Partitioned by VMT vessel arrival date.)



5081 - Crude Oil Tank 7 and Ballast Water Tank 94 Maintenance Review

Objectives: This project would entail performing a technical review of the maintenance of crude oil storage Tank 7 and ballast water storage Tank 94 at the Valdez Marine Terminal. Both Tank 7 and Tank 94 underwent comprehensive internal inspections in 2021. The last time Tank 7 underwent a similar internal inspection was in 2008, and Tank 94's last internal inspection occurred in 2012. The 2021 internal inspections of both tanks will result in a large amount of new information pertaining to the past, current, and future maintenance of each storage tank. Additionally, since their last internal inspections were completed back in 2008 and 2012, Alyeska has gathered and maintained other information, such as cathodic protection system testing records and external inspection results

pertinent to the maintenance of Tanks 7 and 94. The new information generated from the 2021 internal inspections and the other, older information must all be considered to continue to safely maintain each of these tanks. This project is necessary to ensure that Alyeska is using industry best practices and considering all the pertinent information in the decisions they make to safely maintain both tanks, now and in the future.

Accomplishments since last report: Progress on these FY2022 and 2023 projects has stalled because of delays in receiving information from Alyeska – this situation is largely the same as it was during the last report. Tanks 2, 7, and 94 are all back in service now, and the information the Council needs to complete these projects should be available. The Council first requested the Tank 2 information on 3/2/2023 and the Tank 7 and 94 information on 10/7/2021. PWSRCAC continues to work through Alyeska's senior leadership and Liaison to acquire the information requested.

5591 - Crude Oil Piping Maintenance Review

Objectives: This project involves a technical review of the internal inspections of crude oil piping that occurred at the Valdez Marine Terminal (VMT) from 2016 through 2018, and a follow-on inspection of the buried crude oil relief piping that occurred in 2022. The goal of this project is to ensure that the crude oil piping at the VMT is maintained using industry best practices, such that the risks of a spill are minimized.

Accomplishments since last report: The data for the internal inspections of crude oil piping that occurred at the VMT from 2016 through 2018, and a follow-on inspection of the buried crude oil relief piping that occurred in 2022, was requested from Alyeska in June 2023. However, Alyeska noted that the dataset was very large and the estimated delivery time of the data would be in the 3rd quarter of next year (FY2025).

6000 - Oil Spill Response Program

Objectives: Through this program, PWSRCAC develops positions and recommendations on oil spill response technologies; reviews state and federal contingency plans (c-plans) and plan-related issues; promotes compliance, enforcement, and funding of existing environmental regulations; and promotes the incorporation of local knowledge of sensitive areas into contingency planning.

Accomplishments since the last report:

Alaska Regional Response Team (ARRT): General information on the ARRT can be found HERE, and meeting summaries and presentations can be found HERE. The next ARRT meeting is scheduled for September 14, 2023, in Anchorage. Under ARRT, the Regional Stakeholder Committee (RSC) Task Force continues work on the job aid for the RSC Liaison Officer, RSC members, and language to be inserted into the area contingency plans.

<u>Prince William Sound Area Contingency Plan (PWS ACP)</u>: The next PWS Area Committee meeting is scheduled for October 5, 2023, in conjunction with the Valdez Marine Terminal IMT exercise on October 4, 2023.

<u>Arctic and Western Area Contingency Plan (AWA ACP)</u>: The AWA has scheduled the following subcommittee and workgroup meetings:

Salvage and Marine Firefighting Workgroup meeting is scheduled for August 17, 2023.

• The Training and Exercise Subcommittee, Admin Subcommittee, and GRS Subcommittee will meet quarterly on the same day. The next meeting is scheduled for October 11, 2023.

6510 - Contingency Plan Review

Objectives: The purpose of this project is to monitor, review, and comment on state and federal contingency plans (c-plans) for the Valdez Marine Terminal (VMT) and the Trans Alaska Pipeline System (TAPS) tankers that transit Prince William Sound. Reviewing c-plans is a major task for PWSRCAC as outlined in both the PWSRCAC/Alyeska contract and OPA 90.

The Prince William Sound Tanker Oil Discharge Prevention and Contingency Plan (PWS Tanker C-Plan) and associated vessel response plans for Alaska Tanker Company, Andeavor (subsidiary of Marathon Petroleum), Crowley Alaska Tankers, Hilcorp North Slope, and Polar Tankers, was renewed on January 31, 2022, and will expire in 2027. Alyeska Pipeline Service Company (Alyeska) Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan (VMT C-Plan) was renewed on November 15, 2019, and will expire in 2024.

Accomplishments since last report:

PWS Tanker C-Plan:

Minor administrative amendments have been submitted and approved over the last several months.

VMT C-Plan:

ADEC recently approved a minor amendment to the VMT C-Plan to replace the barge MINERAL CREEK with the newly built OSRB-5 response barge.

VMT Coordination Workgroup: The VMT Coordination Workgroup met on June 8, 2023. Highlights include:

- Alyeska intends to submit the VMT C-Plan for a sufficiency review in June and plans to submit the plan in August.
- Most changes to the plan will be administrative; no major changes anticipated.

The next VMT Coordination workgroup meeting is scheduled for September 28, 2023.

6512 - Maintaining the Secondary Containment Systems at the VMT

Objectives: This project entails promoting methods Alyeska could use to verify the integrity of the secondary containment systems at the Valdez Marine Terminal's (VMT) East Tank Farm, otherwise known as the catalytically blown asphalt (CBA) liner. The goal of this project is to ensure that the buried CBA liner at the VMT will hold spilled oil long enough to prevent ground or surface water contamination.

Accomplishments since last report: Project Manager Sadie Blancaflor reached out to Alyeska in June 2023 to arrange a meeting with Alyeska engineers and Dr. Craig Benson, the author of 2022 Council report "Methodologies for Evaluating Defects in the Catalytically Blown Asphalt Liner in the Secondary Containment System at the Valdez Marine Terminal." Alyeska declined the meeting and responded on June 22, 2023, noting that they are working on a final report and validation scope and process, and their focus is to report out on the regulatory Condition of Approval timeline.

6530 - Weather Data / Sea Currents Project

Objectives: This project studies wind, water current, and other environmental factors near the Valdez Marine Terminal, in Prince William Sound, and in the Gulf of Alaska. Weather conditions affect the safe navigation of vessels and aids the ability to prevent, respond to, contain, and clean up an oil spill. Accurate weather data for the region supports research and decision making in areas like oil spill response, traffic management, vessel performance specification, and contingency planning.

Accomplishments since last report: The weather station at Cape St. Elias is getting older and is in need of maintenance. Replacement components have been ordered and are on-site in Cordova. Budget permitting, we will replace the equipment sometime in FY2024. The CTD sensor set up at the Valdez tide gauge station is working well. The Council's two weather stations are operating normally.

The <u>new weather station installed on the Kokinhenik Bar</u> on the Copper River Delta is operating normally. There will be a site visit to the station sometime this fall to tighten anchor bolts and readjust guy wires. Going forward, this station's status will be reported as part of Project 6530.

The camera at Nuchek is functioning normally.

6531 - Port Valdez Weather Buoys

Objectives: This project originally assembled and deployed, and continues to maintain, two buoys which measure ocean currents and common weather parameters in Port Valdez. The first buoy is installed near Jackson Point [61.0910°N 146.3811°W] in the vicinity of the Valdez Marine Terminal (VMT). The second buoy is installed at the Valdez Duck Flats [61.1201°N | 146.2914°W]. The Prince William Sound Science Center (PWSSC) partners with the Council to facilitate this project.

The Oil Pollution Act of 1990 requires the Council to study wind and water currents and other environmental factors in the vicinity of the terminal facilities which may affect the ability to prevent, respond to, contain, and clean up an oil spill.

The Council's Board of Directors has long advocated that robust weather monitoring systems be installed in the vicinity of the VMT. This includes proposals to install ultrasonic anemometers at the loading berths and a weather station at the VMT. The Council's Board passed a resolution expressly requesting a weather station be employed at the terminal on January 22, 2016.

Weather is a significant factor in the management of safe crude oil transportation through Prince William Sound. Some of these concerns include marine safety, tanker escort operations, oil spill contingency planning, containment boom design, and safe loading of oil tankers.

Accomplishments since last report: The Spring service visit started on May 22 and buoys were placed back on station May 24. Hulls were cleaned, zincs replaced, one wind meter replaced, and new relative humidity sensors were installed. The next service call will be towards the beginning of October. Draft contracts with the Prince William Sound Science Center and JOA Surveys have been started.

6536 - Port Valdez Weather Buoy Data Analysis

Objectives: In 2019, PWSRCAC was able to install two weather buoys in Port Valdez, one in the vicinity of the Valdez Marine Terminal and the other near the Valdez Duck Flats. The buoys are expected to collect weather data for at least five years. This series of projects will take the data collected in each of

the five years and perform an analysis to determine any weather trends throughout the year and seasonally. The analysis includes current and wind direction and speed information, wave direction and heights, and other pertinent information that can be obtained from the weather data.

Accomplishments since last report: PWSRCAC is in the process of contracting with the Prince William Sound Science Center to analyze the data from 2022. The Port Valdez Weather Buoy Data Analysis Project Team met on June 21, 2023, with Dr. Rob Campbell to discuss the draft Port Valdez Weather Buoy Data Analysis report for the year 2022. Dr. Campbell made revisions to his report based on the feedback he received from the project team and presented the draft report at the July 21, 2023, OSPR Committee meeting. The OSPR Committee recommended the acceptance by the PWSRCAC Board of Directors.

6560 - Peer Listener Training

Objectives: Update the Council's Peer Listener program, which was created and implemented shortly after the Exxon Valdez oil spill to promote community resiliency through a peer-to-peer support network. The update will include assessing the current program, reviewing similar programs nationwide, and revising the Peer Listener Training manual and delivery methods according to contemporary best practices.

Accomplishments since last report: The Council's Peer Listener Manual was updated and revised by contractor Agnew::Beck over the past several months with input from the Project Team and SAC. SAC reviewed the latest edition this summer. The final manual will be presented to the Board for acceptance at the September meeting.

7000 - Oil Spill Response Operations Program

Objective: This program encompasses monitoring and reporting on the activities related to the operational readiness of the oil spill response personnel, equipment, and organization of the TAPS shipping industry. The program also encompasses monitoring actual oil spill incidents within our region and evaluation of overall response readiness. Additionally, the program includes the planning and implementation of PWSRCAC's Incident Response Plan.

Accomplishments since last report: Robida helped staff members Danielle Verna and Austin Love set **passive sampling devices at LTEMP sites** this past spring and early summer. With Love departing PWSRCAC, having another person trained and familiar with the process and sites added depth and flexibility to better support LTEMP in the future. Robida helped with the three Port Valdez sites deployed on May 4, and then Knowles Bay and Disc Island on May 5, and then approximately a month later helped with some of the retrieval efforts. Verna will be leading this LTEMP work going forward and is the best source of information if there are questions. This year marks the 30-year anniversary of the LTEMP program.

The **annual shipper's exercise** took place May 15 through 18. This year, Hilcorp and Alaska Tanker Company led the event and played the role of the responsible party. This was strictly a tabletop exercise, with no equipment or vessels physically deployed. The exercise covered the first 36 hours of a hypothetical tanker spill of 140,000 barrels in mid-Sound, with Hilcorp assuming the role of the Incident Commander at hour 12. The command post was run in a hybrid fashion via the Microsoft Teams platform and the physical command post locations (in Valdez on day one and then in Anchorage on

days two and three). The Council contracted with Nuka to help evaluate the exercise and this report was discussed during the July 21 OSPR Committee meeting.

During the annual shipper's exercise, the Regional Stakeholder Committee (RSC) process was initiated. This exercise objective was related to the Alaska Regional Response Team (ARRT) **RSC Task Force** work which PWSRCAC staff has been a part of.. The Task Force has been developing job aids to assist both the Liaison Officer who will be managing and initiating the RSC and RSC members. The draft version of the Liaison Officer job aid was used for the first time during this exercise and feedback and exercise play led to some further edits during the most recent Task Force meeting. The Task Force believes the Liaison Officer job aid is fairly complete at this point and attention is now turning to developing the RSC Member job aid. Currently, only two of the four area plans in Alaska mention the RSC, and these Task Force work products will create consistency across Alaska and bring this stakeholder engagement process to other parts of the state.

The Arctic and Western Alaska (AWA) Area GRS SubCommittee continues to lead the effort converting GRSs to a GIS-based system. The SubCommittee met last spring to discuss anticipated summer efforts that are now underway. As part of their inspection work in the AWA region, USCG staff will conduct a verification of nearby GRSs via the phone app that should make the GRS update process faster and easier. Updates via the app were also done this past spring on some Kodiak GRSs, but this process needs further refinement and practice, and this summer work should help establish those protocols. Quality control work also continues on the GRS data itself, to ensure all was migrated over to the new GIS-based system accurately.

Council staff Roy Robertson and Robida have both been aboard the new **OSRB-5 barge** observing different equipment demonstrations. The barge is an improvement over the Mineral Creek barge, which it will be replacing; there is better housing and amenities for crews, a more functional system for deploying and transferring the Yokohama fenders to a stricken tanker, and a platform that will allow Crucial skimmers and Buster systems to be used similarly to the four other OSRBs. Robida observed open water lightering activity and Robertson observed nearshore support-related activities that were conducted to show the OSRB-5 is a suitable replacement. Stand-alone reports will be generated for these deployments. Alyeska/SERVS sent crew training records and other documentation related to the OSRB-5 to ADEC in June, and incorporation of this barge into the VMT and PWS Shipper C-Plans will occur via minor amendment.

7050 - Virtual Meeting with Contracted Response Vessel Representatives

Objectives: This project funds a virtual meeting with fleet representatives from each of the ports where vessels are on contract with Alyeska/SERVS for spill response. PWSRCAC has conducted similar group meetings face-to-face in the past and they have proved to be a productive way to interact with program participants, assess the overall health of the contracted response vessel program, and inform Alyeska/SERVS of any concerns or potential recommended improvements from the perspective of program participants. Considering both the VMT and PWS Shipper plans rely on these contracted vessels to execute respective contingency plans, it's important that the program remains healthy, that training and exercise activity is engaging and effective, and there are enough vessels under contract to satisfy contingency plan requirements.

Accomplishments since last report: Work has not yet begun on this project.

7520 - Preparedness Monitoring

Objectives: PWSRCAC's Drill Monitoring program falls under a broader program called Oil Spill Response Operations. Objectives for the Drill Monitoring program are to promote oil spill response operational readiness within the EVOS region by observing, monitoring, and reporting on oil spill prevention and response drills, exercises, and training; to provide citizens, regulatory agencies, and responders (Alyeska and the shippers) with independent observations and recommendations to improve preparedness; and provide citizen oversight. Tasks to be completed include:

- Monitor and report on regular oil spill drills and training exercises at the VMT and throughout the Exxon Valdez oil spill region to citizens, the Board, industry, and regulatory agencies
- Provide quarterly recommendations to the PWSRCAC Board of Directors
- Keep PWSRCAC's standing committees (OSPR, TOEM, POVTS, IEC, and SAC) informed
- Produce an annual report on effectiveness and progress of the regularly monitored drills and exercises
- Continue developing and implementing staff training for drill monitoring

Recent Exercises

OSRB-2 Deployment Training - July 13, 2023

SERVS is training the TCC crews on the deployment process on barge OSRB-2. While it is unlikely the TCC crews would be used on the OSRB barges to recover oil during a spill, the cross training is a good opportunity to help the TCC crews understand processes on board the response barges.

Washington Emergency Towing Exercise with the Tug Commander - July 2, 2023

The tank vessel Washington conducted an emergency towing exercise with the tug Commander on July 2, 2023.

Solomon Gulch Hatchery Deployment Training - June 24, 2023

Alyeska deployed the sensitive area protection at the Solomon Gulch Hatchery on June 24. This deployment was focused on training TCC crew how to deploy this protection strategy and was an untimed event.

Tug Commander Vessel Dispersant Exercise - June 15, 2023

The tug Commander's crew demonstrated the tug's dispersant spray system in Port Valdez on June 15, 2023. This was another annual training exercise that the tugs Commander and Champion perform each year.

Tug Challenger Port Valdez U/J Boom Exercise- June 9, 2023

The tug Challenger deployed its onboard skimmer and boom in Port Valdez on June 9, 2023. This was an annual training opportunity for the crew of the Challenger.

MSRC Dispersant Aircraft Tour - June 6, 2023

Staff members Linda Swiss and Roy Robertson toured the MSRC 737 dispersant jet while it was in Anchorage on June 6, 2023. This is the new dispersant delivery system that the PWS Shippers now have under contract after switching from Lynden's C-130.

New Lightering Barge (OSRB-5) Deployment - May 23 & 24, 2023

SERVS conducted demonstrations of the new barge functioning as the lightering barge and as a nearshore task force support barge. The first day included a demonstration of lightering capabilities, including deploying the large Yokohama fenders that serve as a buffer between the ships and deploying the equipment needed to offload a tanker if it lost the ability to offload itself.

The second day focused on demonstrating the offload of the mini and micro barges used by the nearshore task forces to store their recovered oil.

ATC and Hilcorp Annual Shipper's Drill - May 16-18, 2023

This was a three-day hybrid exercise from May 16-18 that included both a virtual command post (using Microsoft Teams) and physical command posts in Valdez and Anchorage. The spill scenario was a 140,000-barrel spill in mid Prince William Sound. The objectives included the transition of spill management from SERVS to Hilcorp, preparation for establishing a Regional Stakeholder Committee (RSC), salvage and lightering of the damaged tanker, and setting up and operating a Joint Information Center (JIC).

International Bird Rescue (IBR) Facility Demonstration - April 22, 2023

Staff member Roy Robertson as well as Alyeska staff were given a tour and demonstration of the IBR facility located in Anchorage on April 22, 2023. This demonstration included descriptions of how oiled birds are treated and processed when they arrive at the facility, and the equipment that would be used.

Alyeska Wildlife Exercise - April 20, 2023

Alyeska conducted a Valdez Marine Terminal (VMT) oiled wildlife response exercise in Cordova on April 20, 2023. This exercise was conducted in Cordova to spread out the training for the Alyeska wildlife response-trained vessels. This was a large exercise that encompassed wildlife hazing, capture, transportation, and stabilization for birds and sea otters. Many of the oiled wildlife response experts, both contractors and agency representatives, participated in this exercise.

Cordova Operational Readiness Exercises (ORE) - April 19, 2023

Alyeska conducted two OREs in Cordova on April 19, 2023. There was an Open Water Response Barge (OSRB) deployment with the tug Commander and barge OSRB-3 in Orca Bay and a nearshore deployment off the barge 500-2 in Nelson Bay.

Whittier Nonmechanical Response and Monitoring Exercise - April 17, 2023

SERVS conducted an Operational Readiness Exercise focused on environmental monitoring of waters before and after the use of nonmechanical response techniques in Whittier. This exercise was going to include a simulation of in-situ burning and the sampling of water on the surface and at depth. However, due to high wind conditions, the exercise was limited to doing water sampling in the Whittier harbor.

Upcoming Drills and Exercises

VMT annual IMT Exercise - October 4, 2023.

8000 - Maritime Operations Program

Objectives: This program reviews port organization, operations, incidents, and the adequacy and maintenance of the Coast Guard Vessel Traffic System, and coordinates with the Port Operations and Vessel Traffic Systems (POVTS) Committee. Major program components include participation with the Valdez Marine Safety Committee (VMSC), monitoring changes to the tanker escort system, reviewing Best Available Technology documents for the tanker escort system and the Vessel Emergency Response Plan (VERP), participating in monthly SERVS/PWSRCAC and ADEC/PWSRCAC communication meetings, and supporting maintenance for the NOAA weather stations.

Accomplishments since last report: Project Manager Alan Sorum participated in a virtual workshop providing crucial insight into the types of data needed to ensure safe and efficient marine commerce in and along the Alaskan coastline. The workshop was hosted by NOAA, National Ocean Service (NOS), Center for Operational Oceanographic Products and Services (CO-OPS).

Sorum has drafted a budget briefing sheet for a potential project related to aquatic noise, and has been researching and following International maritime Organization (IMO) regulatory efforts to reduce greenhouse gases with the POVTS Committee Chair Steve Lewis. Sorum joined a discussion group of scientists, community members, emergency managers and others interested in mitigating the hazards presented by landslides, especially those that generate tsunamis. He continues to monitor the Washington State Tug Escort and Emergency Response Towing Vessel (ERTV) Analysis Project.

Staff have been working with the POVTS Committee to evaluate whale strike reduction strategies, an issue proposed for potential project consideration by Rick Steiner. A memo outlining these efforts was accepted by the Executive Committee at it's July 13 meeting.

Sorum has been working with the City of Valdez to convey the importance of Port Valdez to the Alaska Congressional Delegation and the need to provide a replacement Coast Guard cutter in Valdez.

Working with Alaska Ocean Observing System (AOOS), the Council was able to apply extra funds from the Conductivity, Temperature, and Depth (CTD) sensor grant to help fund the weather station on the Copper River Delta. Sorum works with the OSPR Committee on weather-related projects.

8018 - State of the Industry: Advances in Escort Tugboat Technology and Regulatory Framework

Objectives: This project proposes to review current global advances being used in the design of capable escort tugboats and regulations requiring the use of these vessels.

Accomplishments since last report: A Request for Proposals was published and the POVTS Committee will be recommending a potential contractor to the Board at its September 2023 meeting.

8025 - Vessel Operator Tsunami Hazards Guidance Workshop

Objectives: The goal of this project is to convene a 2-day workshop, with participants representing a diversity of vessel operators, emergency management, and the scientific study of tsunami impacts. Work products generated by the event will include preliminary guidance for vessel operators facing the threat of a tsunami and a list of research topics that could improve future guidance. The proposed guidance will be designed to be applicable in Prince William Sound and similar areas that have complex steep shorelines, and which face the potential of landslide-generated tsunamis.

Accomplishments since last report: The workshop has been set for June 3-4, 2024, and a contract with Nuka Research and Planning Group should be in place by the September Board meeting to facilitate this project. The workshop is being held in concert with the AlaskEX24 Statewide Tsunami Exercise to be held in Valdez on May 29-30, 2024, in Valdez.

8520 - Miscommunication in Maritime Contexts

Objectives: Seeking to identify and address various causes of miscommunication, the proposed project will provide a comprehensive perspective by collecting information on the linguistic, cultural, and

pragmatic needs and practices of native and non-native English-speaking mariners in Prince William Sound. The proposed project would entail the first two of four phases.

Accomplishments since last report: The project is delayed due to a health concern with the Contractor's immediate family. This is a two-year contract, so there will be time to catch up in the new fiscal year.

A comprehensive search of NTSB accident and incident reports has been completed. Reports were considered relevant to this review if communication or language was explicitly or indirectly identified as a contributing or causative factor in the accident or incident. Forty-one reports were identified as relevant and are currently undergoing thematic analysis.

A comprehensive literature search for empirical and synthetic articles in applied linguistics and maritime communication is currently underway.

9000 - Environmental Monitoring Program

Objectives: Coordinate projects developed and overseen by the Scientific Advisory Committee and obtain scientific knowledge and technical information about issues related to the actual and potential environmental impacts of the Valdez Marine Terminal and associated crude oil tankers. The notable tasks to be accomplished under this program are as follows:

- Project manager to attend at least one technical scientific conference.
- Plan and complete budgeted environmental monitoring and scientific research projects.
- Conduct PWSRCAC Science Night.

Accomplishments since last report: Projects managed under this program continue to be planned and executed successfully. Project Manager Danielle Verna attended and presented a poster on a history of the Council's invasive species monitoring projects at the International Conference on Marine Bioinvasions in Baltimore, Maryland, May 16-18, 2023. Science Night planning for 2023 is underway.

9110 - Monitoring Spatial Variability of Marine Birds During Winter in PWS Tanker Escort Zone

Objectives: Provide up to date information on winter marine bird density and distribution throughout the Prince William Sound tanker transit zone, including under-surveyed areas such as the open waters and adjacent bays in and around Port Valdez, Valdez Arm, Tatitlek Narrows, Port Fidalgo, and Port Etches. The notable tasks to be accomplished under this project are as follows:

- Perform winter bird surveys in Prince William Sound for three consecutive years.
- Analyze data obtained during winter bird surveys and report the results of the analysis.
- Make winter bird survey maps readily available for use by spill response managers.

Accomplishments since last report: The marine bird surveys were completed successfully between March 2 – 7, 2023. Staff from the Prince William Sound Science Center analyzed the data and presented a draft report to SAC over the summer. The final report will be presented to the Board for acceptance at the September meeting.

9510 - Long-Term Environmental Monitoring Project

Objectives: Comprehensively monitor the actual and potential environmental impacts related to the Valdez Marine Terminal and associated crude oil tankers and provide the Council with information

about the presence and effects of hydrocarbons generated by the terminal facility and associated tankers. Here are the notable tasks to be accomplished under this project:

- Obtain environmental samples in Port Valdez: marine sediments, mussels, and passive sampling devices.
- Analyze environmental samples.
- Interpret and report results of sample analysis.
- Present analytical findings to the PWSRCAC Board of Directors.
- Maintain Environmental Monitoring Project plan.

Accomplishments since last report: Every five years, an "expanded" LTEMP sampling year is conducted, where environmental samples are collected from Port Valdez as well as additional monitoring stations in Prince William Sound and the Gulf of Alaska. Sampling in 2023, which coincided with this 5-year cycle, successfully took place in Port Valdez via vessel charter in May and June. Additional sampling was successfully carried out at sites in Prince William Sound via vessel charter and helicopter in June. Due to weather constraints, samples were not collected at sites in the northern Gulf of Alaska. SAC and contractors at Owl Ridge Consulting have recommended collecting samples at those sites in June 2024 (rather than later in 2023) to align with our typical sampling window in early summer. All samples collected this year, including mussels, sediments, and passive sampling devices, have been shipped to analytical laboratories, Alpha Analytical and Oregon State University. Once the results are received this fall, Owl Ridge Consulting will work on data interpretation and writing of a final report.

9512 - Determining Concentration and Composition of Oxygenated Hydrocarbons from the VMT

Objectives: Determine the types and amount of oxygenated hydrocarbons that are released from the Ballast Water Treatment Facility at the Valdez Marine Terminal. The notable tasks to be accomplished under this project are as follows:

- Collect water samples from the VMT Ballast Water Treatment Facility following discharge of oily ballast water by tankers.
- Analyze the samples to determine the chemical composition and concentration of oxygenated hydrocarbons.
- Interpret and report findings of the analysis and prepare the report for publication in a peer-reviewed journal.
- Produce recommendations on future research to understand the fate, transport, and toxicity of oxygenated hydrocarbons in the marine environment.

Accomplishments since last report: Results from analysis of the samples and a draft report were presented to SAC this summer. The final report with recommendations and a brief Executive Summary will be presented to the Board for acceptance at the September meeting. The contractor recently presented this project at two scientific conferences – AMOP and the American Society for Mass Spectrometry Conference.

9520 - Marine Invasive Species

Objectives: Understand and minimize the environmental impacts of invasive species potentially arriving in the PWSRCAC region from tanker ballast water and hull fouling. Here are the notable tasks to be accomplished under this project:

 Obtain plankton samples in Port Valdez at three sites: the small boat harbor, Valdez Container Terminal, and Valdez Marine Terminal

- Perform metagenetic analysis on plankton samples to identify variability in the plankton community between locations and through time, and identify any nonindigenous species
- Interpret and report results of plankton metagenetic analysis
- Conduct monitoring of invasive crab and tunicate species in Valdez, Cordova, and Kodiak

Accomplishments since last report: Settlement plates were successfully deployed by the contractor via vessel charter in late June throughout Prince William Sound. The plates will stay in place for three months. Retrieval and analysis of the plates is scheduled for late September. A contract change order was successfully executed to include the second phase of the project (analysis and report).

9521 - Marine Invasive Species Internship

Objectives: Support local students to monitor for invasive species potentially arriving in the PWSRCAC region from tanker ballast water and biofouling. Target species include European green crab and tunicates in the communities of Valdez, Cordova, and Kodiak.

Accomplishments since last report: Recruitment for 2023 Marine Invasive Species Monitoring Interns in Cordova, Valdez, and Kodiak took place this spring. High school students in Valdez and Kodiak have been monitoring monthly throughout the summer. No students in Cordova volunteered for the internship.