



PRINCE WILLIAM SOUND

REGIONAL CITIZENS' ADVISORY COUNCIL

May 2024
Status Report
 As of March 21, 2024

Exxon Valdez Oil Spill – 35th Anniversary

Project Manager Amanda Johnson, Outreach Coordinator Maia Draper-Reich, and Director of Communications Brooke Taylor coordinated efforts (online, in print, and in-person) to honor the 35th anniversary of the Exxon Valdez oil spill. No official project was funded; however, staff used the opportunity to showcase the Council's mission in a variety of ways. A summary of these activities was shared at a recent IEC meeting, and is available online here: <https://tinyurl.com/EVOSupdate35th>. Note that list was current as of late February. Please contact Amanda Johnson for a final list.

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. Director of Communications Brooke Taylor traveled to Valdez in February with author/illustrator Tom Crestodina to view vessels and equipment for Project 3810. Taylor also traveled to Portland, OR, in April to attend the 2024 Science Talk conference, done by the Association of Science Communicators, as professional development training.

3110 – Oral History

Objectives: To update the PWSRCAC logo and other small corrections in The Spill book and place an order of 1,000 print copies for outreach uses.

Accomplishments since last report: Staff has been working on a new order of 1,000 copies of the Spill book, which was produced under this project in 2008/2009. The order includes small updates to the book including our new logo. We are also in the process of creating an eBook version. Print books are expected to arrive in June 2024.

We consistently provide these books to partners, educators, and the public at no cost and prior to this order had less than ~150 copies left from our previous order in 2016.

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.

The March special edition highlighted the changes in the spill prevention and response system in Prince William Sound since 1989, including improvements and remaining concerns:

<https://tinyurl.com/EVOS-35YearsLater>.

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: The 2022-2023 report was completed and distributed in late 2023. The last contract with the graphic designer closed in November 2023, and a new contract is being drafted ahead of work starting on the 2023-2024 report, tentative in May/June.

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 on-water 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: Based on the spring SERVS training dates, scheduling logistics, and where the tour has been held previously, the Information and Education Committee considered different scenarios and voted not to hold the FVPCO tour in spring 2024. Instead, we are moving ahead with planning the FY2025 tour for September 2024 in Whittier.

Additionally during FY2025, staff and IEC will work to develop an alternative format for this outreach in Kodiak as there is not an appropriate passenger vessel option to host the tour in the typical way in that community.

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:

- **February 5-9** - Alaska Forum on the Environment (AFE), Anchorage, AK
 - Maia Draper-Reich presented for PWSRCAC on a shared session titled “30 Years Since the Exxon Valdez Oil Spill: Community Projects and Engagement.” The other speakers were Shihway Wang, Executive Director of the EVOS Trustee Council, and Shaylon Cochran, Director of Communications and Public Outreach of Cook Inlet RCAC. ~130 people attended the session between in person and online.
 - PWSRCAC and CIRCAC shared an exhibitor booth for the whole event, connecting with 249 of attendees. Maia, Shaylon, PWSRCAC staff member Jaina Willahan, and CIRCAC

staff member Cassandra Johnson disseminated information about both RCACs and their missions and handed out PWSRCAC and CIRCAC giveaway items and publications.

- **February 20-23** – Homer Community Visit, Homer, AK
 - Maia accomplished the following outreach programs and meetings during this trip:
 - Guest lesson on EVOS history and PWSRCAC history and accomplishments for Alaska History class at Homer High School
 - Guest Oil Spill in a Pan lesson for biology class at Homer Flex High School
 - Guest Oil Spill in a Pan lesson for the Center for Alaskan Coastal Studies' Science and Action Club afterschool program
 - Four guest Oil Spill in a Pan lessons for 8th grade science students at Homer Middle School
 - Three guest Oil Spill in a Pan lessons for 3rd-6th grade students at Fireweed Academy Charter School
 - Volunteer gathering
 - Partner meet ups with NOAA, USFWS, and KBNERR
 - She shared different PWSRCAC publications with Homer educators as well.
 - She connected with 154 students and 25 adults through the listed programs.
- **March 22-24** – Alaska Tsunami Ocean Sciences Bowl, Seward, AK
 - Maia and Jim Herbert served as competition officials for the annual quiz bowl event hosting high school teams from around the state including several from the EVOS region.
- **April 11-13** – ComFish Alaska, Kodiak, AK
 - Danielle Verna hosted the Council's booth at this expo event.
 - She accomplished some work for the Council's Kodiak-based Aquatic Invasive Species Intern.

Maia also attended the Alaska Natural Resources and Outdoor Education Symposium on March 1st in Anchorage to hear talks and network with other environmental educators in the region.

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 accepted seven proposals on the latest RFP for Summer 2024 programs, utilizing the remainder of the FY2024 Youth Involvement contracting funds. These projects are in the contracting process with work beginning in March and concluding in September 2024.

Four are underway for the 2023/2024 School Year are currently underway and will close by June 30, 2024:

- Alaska Marine Conservation Council/Kodiak Ocean Science Discovery Program – *Science and Engineering Club* for \$5,000
- Alaska Marine Conservation Council/Kodiak Ocean Science Discovery Program – *Chemistry Introduction: Oil, Climate Change, and Ocean Acidification* for \$5,000

- University of Alaska Anchorage, Prince William Sound College - *Environmental Undergraduate Research Experience* for \$4,955
- Center for Alaskan Coastal Studies – *Afterschool Action to Lifelong Learners* for \$5,000

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.

Accomplishments since last report: The booklet "Stories of a Citizens' Council" was redesigned and reprinted in November.

Project Manager Amanda Johnson attended the Nonprofit Technology Network Conference in March. Session topics included best practices for website, email, and other digital communications; ethical and responsible use of artificial intelligence; creation and management of accessible content; data visualization; and management of technology projects and programs; and other topics. The conference agenda is available here: <https://www.nten.org/gather/ntc/program/agenda>.

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.

Website data: Website usage for www.pwsrca.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. Contact project manager Amanda Johnson for access to data reports.

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.

1. Educate stakeholders and the general public about the importance of spill prevention and response, why the PWS prevention/response system is one of the best in the world, and how it can be kept that way.
2. 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 visited Valdez in February to view vessels and equipment. Prior to his visit, the Council project team and industry representative provided input on a staff developed outline, meant to provide guidance to Crestodina on the book's content. During the Valdez visit, Crestodina and Director of Communications Brooke Taylor toured SERVS assets, the tanker Polar Adventure, and SWAPA pilot boats. Industry personnel (Alyeska/SERVS, Polar Tankers, SWAPA) were welcoming, accommodating, and extremely helpful in answering Crestodina's questions. Everyone

interacted with seemed enthusiastic about the project and eager to help. Crestodina has now begun development of sketches and a storyboard for the book.

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:

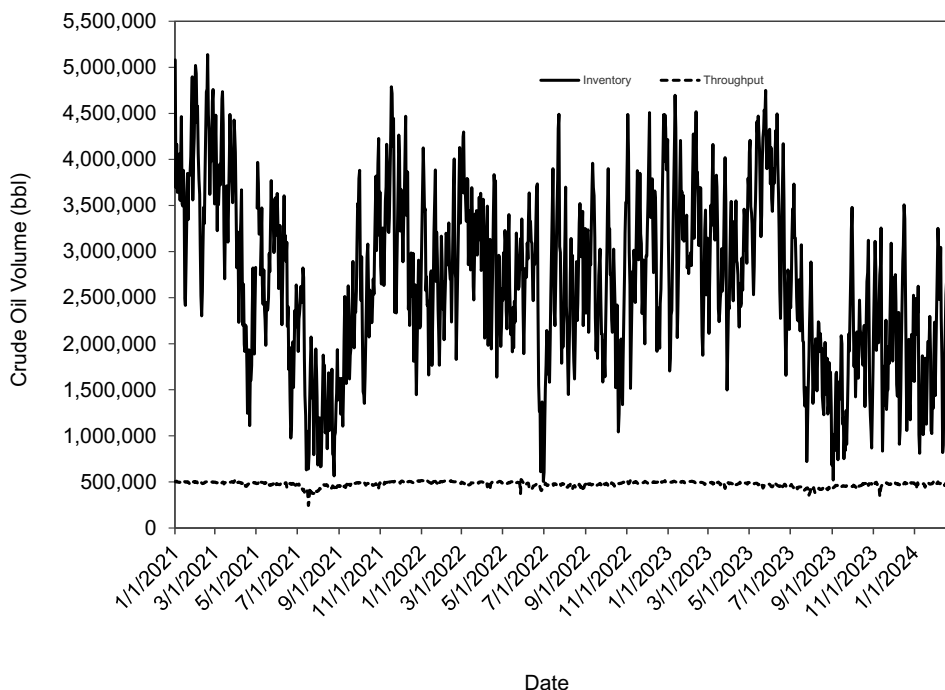
- VMT Projects and Maintenance Monitoring:**
 On February 7, 2024, Council Staff Joe Lally and Sadie Blancaflor received a tour of the VMT on snow removal this winter. Alyeska has been proactive about maintaining suitable staff for snow clearing on the crude oil storage tank tops and removing snow from the vent side.
- Outstanding Requests for Information and Responses to Recommendations:**
 As of March 12, 2024, all outstanding requests for information as “high” priority have been fulfilled by Alyeska. Council staff continue to maintain a track record of all information requests made from 2021 to present.

The Council also transmitted a letter to Alyeska dated February 29, 2024, requesting the tank bottom processing fire investigation report and additional information related to the decision to move this process from West Bench to inside active East Tank Farm dike cells.

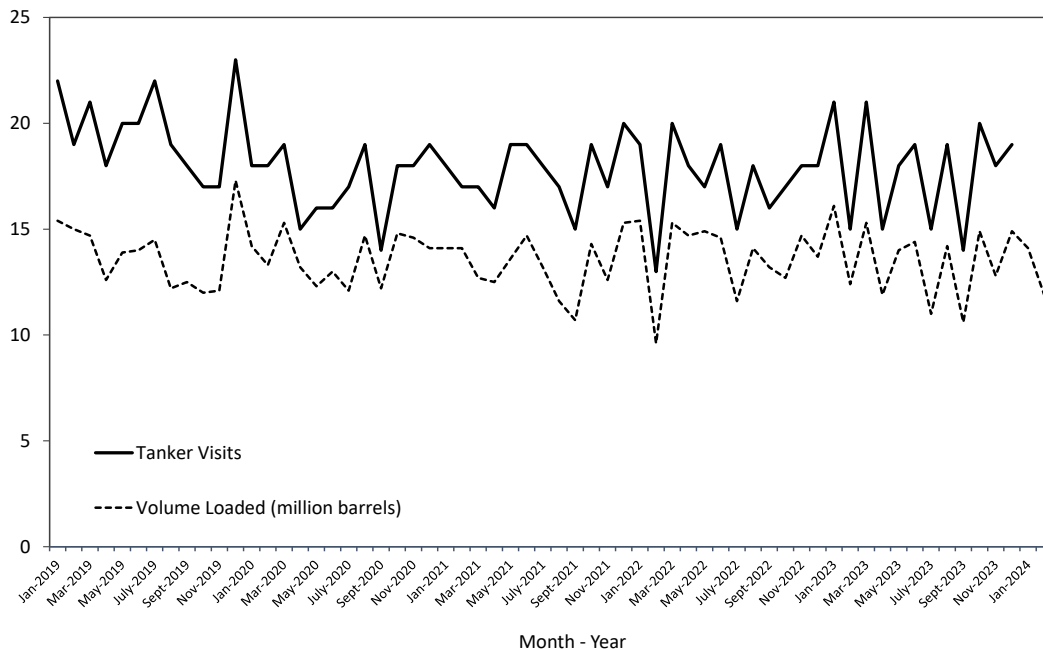
Attachments: Graphs depicting a variety of data related to the operation and environmental impacts of the Valdez Marine Terminal.

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>)

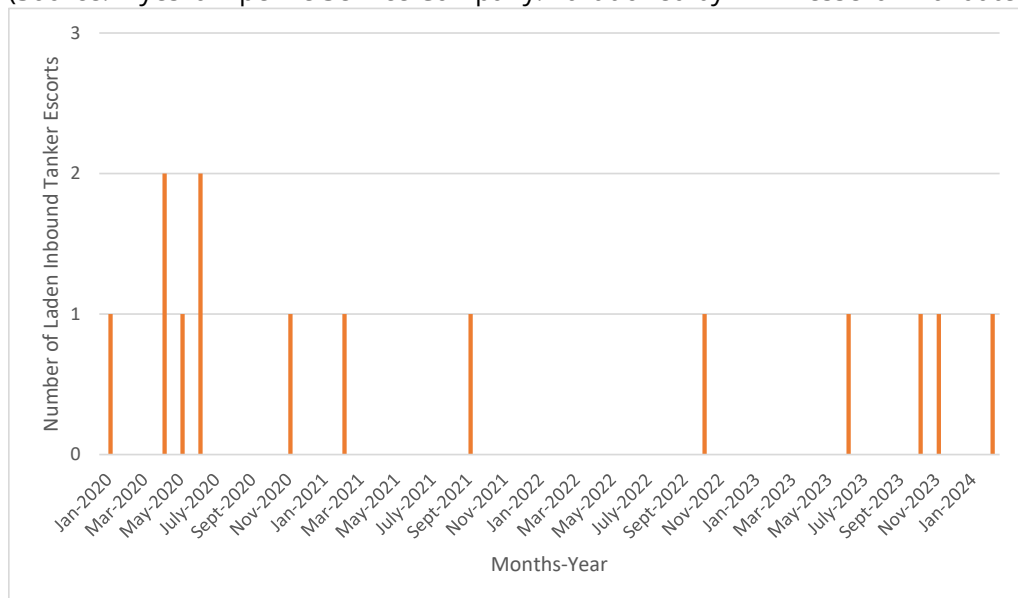


Number of tanker visits and crude oil volume loaded onto ships from VMT
 (Source: Alyeska Pipeline Service Company. Partitioned by VMT vessel arrival date.)



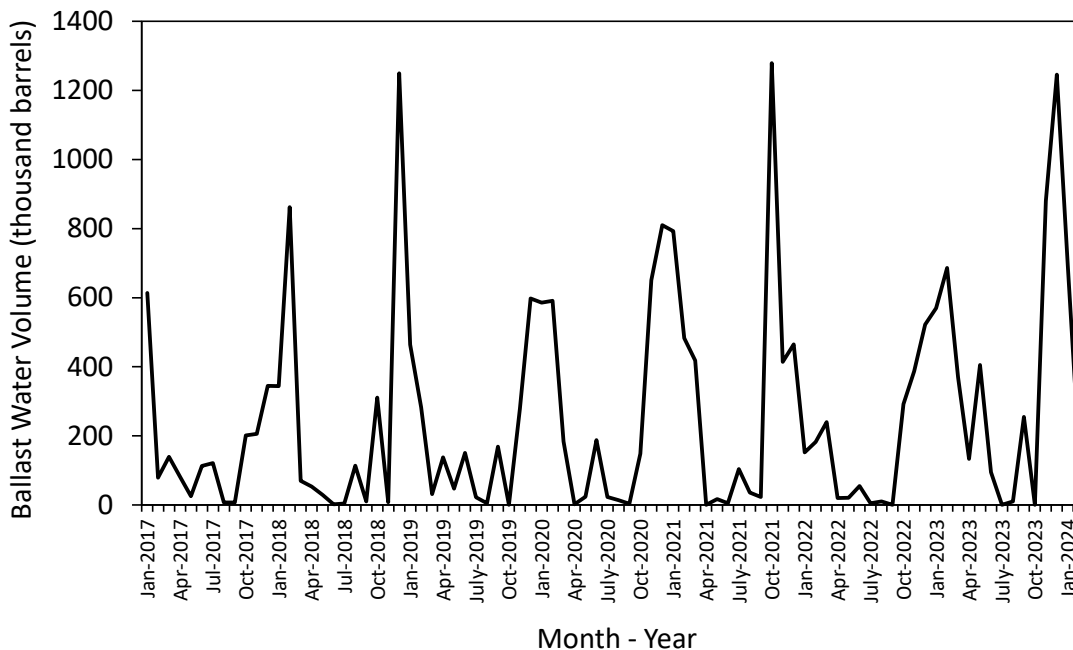
Inbound laden tanker escorts to VMT

(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.)



5051 – Water Quality Review of VMT

Objectives: This project entails a review of 2018-2023 water quality data. The goal of this project is to ensure the terms of the Valdez Marine Terminal’s water quality permit minimize the environmental impact of wastewater effluent discharged from the facility.

Accomplishments since last report: An RFQ has been released for limited bid, with proposals being reviewed beginning March 15, 2024.

5057 – Air Quality Review of VMT

Objectives: This project ensures that Alyeska is mitigating and reducing sources of air pollution at the VMT which may pose adverse environmental and health impacts on residents of Valdez. The goal of this project is to provide actionable, clear, and specific recommendations to advance efforts to reduce sources of air pollution at the VMT.

Accomplishments since last report: In February 2024, the Council contracted with Ron Sahu, PhD. A public records request for information related to the VMT Title V permit has been submitted to ADEC. Dr. Sahu is currently tasked with reviewing documentation related to the tank vent damage incident to determine whether an emissions estimate from the event can be calculated.

5081 – Crude Oil Tanks 7 and 2, 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: Both draft reports for Tank 2 and Tanks 7 & 94 have been completed. Alyeska provided feedback and additional documentation for the Tank 7 & 94 draft report in February 2024, and Taku Engineering is currently tasked with reviewing Alyeska's response.

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: This funding has been returned to contingency as Alyeska noted that the requested information for the completion of this project would be unavailable until FY25.

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 ARRT met in March 2024 in Anchorage and discussed the following:

- Cultural Resources Job Aid
- Support from State of Alaska Dept. of Health, Environmental Public Health Program
- Available support from NOAA
- Support from U.S. Dept. of Transportation Formation of a Tribal Engagement Task Force

Prince William Sound Area Contingency Plan (PWS ACP): The PWS Area Committee met on March 7, 2024 and discussed the following:

- Roles and responsibilities of ADEC, USCG, EPA
- ADEC use of drones in responses
- Regional Stakeholder Task Force update
- Updates on Geographic Response Strategies (GRS) project

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:

The Prince William Sound shippers submitted a major amendment to the PWS Tanker C-Plan and associated vessel response plans in September 2023. The amendment is proposing to update the plan to conform to the contingency planning regulatory changes in 18 AAC 75 in early 2023 as follows:

- Replacement of Mineral Creek barge with OSRB-5 and associated reduced volume for storage
- Changes to the plan to align with new regulations
- Administrative edits
- Whether the required information is provided to establish that an operator has “primary operational control” of vessels in the plan

ADEC issued requests for additional information (RFI) in December 2023, and the shippers responded in January 2024. Staff awaits an additional 10-day public review of the information provided. As ADEC issued a RFI, this step is necessary before ADEC can approve, approve with conditions, or deny a major amendment.

VMT C-Plan:

The public review for the 5-year renewal of the VMT C-Plan began in November 2023. PWSRCAC submitted comments in December 2023. Staff awaits ADEC’s RFIs on the VMT C-Plan.

Secondary containment: As part of the renewal of the VMT C-Plan in 2019, and to address conditions of approval on secondary containment, Alyeska was required to identify a method to evaluate integrity of the catalytically blown asphalt (CBA) liner/secondary containment in the East Tank Farm by October 2023. Alyeska plans to use Geoelectric Leak Location (GELL) as a method to evaluate portions of CBA liner in the East Tank Farm. GELL can be used to characterize the liner by locating and identifying any defects or perforations that may be present in a survey area only on the CBA liner. Alyeska proposes to do a pilot study in the West Tank Farm (which is out of service) to calibrate the GELL method prior to implementation in East Tank Farm. There are four out-of-service crude oil storage tanks in the West Tank Farm and 14 in-service crude oil storage tanks in the East Tank Farm. The pilot study is slated for the summer of 2024.

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 be cleaned up prior to ground or surface water contamination.

Accomplishments since last report: In January 2024, the Council received an update from Dr. Craig Benson that he will be retiring from fieldwork; one of his associates will be conducting the in-person site visit this summer and will be subcontracted under Dr. Benson who plans to remain involved in this project through completion. PWSRCAC will work with Alyeska to identify and provide contact information for the subcontractor who will be conducting this work.

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 showing its age. Replacement components have been ordered and are on-site in Cordova. A purchase order has been issued for the PWSSC to assemble the weather station.

Our two weather stations at Cape St Elias and Nuchek are operating normally.

The weather station at Kokinhenik Bar on the Copper River Delta has been installed. There will be a site visit to the station sometime in the spring to tighten anchor bolts, readjust guy wires, and troubleshoot the power system.

The camera at Nuchek is working correctly.

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. On January 22, 2016, the Council's Board passed a resolution expressly requesting a weather station be employed at the terminal.

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 Duck Flats buoy is operating normally. The VMT buoy is currently moored in the Valdez Harbor. Purchase and installation of a new anchoring system is on hold, awaiting approval of the Board and Alyeska to continue the project into the next fiscal year.

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: The project team for this project agreed that a sole source contract with Prince William Sound Science Center (PWSSC) to continue doing the Port Valdez Weather Buoy Data Analysis for the year 2023 is the best approach to build on the previous reports. Staff has a contract with the PWSSC to complete this project. The project team met with Dr. Rob Campbell of the PWSSC on February 29, 2024 to get this project underway.

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 Coping with Technological Disasters Guidebook and Peer Listener Manual were shared with the Trinidad and Tobago Office of Disaster Preparedness and Management following an oil spill in their waters in February 2024.

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: Staff continues to participate in the ARRT-initiated **Regional Stakeholder Committee (RSC) Task Force**. The group has mostly completed the two job aids; one for the Liaison officer and one for RSC participants. Remaining additions, copy editing and final formatting, and final review are anticipated to occur at the April 16th meeting. Once finished, work products will pass to the ARRT Tri-Chairs for their review, and eventually this material will be written into all of the Alaska Area plans and moved onto the ADEC tools and references website, where a variety of job aids resources already exist. Robida will further address the RSC Task Force progress and work products before the Board.

Staff continues to track the effort to convert Geographic Response Strategies (**GRS**) to a **GIS-based** system. All PDF information for the original GRS's has been vetted for accuracy and ported over into the GIS system, and boom lines were drawn into the GIS system to show where boom would be positioned. The drawing of boom seems simple enough, but was apparently a big technological hurdle. GRS site visits are anticipated by the USCG and other key project members to happen this summer, for the purpose of testing and refining the phone app so that GRS updates can be suggested and logged right in the field. The Arctic and Western Alaska Area committee is driving this process.

The **Allison Creek barge** went out of service on February 14, 2022. The new replacement barge will arrive into PWS in early April. Specific dates and details are not known yet, but training and further mobilization will be needed before the barge and crews are "response ready," and several exercises to test and show of barge capabilities are expected. It's likely that this work will occur prior to the May Board meeting.

7035 - 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 oil 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 that there are enough vessels under contract to satisfy contingency plan requirements.

Accomplishments since last report: Project Manager Robida and other staff met with representatives from the SERVS contracted vessel response fleet on March 16 via Zoom. Representatives from each of the six ports where vessels hold contracts participated, along with a few Oil Spill Prevention and Response (OSPR) Committee members and Board members who also hold contracts with SERVS, for a total of 12 participants (not including staff).

Discussion focused on three questions: 1) the general health of the program, 2) if there were any port specific issues that the group should be aware of, and 3) feedback on exercises and trainings. Staff also very briefly touched on the updated contingency plan regulations that took effect prior to the most recent VMT and Shipper's plan renewal.

Fleet representatives indicated the program is healthy and there is considerable interest in acquiring these contracts, but they also spoke to some of the challenges such as crewing for extended durations in the event of a lengthy response, and also suggested some training and exercise improvements.

Robida is in the process of following up with fleet representatives and drafting a summary report. Overall, the meeting went well, and was appreciated by fleet representatives.

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

Polar Adventure Emergency Towing Exercise – February 27, 2024

SERVS and Polar Tankers conducted an emergency towing exercise in Prince William Sound south of the precautionary area with tanker Polar Adventure and the tugs Contender and Challenger on February 27.

Upcoming Drills and Exercises

Alyeska Annual IMT and Deployment Exercise – May 8, 2024

Marathon Annual Shipper's Exercise – October 15-17, 2024

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: The Project Manager has 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.

Staff have been working with the POVTS and Scientific Advisory Committee to evaluate whale strike reduction strategies.

Working with AOOS, we were able to apply extra funds from the CTD sensor grant to help fund the weather station on the Copper River Delta and the grant has been closed out. The Project Manager 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: This project was deferred due to a lack of responses from the RFP.

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 Tsunami Workshop has been set for June 3-4, 2024 in Valdez and will be held in conjunction with the AlaskEX24 Statewide Tsunami Exercise the week prior. Working with the steering committee and contractor Nuka Research & Planning group, a draft agenda has been prepared.

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: A comprehensive literature search for empirical and synthetic articles in applied linguistics and maritime communication, as part of Phase 1 of this project, was approved by the Board at a special Board meeting in March 2024.

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. PM Danielle Verna will be attending the International Oil Spill Conference in New Orleans, LA, in May and presenting a paper with SAC Chair Davin Holen titled *Building Collaborative Social Science Research Models to Understand the Social, Cultural, and Economic Impacts of Spills*.

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: A contract was executed with the Prince William Sound Science Center for surveys to take place in winter (March) 2024 and for the contractor to perform a hot spot analysis using available data from bird surveys in and around the tanker lanes.

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: Planning is currently underway to execute sampling during the 2024 field season followed by data analysis and data interpretation. Sampling will occur at the typical sites in Port Valdez (adjacent to the Valdez Marine Terminal, Gold Creek, and Valdez small boat harbor) as well as sites on the northern Gulf of Alaska coast (Aialik Bay, Windy Bay, and Shuyak Harbor). Blue mussels will be collected at all sampling sites, while sediments and passive sampling devices will be collected in Port Valdez. Contractors for vessel charters, data analysis, and data interpretation are anticipated to remain the same as in 2023. The Board will be asked to authorize contracts at this meeting.

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: The final report was presented to the Board at its September meeting. The contractors shared follow-up information with SAC during a virtual meeting in February. The contractor is preparing a manuscript for publication in a peer-reviewed journal.

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: Data analysis and interpretation are currently underway by contractors at the Smithsonian Environmental Research Center. A complete analysis and draft report are expected in early summer 2024 and will be reviewed by SAC.

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: PM Danielle Verna submitted an abstract for intern Noah Schrof from Kodiak to present his project at the Kodiak Area Marine Science Symposium in April. Intern Joshua Duong from Valdez is scheduled to present his project at the Prince William Sound College in April.