

**May 2021  
Status Report**

### **3100 – Public Information Program**

**Objectives:** Inform 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.

### **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 fishing vessel program training in the following communities: Cordova, Valdez, Whittier, Seward, Homer, and Kodiak. The on-water portion of the training, in partnership with Alyeska/SERVS, shows real-time capabilities of oil spill response equipment and tactics. This project contracts a local tour boat that will allow interested students, members of the public, and media to learn about oil spill response.

**Accomplishments since last report:** The spring 2021 event has been canceled due to ongoing uncertainty about feasibility of group gatherings. Budgeted funds were returned to contingency.

### **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:**

- Alaska Forum on the Environment was held virtually this year. Council staff Betsi Oliver helped plan and moderate the Oil Spill Track. Sessions occurred February 8-11 but also throughout the year as online webinars.
- Tsunami Bowl, National Ocean Sciences Bowl. High school students from around Alaska compete in a marine sciences quiz bowl and research project and presentation. Winners go on to the national bowl. Volunteer Jim Herbert and staff Betsi Oliver participated as virtual competition judges.
- Alaska Science and Engineering Fair was judged virtually this year. Volunteers Steve and Savannah Lewis represented the Council as volunteer judges. Mr. Lewis assessed entries in the special award category for oil spill related projects.

### **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:** New programs selected for funding: two new programs were selected, and one previously funded program was approved for additional funding to support pandemic-related increased travel expenses.

### 3560 – Exxon Valdez Project Jukebox

**Objectives:** This project will fund adding up to five profiles with interviews to UAF’s Project Jukebox website. By preserving the oral accounts of individuals impacted by the spill, and displaying these stories online via Project Jukebox, the Council may further promote environmental safeguards to help prevent and respond to future oil spills in Prince William Sound. Further, the Exxon Valdez Project Jukebox assists in the promotion of all Council activities to a growing digital audience.

**Accomplishments since last report:** Staff and IEC are finalizing selections of interviews for inclusion in Project Jukebox. The new interviews should be available on UAF’s website by the end of the fiscal year.

### 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 will be disseminated in a format that is easily understood by the general public.

**The Observer:** Print and email versions of the Observer newsletter are produced three times per year.

### 3610 – Web Best Available Technology

**Objectives:** This project helps ensure the Council’s websites and web presence uses 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: Updates to the Resource Library on the [www.pwsrca.org](http://www.pwsrca.org) website are under development. This work will support a searchable/filterable database for educational lesson plans, among other improvements. This project also supports technical assistance for the OSPR project called 7901 Web-based RSC Resources.

**Website data:** Website usage for [www.pwsrca.org](http://www.pwsrca.org) is tracked through Google Analytics for information such as numbers of visitors, location of visitors, how the visitor found the site, which pages are visited most often, how much time is spent on particular pages, whether the visitor was engaged enough to visit more than one page and much more.

Top content from 12/10/2020 to 3/10/2021:

1. Exxon Valdez Oil Spill & Oral History of EVOS
2. Regulatory Reform Landing Page
3. Tracking Weather in PWS/New Buoys
4. Oil Spill Response
5. Fishing Vessel Training

Please contact Project Manager Amanda Johnson if you would like more details.

### 3620 – Connecting with Our Communities

**Objectives:** This project will fund adding up to five profiles with interviews to UAF’s Project Jukebox website. By preserving the oral accounts of individuals impacted by the Exxon Valdez oil spill, and displaying these stories online via Project Jukebox, the Council may further promote environmental safeguards to help prevent and respond to future oil spills in the Prince William Sound. Further, the Exxon Valdez Project Jukebox assists in the promotion of all Council activities to a growing digital audience.

**Accomplishments since last report:** Staff have begun the transition to the updated logo, approved by the Board at their September 2020 meeting, on public facing materials and platforms. Staff have been coordinating with Helvey Communications on a number of other deliverables for the FY19 and FY20 contracts, and are on track to close out both contracts by the end of this fiscal year.

### 3903 – Youth Internship

**Objectives:** Coordinate with regional secondary and/or higher education institutions to recruit students for internships, coordinate with other committees to help support students’ education goals while meeting appropriate PWSRCAC project needs.

**Summary:** Intern Rosie Brennan has been working since January to update the Alaska Oil Spill Curriculum. Work on the lesson content was completed by contractor last year. Brennan’s work includes creating a consistent template for all lessons and developing a searchable webtool for all the lessons to support educators to find and use the curriculum.

### 5000 – Terminal Operations Program

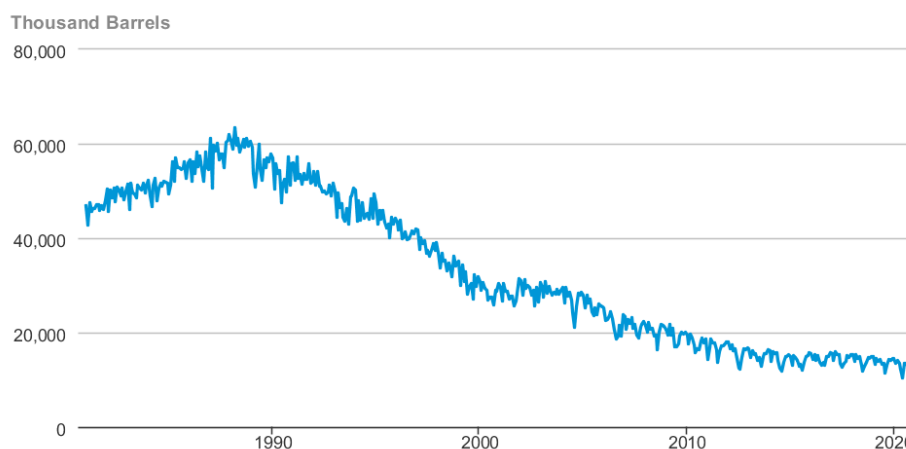
**Objectives:** The goal of the Terminal Operations and Environmental Monitoring Program is to prevent oil and hazardous liquid spills and minimize the actual and potential environmental impacts associated with the operation and maintenance of the Valdez Marine Terminal.

**Accomplishments since last report:** Monitored spills associated with operation and maintenance of the terminal, crude oil laden tanker ship tug escorts, 2020 VMT projects, and water quality of effluent discharged from BWTF and sewage treatment facility.

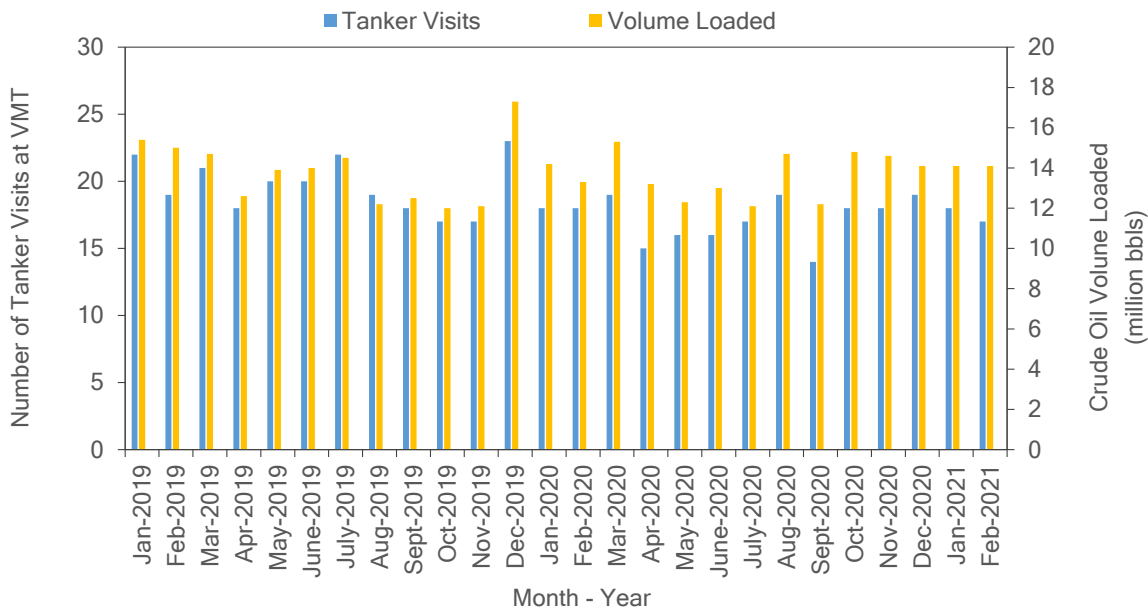
Graphs depicting a variety of data related to the operation and environmental impacts of the VMT.

#### Trans-Alaska Pipeline Throughput, Thousand Barrels Per Month

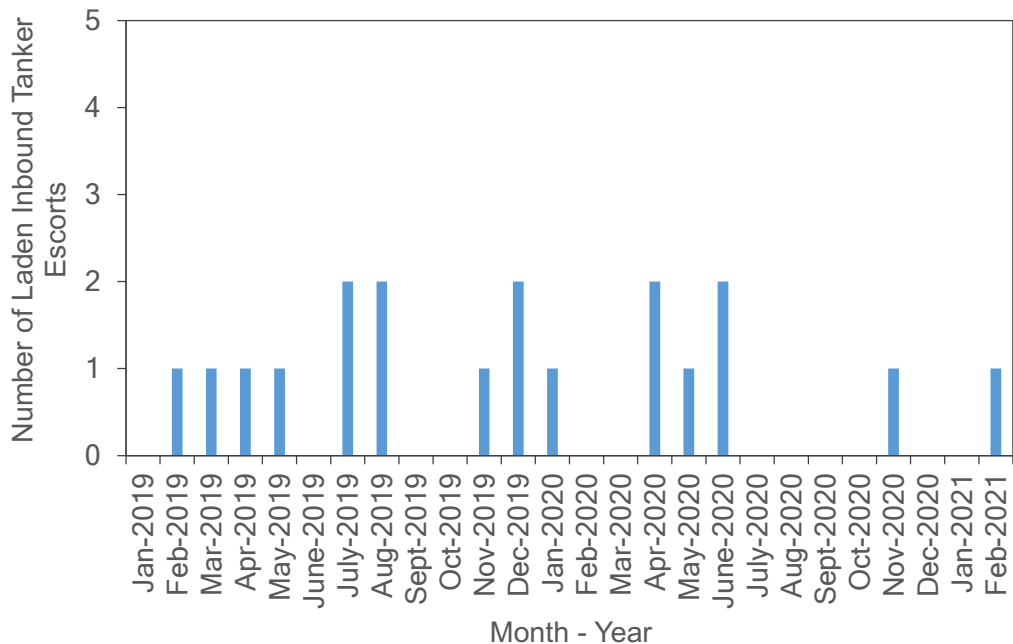
(Source: U.S. Energy Information Administration)



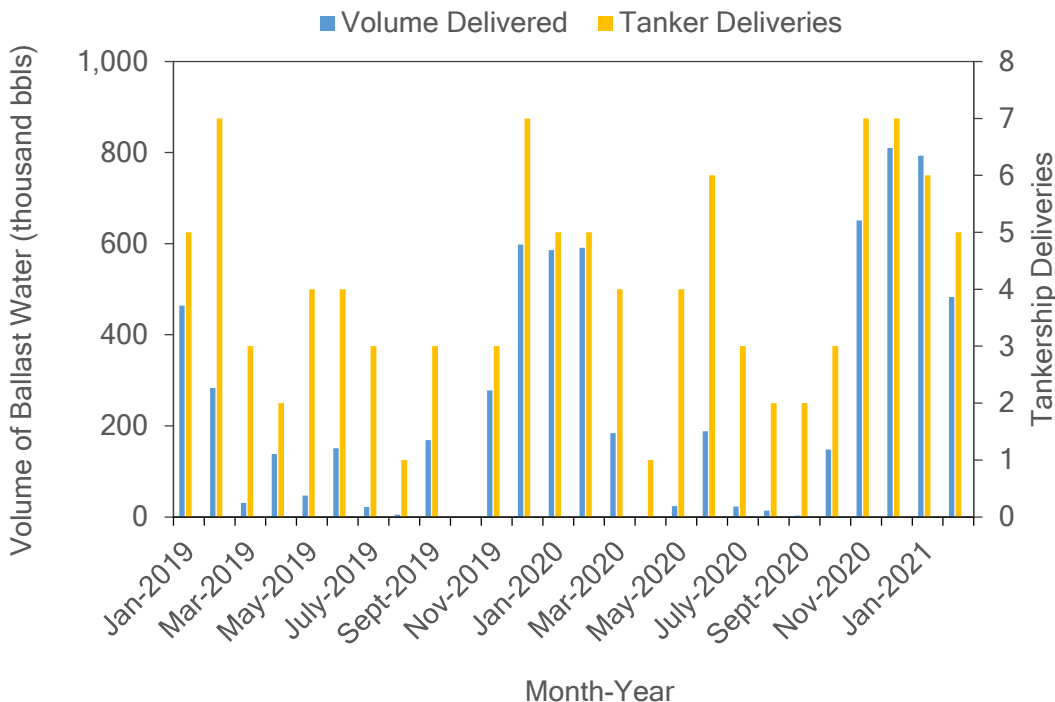
**Crude oil loaded and tanker visits at VMT.** (Source: Alyeska Pipeline Service Company. Partitioned by VMT vessel arrival date, current through February 2021.)



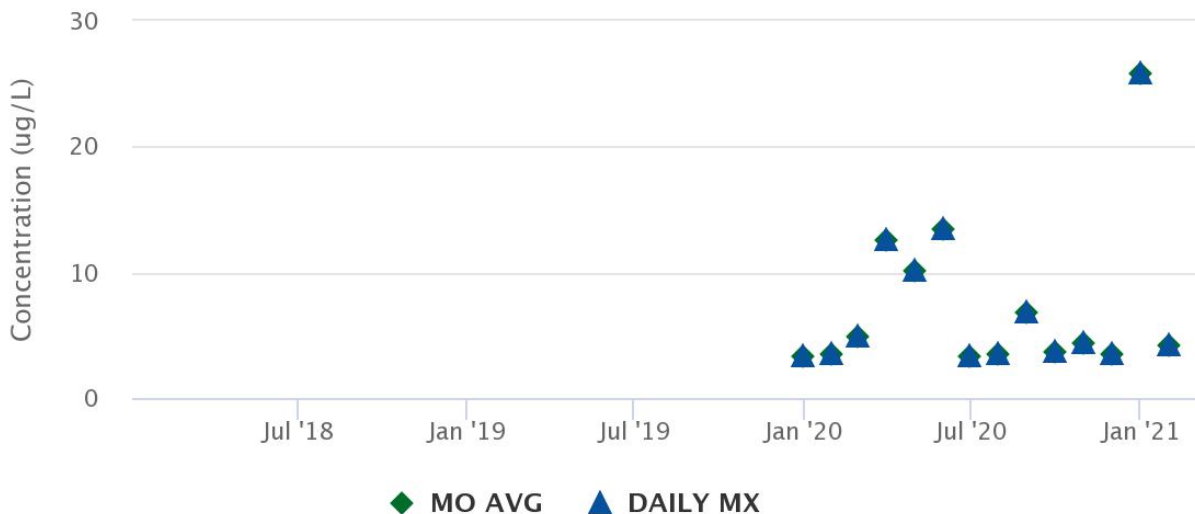
**Inbound, laden tanker escorts.** (Source: Alyeska Pipeline Service Company. Partitioned by VMT vessel arrival date and determined based on if vessel was escorted inbound or not, current through February 2021.)



**Ballast water deliveries to Ballast Water Treatment Facility from tanker ships** (Source: Alyeska Pipeline Service Company. Partitioned by VMT vessel arrival date, current through February 2021.)



**Total aqueous hydrocarbons discharged from the Ballast Water Treatment Facility.** This chart shows the monthly average and daily maximum concentrations of dissolved hydrocarbons being discharged from the Ballast Water Treatment Facility into Port Valdez. Concentration units are micrograms per liter (Source: U.S. EPA, current through January 2021).



**5056 – Tank 8 Internal Inspection Review**

**Overall Goal:** The goal of this project is to review and thereby monitor an important aspect of the maintenance of the Valdez Marine Terminal, the scheduled 2019-2020 internal inspection and repair of crude oil storage Tank 8.

**Accomplishments since last report:**

- On March 9, 2021, Taku Engineering, the Council's contractor for this project, submitted their first draft of a report detailing the results of their work reviewing the maintenance records of Tank 8. The draft report includes recommendations for improving the maintenance of Tank 8. The draft report will be reviewed by the Terminal Operations and Environmental Monitoring Committee.
- Taku Engineering met with staff from Alyeska Pipeline Service Company the week of March 15, 2021 to ask for final information they'd like to use to complete this project and inform their final report for the Council.

**5640 – ANS Crude Oil Properties**

**Objectives:** This project entails analyzing the physical and chemical properties of Alaska North Slope Crude Oil and interpreting how those properties would impact the effectiveness of oil spill response measures including mechanical recovery, in-situ burning, and dispersants.

**Accomplishments since last report:** This project remains on hold because Environment Canada, the lab that would analyze the November 2019 sample of Alaska North Slope Crude Oil, cannot analyze the oil sample due to COVID-19 restrictions. They may be able to perform that work in early 2021. Recall, Environment Canada has offered to perform this chemical and physical analysis, on the Council's crude oil sample, free of charge.

**5998 – Cathodic Protection Systems Review**

**Objectives:** The purpose of this project is to review and analyze the operation and maintenance of the cathodic protection systems used at the Valdez Marine Terminal to limit corrosion on the crude oil storage tanks and piping at the facility. The goals of this project are to improve the Council's current understanding of these critical systems and, if warranted, identify ways Alyeska's operation and maintenance of the VMT could be improved, such that the risks of an oil spill from the terminal are decreased. Another goal of this project is to highlight where and how Alyeska implements industry best practices in regards to the operation and maintenance of cathodic protection systems at the Valdez Marine Terminal.

**Accomplishments since last report:**

- On March 5, 2021, the Council's contractor, National Pipeline Services, submitted their first draft of a report detailing the results of their work reviewing the records and procedures used to cathodically protect the crude oil piping at the Valdez Marine Terminal. The draft report includes recommendations for improving the operation and maintenance of the cathodic protection systems at the terminal. The draft report will be reviewed by the Terminal Operations and Environmental Monitoring Committee.
- National Pipeline Services met with staff from Alyeska Pipeline Service Company the week of March 8, 2021 to ask for final information they'd like to use to complete this project and inform their final report for the Council.

**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 and plan-related issues; promotes compliance, enforcement, and funding of existing environmental regulations; and promotes the incorporation of local knowledge of sensitive areas in contingency planning.

**Accomplishments since the last report:**

- **Alaska Regional Response Team (ARRT):** The ARRT met on February 10, 2021. Highlights of the meeting include version 2 of the Regional Response Plan will be updated in the near future; the Science and Technology Workgroup is updating fact sheets (Subpart J for dispersants); references and tools for area planning are available on ADEC's website; the Marine Spill Response Corp (MSRC) presented on their new responsibilities for dispersant operations in Alaska effective January 1, 2021; and Hilcorp Alaska presented on the current status of Alaska operations.
- **Prince William Sound Area Committee (PWS AC):** The PWS AC met on March 17, 2021. The updated Prince William Sound Area Contingency Plan is expected to be available for public review in the summer 2021. The Alaska Chadux Network reported on the recent consolidation with the Alaska Maritime Prevention & Response Network and its agreement with the Alaska Sea Life Center. The National Pollution Funds Center presented on the Oil Spill Liability Trust Fund.
- **BP-Hilcorp Transaction:** On December 14, 2020, the Regulatory Commission of Alaska (RCA) issued an Order Granting Applications Subject to Conditions regarding the transfer of TAPS assets (including the Valdez Marine Terminal) from BP Pipelines to Harvest Alaska. PWSRCAC plans to submit an amicus curiae brief in support of the City of Valdez appeal to the RCA's March 2020 order allowing Hilcorp/Harvest Alaska to keep financial information confidential.
- **ADEC Public Scoping on Oil Discharge Prevention and Contingency Plan Requirements:** ADEC Commissioner Jason Brune reported that his staff continues to work on changes to the regulations in Article 4 of 18 AAC 75. A package will be sent out for public review sometime in the future, and plenty of time will be allowed for the review. Commissioner Brune committed that ADEC is "not eliminating any environmental protections" in proposed regulatory changes.

#### 6510 – Contingency Planning Project

**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, Marathon, Crowley Alaska Tankers, Hilcorp North Slope, and Polar Tankers, renewed on February 1, 2017, will expire in 2022. 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:**

**Prince William Sound Tanker C-Plan:** The Prince William Sound Tanker C-Plan expires on January 31, 2022. The plan renewal is expected to be submitted to ADEC for a sufficiency review in the spring 2021.

**Valdez Marine Terminal C-Plan:** The VMT Coordination workgroup met on February 9, 2021. Updates were provided and there was discussion on the charter.

The Council submitted comments on the public review to amend 18 AAC 75.065, .066, and .990 in February. ADEC proposes to change oil spill prevention requirements covering the crude oil storage tanks at the VMT. PWSRCAC does not support extending internal tank inspections beyond 10 years as it increases the risk for leaks due to the inability to assess corrosion rates and integrity of the tank floors.

### 6511 – History of Contingency Planning

**Objectives:** The purpose of this project is to take a long-term view of contingency planning in Alaska spanning over 30 years since the *Exxon Valdez* oil spill. This project will document where progress has been made and where protections have decreased through the established regulatory record. The final report will capture the evolution of contingency planning in Alaska by identifying key issues, themes, and trends over time.

**Accomplishments since last report:** Nuka Research and Planning will introduce their report on the history of the Prince William Sound Tanker Contingency Plan at the May 2021 Board meeting.

### 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 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:** Our two weather stations are operating normally and we have had no maintenance issues with them.

### 6531 – Port Valdez Weather Buoys

**Objectives:** This project is to assemble, deploy and maintain two buoys capable of measuring ocean currents and common weather parameters in Port Valdez. The first buoy is installed near Jackson Point [61.0910°N 146.3811°W]. The second buoy is installed at the Valdez Duck Flats [61.1201°N | 146.2914°W]. The Prince William Sound Science Center (PWSSC) will be partnering with the Council to facilitate this project.

Congress mandated formation of the Council in the Oil Pollution Act of 1990. 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 located in the vicinity on the Valdez Marine Terminal (VMT). This includes proposals to install ultrasonic anemometers at the loading berths and a weather station at the VMT. The Council's Board of Directors 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:** Implementation of the power system upgrades based on recommendations made by JOA Surveys have proven successful and the buoys have been able to operate through the winter darkness to this date.

The next haul out and service visit is being planned for the Spring, possibly in May. The buoy hulls will be cleaned and repainted, zinc anodes replaced, sensors replaced as needed and batteries recharged.



Funding for this project was included in the AOO five-year program planning proposal. One of their priorities is to improve marine safety and there is an interest in weather-related projects.

#### 6536 – Analysis of Weather Buoy Data

**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 project would be the first of five projects that would 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 should include 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 request for proposals (RFP) was released to the public to solicit bids for this project on December 11, 2020. The Project Team met to review two proposals and selected Rob Campbell, Ph.D. to conduct the weather buoy data analysis. An initial meeting between the consultant and the Project Team took place and the contract between being worked between the parties.

#### 6540 – Copper River Delta Flats GRS

**Objective:** The purpose of this project is to develop a white paper that captures the history of developing geographic response strategies (GRS) in the Copper River Delta and Flats (CRDF) area. GRS are pre-built response strategies used to protect pre-identified sensitive areas in the event of an oil spill. Considering CRDF is part of the Prince William Sound Area Contingency Plan (PWS ACP), this information would be applicable to this plan. The white paper would document the significance of protecting this valuable, fragile ecosystem, and explain the current status of the GRS.

**Accomplishments since last report:** This project was a FY22 project discussed in long-range planning this past fall with OSPR. It was activated at the January board meeting and will take place in FY21. A Request for Proposals is currently being drafted for this project and should be completed by mid April..

#### 6560 – Peer Listener Training (Phase I)

**Objectives:** Review and assess the Peer Listener Training and similar programs nationwide to ascertain current best practices. The resulting report will inform the Council's decisions about how to revise the Peer Listener Training, the associated manual (an appendix of *The Guidebook for Coping with Technological Disasters*), and the train the trainer program going forward.

**Summary:** A project team was formed including staff, Board members, and committee volunteers from IEC and SAC. An RFP was released in March with intention to select a contractor by late April.

#### 7000 – Oil Spill Response Operations Program

**Objective:** The Oil Spill Response Operations 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:** COVID continues to shape spill response training and exercise activity. The HAZWOPER class portion of the upcoming spring FV training will be run via virtual platform, and instead

of the usual hands-on equipment station day, this equipment training will occur on the water with SERVS working with smaller groups to better socially distance participants. The Fishing Vessel program continues to have sufficient numbers of training vessels and crew.

Spring FV training dates are as follows:

| Annual Training in Port of | Travel Day | Set-up Day | On-Water Days    | Wrap up/ Begin Travel |                                                                              |
|----------------------------|------------|------------|------------------|-----------------------|------------------------------------------------------------------------------|
| Kodiak                     | 3/31       | 4/01       | 4/02 - 4/06 (4)* | 4/07                  | * Off for Easter Sunday on 4/04                                              |
| Homer                      | 4/07       | 4/08       | 4/09 - 4/12 (4)  | 4/13                  |                                                                              |
| Seward                     | 4/13       | 4/14       | 4/15 - 4/16 (2)  | 4/17                  |                                                                              |
| Whittier                   | 4/17       | 4/18       | 4/20 - 4/21 (2)  | 4/22                  | Conduct Operational Readiness Exercise (ORE) in Whittier on 4/19 (tentative) |
| Cordova                    | 4/22       | 4/23       | 4/24 - 4/29 (6)  | 5/01                  | Conduct Operational Readiness Exercise (ORE) in Cordova on 4/30              |
| Valdez                     | 5/01       | 5/02       | 5/03 - 5/06 (4)  | NA                    |                                                                              |

Briefings concerning the *Admin Sump Spill* that occurred in April of 2020 now occur at monthly intervals. The embankment from where sheening originated continues to be monitored and the Shoreline Clean-up Assessment Team (SCAT) has been doing more methodical walks at large minus tides; no sheening or oiling has been seen for months. Test wells uphill of this site and resulting water quality reporting have shown a continued decrease in hydrocarbon levels and levels are below clean-up thresholds. The TOEM committee has been reviewing these water sampling reports and lessons learned from the spill.

## 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 spill 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.

Targets of the Drill Monitoring project included:

- 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 & SAC) informed.
- Produce an annual report on effectiveness and progress of the regularly monitored drills.
- Continue developing and implementing staff training for drill monitoring.

### Recent Exercises

#### **Polar Tankers and ConocoPhillips Exercise – March 22-25, 2021**

Polar Tankers and ConocoPhillips conducted the annual Prince William Sound Shipper's exercise during the last full week of March. The first day was centered around training and the other three days were focused on the initial 24 hours of the simulated oil spill response. This exercise was conducted primarily in a virtual environment with participants from around the world.

#### **VMT Drainage 58 Boom and Skimmer Deployment – February 25, 2021**

Alyeska conducted a booming and skimmer deployment on February 25 as a practice for the May 26 VMT tabletop and equipment deployment exercise. This was not a timed event and the deployment went smoothly. An orca even swam by to check it out.

### **No-Notice Rapid Response Fleet Exercise with Tug Champion and Barge OSRB-3 – February 12, 2021**

SERVS conducted an unannounced exercise for the Cordova Rapid Response fleet near Johnstone Point on February 12. This exercise was held with the Barge OSRB-3 and the tug Champion. Four vessels from the Rapid Response fleet received phone calls around 8:00 am in the morning and arrived on-scene around 10:45. The vessels worked with the Barge OSRB-3 crew to deploy and tow the barge's two Current Buster 8s and two Crucial skimmers.

### **Upcoming Drills and Exercises**

Valdez Marine Terminal Tabletop and Deployment Exercise – May 26, 2021

Marathon PWS Shipper's Exercise – October 13-14, 2021

### **7901 – Resources for the RSC and Affected Communities**

**Objective:** This project will assemble relevant information and reference material for those involved in the Regional Stakeholder Committee (RSC) process, so that RSC members have easy to digest, easy to find, web-based resources they can draw from. The project will build upon and capture materials from the previous Council-led Spill Response for Stakeholders workshop series, along with other information that the RSC members could use to better represent their communities and understand Alyeska-applicable VMT and tanker contingency plans and response resources.

**Accomplishments since last report:** Draft content was discussed one last time with OSPR, and with IEC at recent meetings. This final committee check-in on draft content was valuable. While not every volunteer suggestion received was incorporated, several edits were made as a result, and there was good discussion in the process. After working through these edits, staff member Brooke Taylor did a final copy edit on all content before things began moving online.

Content was set to the website in late February by staff member Amanda Johnson. This material remains hidden from the general public, but can be accessed via the following link: <https://www.pwsrccac.org/rsc/> Please go investigate and see what you think! The interviews are also posted and this is content that OSPR hasn't seen yet.

An instructional webinar featuring this content was conducted March 18<sup>th</sup>. This was the Council's first time unveiling newly constructed material to the public and conducting outreach. A total of 28 participants were on the webinar including staff, City of Valdez, City of Cordova, and Seldovia participants. Similar educational efforts are expected in the future, and there is a small budget for this in FY22, but the immediate task is to get Board approval on this material so it can be made visible on the website.

### **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 escort system, reviewing Best Available Technology documents for the 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.

### 8010 – Rescue Tug Best Available Technology

**Objectives:** Information gathered and developed from this research project will be used to build on the base of information that PWSRCAC has currently completed. Advances in technology dictate reevaluation of current standards of technology and this evaluation represents a chance to identify best practices that might otherwise be overlooked. Project results will be shared with the public, industry and regulatory stakeholders.

**Accomplishments since last report:**

- Glosten is on schedule and budget. It has completed the following deliverables:
  - Deliverable A – Literature Review and Initial Data Gathering.
  - Deliverable B – Mission Requirements Roundtable Discussion.
  - Deliverable C – Identification of Current Design Standards and Equipment that Represents BAT.
  - Deliverable D – Comparison of Presently Used ETVs.
- Glosten will complete Deliverable E – BAT Evaluation by the end of March 2021 and will prepare the project final report prior to the Board meeting in May 2021.
- A budget adjustment and change order is being proposed that will allow Glosten to prepare and make a presentation to the Board on the project.

### 8013 – Vessel Traffic System Use of AIS and Radar White Paper

**Objectives:** The Prince William Sound Regional Citizens' Advisory Council (PWSRCAC) has invited proposals to produce a white paper to evaluate, compare, and contrast the utilization of Automated Identification System (AIS) and land-based Radar in Vessel Traffic System operations. The selected contractor will ascertain and review research papers and literature related to this topic; summarize findings of this technology review; prepare a white paper on the subject of AIS and radar use; identify gaps in the research on this topic; and provide recommendations for future research. The final work product of this effort is a report detailing the results.

In its efforts to encourage legislators and the Coast Guard to renovate the radar systems used in Prince William Sound, there will need to be accurate resources available that describe the issue well and are based on quality researched facts. This project is intended to provide this resource document.

**Accomplishments since last report:** A Request for Proposals (RFP) document was prepared by staff and approved by the POVTS Committee. The RFP is open for submittal of proposals at this time.

### 9000 – Environmental Monitoring Program

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

- Project manager to attend a technical scientific conference
- Project manager to attend the Alaska Regional Response Team (ARRT) and other meetings
- Conduct PWSRCAC Science Night

**Accomplishments since last report:** There have been no notable accomplishments other than those associated with the projects & programs managed under this program. Dr. Danielle Verna recently joined the PWSRCAC team as the Environmental Monitoring Project Manager.

### 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. Here are the notable tasks to be accomplished under this program:

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

**Accomplishments since last report:** As of March 16, 2021, all the planned 2021 winter marine bird surveys were completed by the researchers from the Prince William Sound Science Center.

### 9510 – Long Term Environmental Monitoring Program

**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 program:

- 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 Program plan

**Accomplishments since last report:**

- All environmental samples have been analyzed.
- Contractors from Payne Environmental Consultants and the United States Geological Survey have completed their interpretation of the data resulting from the lab analyses.
- Payne Environmental Consultants and the United States Geological Survey have submitted draft reports to the Council, and those reports were reviewed by the Scientific Advisory Committee. The draft reports pertain to the “normal” monitoring conducted under this program. However, it should be noted additional reporting associated with the April 12, 2020 oil spill from the Valdez Marine Terminal is occurring, and the reports associated with that work should be completed by September 2021.

### 9511 – Herring and Forage Fish Surveys

**Objectives:** Monitor schools of herring and other forage fish species in order to identify areas in the Sound where they tend to concentrate. Here are the notable tasks to be accomplished under this program:

- Conduct aerial surveys of forage fish in Prince William Sound
- Analyze aerial survey data and report on the results
- Make aerial survey maps readily available for use by spill response managers

**Accomplishments since last report:**

- Conducted aerial surveys of forage fish in Prince William Sound in June 2020
- Analyzed aerial survey data and reported on the results at the January 2021 Board meeting
- Made aerial survey maps readily available for use by spill response managers in July 2020

**9520 – Marine Invasive Species**

**Objectives:** Understand and minimize the environmental impacts of harmful invasive species potentially arriving in the PWSRCAC region due to the TAPS trade via ballast water and hull fouling. Here are the notable tasks to be accomplished under this program:

- Obtain plankton samples in Port Valdez and Prince William Sound
- Perform metagenetic analysis on plankton samples to identify any non-indigenous species
- Interpret and report results of plankton metagenetic analysis
- Conduct monitoring of invasive crab species in Valdez and Cordova

**Accomplishments since last report:**

- Mia Siebenmorgen Cresswell, the Council's invasive species monitoring intern in Cordova, submitted a draft of an invasive species monitoring internship manual to Council staff for review.
- Council staff have been working with scientists from Moss Landing Marine Laboratories and the Smithsonian Environmental Research Center to finalize the 2021 plankton field sampling plan.

**9550 - Dispersants**

**Objectives:** Continue monitoring dispersants research and regulatory issues and to perform direct research to address research gaps. Here are the notable tasks to be accomplished under this program:

- Review dispersants scientific literature
- Update PWSRCAC's dispersants scientific literature bibliography
- Develop dispersants environmental tradeoff analysis tool (dispersants ETA tool)

**Accomplishments since last report:**

- Continue funding hydrocarbon toxicity studies of PWS fish species by NOAA's Northwest Fisheries Science Center

**9590 – Hydrocarbon Toxicity**

**Objectives:** Research and address gaps in knowledge regarding chronic toxic effects of oil, dispersed oil and in-situ burn residue under study conditions closely approximating the marine waters of PWSRCAC's region. Here are the notable tasks to be accomplished under this program:

- Continue funding hydrocarbon toxicity studies of PWS fish species by NOAA's Northwest Fisheries Science Center

**Accomplishments since last report:**

- Continued funding hydrocarbon toxicity studies of PWS fish species by NOAA's Northwest Fisheries Science Center

### 9650 – Review and Update Coping with Technological Disasters – A User Friendly Guidebook

**Objectives:** Review and update of PWSRCAC's *Coping with Technological Disasters: A User Friendly Guidebook*, originally produced in 1999. Here are the notable tasks to be accomplished under this program:

- Perform in-house review of the guidebook and appendices
- Update the guidebook
- Update the guidebook's appendices
- Promote awareness and use of the guidebook and appendices

**Accomplishments since last report:**

- Council staff completed their work to format, copyedit, and make final content changes to the Guidebook and appendices.
- The revised Guidebook and appendices were provided to the Scientific Advisory Committee on March 8, 2021 for their review.

### 9660 – The Recovery of a Subsistence Way of Life

**Objectives:** Use Prince William Sound household survey data, gathered by the Alaska Department of Fish and Game to conduct a study examining the socioeconomics of the post Exxon Valdez Oil Spill recovery from a local community perspective. Here are the notable tasks to be accomplished under this program:

- Analyze data from the Alaska Department of Fish and Game's Prince William Sound household surveys
- Prepare a journal-length paper with a summary of study findings to be submitted to a peer reviewed journal by the authors

**Accomplishments since last report:** The final report associated with this project was approved by the Board at its January 2021 meeting.

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