

January 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: Attended the Public Relations Society of America International Conference, which was held virtually on October 26-29, 2020.

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 will be 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: With the merited and widespread cancelations of in-person events and travel this year, most outreach activities and events have been put on hold, postponed, or canceled. Currently, this has not impacted the budget, except that not all funds will be used. Staff are focusing their time on internal projects in support of long-term outreach objectives.

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:

- Proposals have been requested for programs that will occur in Summer 2021.
- The Alaska Oil Spill Curriculum has been fully revised to meet new curriculum standards for science.

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 interviews for inclusion in Project Jukebox. Staff will be working with UAF in February and March on transcriptions. 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.

Annual Report: Coordinated with staff and contractor to complete the 2019-2020 annual report. The report has been distributed both electronically and in hard copy.

3610 – Web Best Available Technology

Objectives: This project helps ensure the Council's websites and web presence uses the best and most upto-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.pwsrcac.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 an OSPR project: 7901 Web-based RSC Resources.

Website data: Website usage for www.pwsrcac.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. Below is an overview for the three months prior to this report, compared to the previous three months:

		8/10/2020 to 10/10/2020
Total sessions (a session is the period of time a user is actively engaged with the website)	2,923	2,852
Total users (total number of individual visitors to the site during the time period - this differs from total <i>sessions</i> because an individual may have visited the site more than once during the period)	2,289	2,207

Pages per session (an average number of individual pages that are	1.97	2.12
opened during each session - more than "1" in this category typically		
means that a visitor was engaged enough in the content to visit		
more than one page)		

Top content from Oct 10-Dec 10 2020		
1.	Regulatory Reform	
2.	Tracking Weather in PWS/New Buoys	
3.	About staff & Board members	
4.	Oral History of EVOS	
5.	Internship/Employment	

This is a basic overview. Google Analytics tracks data about many different aspects of the website. 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: Coordinated with staff and contractor to complete the 2019-2020 annual report. The report has been distributed both electronically and in hard copy.

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: Recruitment for this position is in final stages. This year's focus will be to launch the revised Alaska Oil Spill Curriculum.

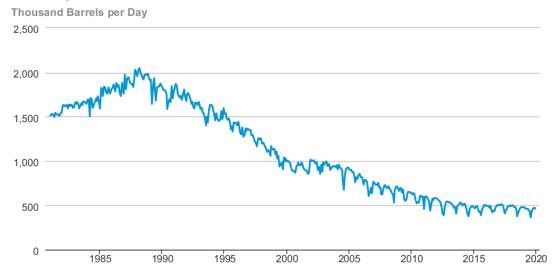
5000 - Terminal Operations Program

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.

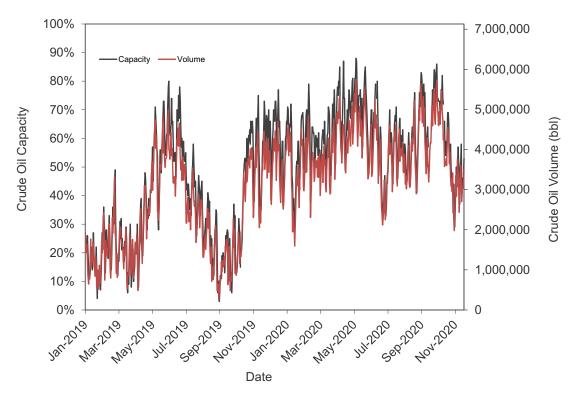
Accomplishments since last report: Monitored spills associated with operation and maintenance of the terminal, crude oil laden tanker ship tug escorts, 2020 VMT projects, and water quality of effluent discharged from the BWTF and sewage treatment facility.

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

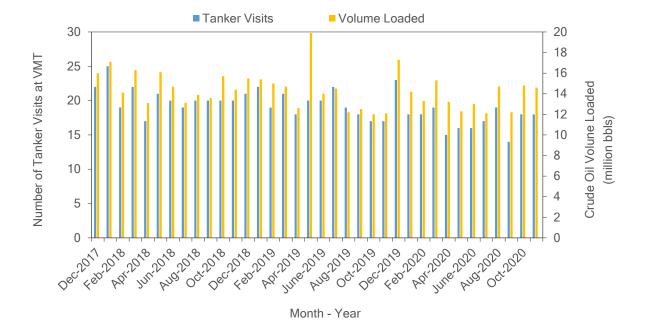
 Trans-Alaska Pipeline Throughput, Thousand Barrels per Day (Source: U.S. Energy Information Administration)



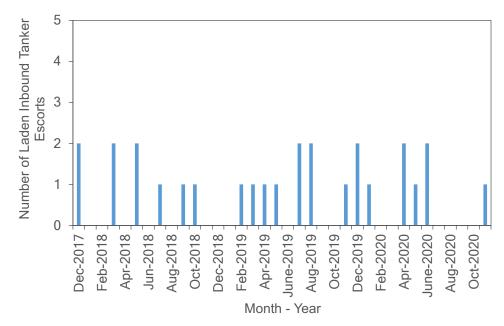
• Crude oil stored at the Valdez Marine Terminal (Source: Alaska Department of Revenue Tax Division and Alyeska Pipeline Service Company. Current through November 29, 2020.)



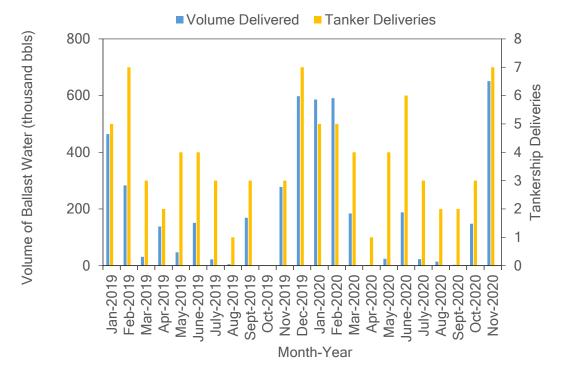
• **Crude oil loaded and tanker visits at VMT.** (Source: Alyeska Pipeline Service Company. Partitioned by VMT vessel arrival date, current through November 2020.)



• 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 November 2020.)



 Ballast water deliveries to the Ballast Water Treatment Facility from tanker ships (Source: Alyeska Pipeline Service Company. Partitioned by VMT vessel arrival date, current through November 2020.)



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: Alyeska has provided more of the information initially requested from Alyeska on June 23, 2020 pertaining to this project. That additional information has allowed the Council's contractor, Taku Engineering, to complete some of the scope of work of this project and develop initial findings pertaining to the maintenance of crude oil storage Tank 8. Taku Engineering will be presenting their initial findings to the Board during this meeting, during agenda item to address obtaining the outstanding information needed from Alyeska to complete this Council project.

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 is 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. Environment Canada 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: As was reported during the September 2020 Board meeting, work has still not moved forward on this project because Alyeska has not provided all the information initially requested by the Council's contractor, National Pipeline Services, on January 10, 2020. Council staff have been working with Alyeska to obtain the outstanding requested information so the Council's contractor can complete this project. There is an agenda item included during this Board meeting to address the need to obtain the outstanding information requested from Alyeska for this project.

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 next meeting is scheduled for February 10, 2021 which is open for the general public. General information on the ARRT can be found <u>HERE</u>, and meeting summaries can be found <u>HERE</u>.
- The Wildlife Protection Guidelines for Oil Spill Response in Alaska, Version 2020.1 dated August 31, 2020, promulgated recently, are available HERE. These guidelines are posted on ADEC's website titled Area Plan References and Tools available HERE.
- There was an update to the Alaska Area Committees Guidelines for Coordination and Consultation with Federally Recognized Tribes available on the ARRT website <u>HERE</u>.
- Prince William Sound Area Committee (PWS-AC): The PWS-AC met on September 16, 2020.
 Highlights include updates to the PWS Area Contingency Plan are expected to be available for public review around the end of 2020 or the beginning of 2021. The next meeting is tentatively scheduled for March 16, 2021.
- Arctic and Western Alaska Area Committee (AWA-AC): The AWA-AC met on December 1, 2020. It
 was reported that the AWA Area Contingency Plan will be updated by the end of 2020. The
 Protocols for Using Unmanned Aircraft Systems (UAS) during an oil spill response or exercise
 were recently adopted into the AWA Area Contingency Plan. This document can be viewed on
 ADEC's Tools and References page HERE.
- Alaska Inland Area Committee (AI-AC): PWSRCAC provided comments in July 2020 on updates to the AI Area Contingency Plan. It is expected that this plan will be promulgated by the end of 2020.

BP-Hilcorp Transaction: On December 14, 2020, the Regulatory Commission of Alaska 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. Staff is currently evaluating the outcome of this approval.

ADEC Public Scoping on Oil Discharge Prevention and Contingency Plan Requirements: ADEC Commissioner Jason Brune reports that his staff continues to review comments received from the public scoping process earlier this year. It is unknown when ADEC expects to propose any regulatory changes. Staff continues to monitor this effort.

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, BP Oil Shipping Company, Crowley Alaska Tankers, Polar Tankers, and Tesoro Alaska Company (Andeavor) were renewed on February 1, 2017 and 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 be in effect until November 21, 2024.

Accomplishments since last report:

VMT C-Plan

VMT C-Plan Amendment 2020-1: VMT C-Plan Amendment 2020-1 was approved by ADEC on September 23, 2020. This major amendment, which went out for public comment earlier this year, incorporates the revisions to the VMT C-Plan based on the consensus terms reached during the Collaborative Process in the 2017 administrative appeal on protection of the Solomon Gulch Hatchery and Valdez Duck Flats. The language was changed to immediately boom the Duck Flats and hatchery whenever a spill is either uncontained or unsecured, of an unknown volume, and/or a volume greater than five barrels.

VMT minor amendments: Alyeska has submitted three minor amendments in the last several months which have been approved by ADEC. These amendments cover administrative changes, updating references, removal of two pieces of firefighting equipment that were replaced by a new ladder truck, and replacement of the Fort Liscum self-propelled skimmer.

Prince William Sound Tanker C-Plan

Change of Prince William Sound Tanker C-Plan Administrator: The Response Planning Group (RPG), consisting of PWS shippers, recently announced that Angelina Fuschetto of Crowley Alaska Tankers has replaced Monty Morgan of Polar Tanks as plan administrator.

PWS Tanker C-Plan Minor Amendment on Changing Contractor: In October, the RPG and SERVS proposed a minor amendment in order to address a change in USCG guidelines for dispersant operations. To meet these revised guidelines, which go into effect January 1, 2021, the RPG proposes to change service providers from Lynden Air Cargo to Marine Spill Response Corporation (MSRC). Lynden's C-130 aircraft in the PWS Tanker C-Plan is being replaced by MSRC's large fixed-wing, dispersant aircraft and spotter plane located in Bellingham, WA. ADEC approved this change on December 2, 2020.

Foreign flagged vessels: There has been an increase in the use of foreign flagged vessels over the last few months by Hilcorp North Slope and Polar Tankers. This increase is due to COVID impacts to U.S. West Coast demand. According to Hilcorp, the delays in shipyard work combined with lower West Coast demand are the primary drivers of increased foreign flag usage this winter.

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: Work continues on the history of the PWS Tanker C-Plan. Staff have been logging historical documents into PWSRCAC's electronic document management system for the last several months. Nuka Research and Planning Group has been working through PWSRCAC's internal system, identifying key issues that have led to changes in the plan or validated it. Nuka is developing a timeline of significant events along with accompanying documentation that tracks the history of the PWS Tanker Plan.

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. Batteries and data logger for the Cape St Elias station were replaced.

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: The PORTS (Physical Oceanographic Real-Time System) site for Port Valdez is operational now. NOAA will be using our buoy data along with information derived from their weather stations and tide gauges located in Port Valdez.

Based on recommendations made by JOA Surveys, the contractor recently added to support the PWS Science Center in maintaining and upgrading the buoys, the power systems on the two buoys have been upgraded. This involved disassembling the buoys and installing new batteries, solar panels and charge controllers. Work was conducted the week of November 29 by Prince William Sound Science Center, JOA Surveys and staff at the Valdez Harbor Drive Down Dock.

Funding for this project was in included in the AOOS 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 deadline for responses to the RFP is January 8, 2021. It is anticipated that a contractor will be selected by January 18, 2021, with the goal of having a final report for acceptance by the Board at the May 2021 Board of Directors meeting.

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 disrupt response training/exercise activity
- Admin Sump spill briefings continue

COVID-19 continues to disrupt the normal spill response training and exercise activity. Fall FV training, normally occurring in Whittier and Cordova in September was cancelled. To keep vessels' required certification current, crews needing refreshers are completing the Hazwoper training online this fall instead. SERVS instituted a bonus program to incentivize crews to complete this online Hazwoper training as early as possible. As of early December, at the monthly SERVS/PWSRCAC communication meetings, it was reported that fleet availability number was sufficient (279 available vessels is the minimum).

An in-person wildlife response training event did take place in Kodiak this October. SERVS felt they could safely manage this smaller event, but also knew they would have to remain flexible and adaptable. A number of Kodiak COVID cases were announced as the class was already in motion, and SERVS finished the remaining class work via Zoom as a result.

SERVS recently replaced and conducted an exercise with the new Ft. Liscum skimming vessel. SERVS deliberately chose the publicly accessible Kelsey Dock in Valdez for the exercise location, and staff members Robida and Robertson, along with observers from ADEC, SERVS, and Crowley Alaska Tankers were in attendance. Just like the previous vessel it replaced, this platform is a self-propelled, Marco skimming belt style advancing skimmer, where encountered oil and oily debris are recovered using a belt and brought onboard. The recovered oil and debris are stored in onboard cargo tanks or on deck. Work vessels pull boom attached to the bow of the vessel to further enhance the encounter rate and help direct oil into the skimmer. This platform is staged at the VMT so it can quickly be deployed should the need arise.

Status update briefings with the Admin Sump Spill have continued and the group is meeting on a limited monthly basis at this point. Alyeska is monitoring for sheen daily at the shoreline edge, but none has been observed in recent weeks. Formal Shoreline Cleanup Assessment Team (SCAT) walks continue as well during extreme low tides and daylight hours. Boom has been pulled from this site. Water sampling test wells are showing below clean-up thresholds numbers, with the only exception being in the immediate SU-6 sump area where the spill originated. SAC has been monitoring these testing numbers.

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

Ft. Liscum Skimmer Training Exercise – November 9, 2020

Alyeska conducted a skimmer training exercise off of the Valdez Kelsey Dock in Port Valdez on November 9. This was the first time the PWSRCAC staff has seen Alyeska's new Marco belt skimmer. This exercise included of two workboats towing boom to enhance the throughput of the skimmer. Alyeska conducted this exercise by the Valdez Kelsey Dock to allow observers to see the exercise as the COVID-19 precautions have not allowed observers for most of the exercises this year.

Upcoming Drills and Exercises

- Polar Tankers PWS Shipper's Exercise March 23-25, 2021
- Valdez Marine Terminal Tabletop and Deployment Exercise May 26, 2021
- Marathon PWS Shipper's Exercise October 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 Spill Response for Stakeholders Council-led 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 Staff and the OSPR Committee had the opportunity to review draft content in September. Feedback indicated that large changes were needed both on the web-navigation aspect of this content, and to the content itself. This fall timeframe was spent reducing the overall volume of content, compressing certain chapters together, and in refocusing more on the immediate questions of what the RSC is and how people could meaningfully participate. A lot of thought was given to how this material would be laid out online as well, and a workable plan has been identified and implemented.

Two interviews were also completed as part of content generation; one with Board President Robert Archibald and another with Executive Director Donna Schantz. The interviews give a human voice to the concepts discussed and reinforced important themes already found in the written content; the value of bringing community & local knowledge to a response, the importance of being organized, and the importance of prioritizing issues.

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 communication meetings, monthly ADEC/PWSRCAC communications 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 held a roundtable discussion with stakeholders in November, 2020 that was well attended. Feedback from this meeting will help define the role of an ETV at Hinchinbrook Entrance. Peter Soles of Glosten has provided a worldwide inventory of ETVs or vessels capable of fulfilling this role and an accompanying memo about the list and its use (contact <u>Alan Sorum</u> for a copy of this memo). This will shape the BAT determination for the project.

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: The \$14,400 included under this program for Science Night has been moved into the Council's contingency fund and it was decided not to hold Science Night this year.

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: The contract between the Council and the Prince William Sound Science Center to complete this project has been finalized. Planning is underway to conduct the winter bird surveys in February and March 2021.

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 the environmental samples were obtained as of August 19, 2020 and all of the "normal" Long-Term Environmental Monitoring Project lab analyses on the samples have been completed. Some lab analyses still remain for samples gathered specifically in regards to the April 12, 2020 oil spill from the Valdez Marine Terminal. The principal investigators or scientists from Payne Environmental Consultants, Inc. and the United States Geological Survey have been interpreting the laboratory data that is available to date (December 11, 2020), and will be reporting their preliminary findings to the Scientific Advisory Committee on Wednesday, December 16, 2020. The remaining lab analysis should be completed by March 2021 and a report to the Board of Directors regarding this project is scheduled for the May 2021 meeting.

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: The data from the June 2020 aerial surveys has been analyzed and discussed in a report written by Dr. Scott Pegau of the Prince William Sound Science Center. That report is recommended for Board acceptance during this Board meeting.

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, completed all her summer 2020 invasive species monitoring. She deployed traps in the intertidal zone to monitor for European green crabs and other invasive species on a monthly basis from May 2020 through August 2020. Mia is also using settlement plates in the Cordova harbor to monitor for invasive tunicates every three months. Her next settlement plate monitoring is scheduled for March 2021. No European green crab or other invasive species have been identified through Mia's summer 2020 internship work.

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: Betsi Oliver, the Council's Outreach Coordinator, has taken over as the Council's project manager for this project in FY 2021. Her work will focus on managing an update to the Council's 2006 dispersants use position. During this Board meeting, Betsi will be asking for the Board's guidance on the direction of this project.

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: None to note.

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: The content of the Guidebook's appendices has been updated by the project team that was coordinated by Joe Banta and included Scientific Advisory Committee members Davin Holen and Jeff Brooks, Board Member, Patience Anderson Faulkner, and Council staff including Betsi Oliver, Jeremy Robida, Joe Lally, and others. Now the content is being copyedited and formatted by an inhouse team of Council staff including Amanda Johnson, Hans Odegard, and Brooke Taylor. The goal is to have the Guidebook's appendices approved by the Executive Committee in February 2021.

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 technical paper has been completed by the Alaska Department of Fish and Game (ADF&G) and has been reviewed by the Scientific Advisory Committee and Alaska Native stakeholders in the Prince William Sound/Gulf of Alaska region. Additionally, ADF&G created a 4-page report summary of the technical paper. Both the technical paper, or report, and 4-page report summary are recommended for Board acceptance during this meeting.

This page intentionally left blank.