



**September 2019  
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. Prepare and publish PWSRCAC's Annual Report each year to inform the general public, member entities, and agency and industry partners of PWSRCAC projects and activities. Support legal requirements for ongoing updates to the public.

### 3410 - Fishing Vessel Program Outreach

**Objectives:** For bringing the realities of oil spill response tactics, equipment, and planning to life for citizens within Exxon Valdez oil spill region communities, the fishing vessel 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.

#### Scheduled Upcoming Events and Milestones:

- Spring 2020 Fishing Vessel Outreach tour, Valdez. Planning will commence once the Spring 2020 SERVS schedule is announced.

### 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:** PWSRCAC booth was exhibited, a presentation was given, or the council participated in the following events as part of community outreach:

- 2-3 May Annual volunteer recognition and outreach presentation, *Valdez*
- 20 May PWS Natural History Symposium, *Whittier*
- 28 May RCAC 101 Guide Training, *Valdez*
- 18-20 June Clean Pacific, *Vancouver, B.C.*
- 12-13 July Copper River Salmon Jam, *Cordova*
- 26 July "Coffee with a Scientist" lecture on dispersants, *Anchorage*
- 14-16 August Mobile Wildlife Response Infrastructure Deployment, *Seward*



Booth at Clean Pacific



Full House for Symposium in Whittier



Salmon Jam, Cordova

**Recognition for Volunteer Involvement:** Thanks to staff and volunteers for assistance with summer outreach activities, including: Jeremy Robida, Austin Love, Nelli Vanderburg, Leigh Lubin, Linda Robinson, Brooke Taylor, Hans Odegard, Amanda Johnson, and Natalie Novik.

**Scheduled Upcoming Events and Milestones:**

- 25-28 September Alaska Historical Society Conference presentation, *Kodiak*
- 13 November Pacific States/British Columbia Oil Spill Task Force Meeting, *WA*
- 20-22 November Alaska Municipal League conference, *Anchorage*
- 21-23 November Pacific Marine Expo, *Seattle*
- 5 December Science Night, *Anchorage*

### 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:**

- Center for Alaskan Coastal Studies taught oil spill prevention, environmental monitoring, invasive species, and impact of oil spills in Homer, Seldovia, Port Graham, and Nanwalek.
- Wrangell Institute for Science and Environment, Seed Media, and Valdez middle school guided 52 sixth graders to make short videos exploring a topic related to the Exxon Valdez oil spill, the Alyeska Pipeline, oil transportation, or the marine ecosystem of Prince William Sound and the effects of oil industry.
- Teachers participated in hands-on learning about the oil spill and the Council’s curriculum in two field courses with Alaska Geographic: one in Kenai Fjords National Park, and one in Prince William Sound with Chugach National Forest.
- Valdez elementary students finished their annual salmon incubation project. With Council funds they learned about the impacts of oil on salmon habitat as well as prevention methods in place.
- Kodiak Youth Conservation Corps and Arctic Youth Ambassador teens finished their year-long commitment which included youth presentations about oil spill impacts at the Alaska Forum on the Environment.
- High school students from around the Council region competed in a marine engineering and oil spill response challenge as part of the Tsunami Bowl ocean sciences quiz bowl, led by Prince William Sound Science Center. Teams of teens made ROVs and then tested their spill response capabilities in a swimming pool.
- Council staff and volunteers presented the “Master of Disaster” education event in Kenai.



*Lubin teaching GRS activity*



*Kodiak teen art responding to spill oral histories*



*Assessing plankton*

**Scheduled Upcoming Events and Milestones:**

- 25-27 October Alaska Cross Content Conference, *Anchorage*

### 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. Email subscriptions have continued to grow in the last year due to Outreach Coordinator Oliver’s increased efforts to encourage sign-ups from the booths at conferences and events.

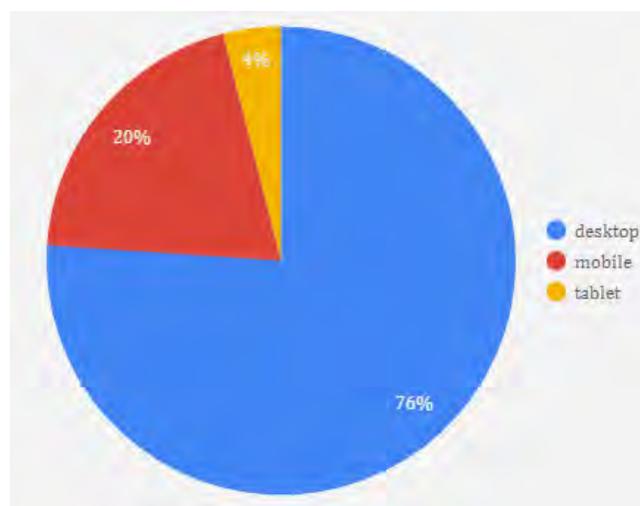
**Annual Report:** Coordinated with contractor on initial set up and planning of Annual Report. Initial draft constructed from staff input. Content review continuing with staff.

### 3610 – Web Best Available Technology

**Upgraded Public Website:** The Council’s public website underwent a major technical upgrade and graphic redesign in December.

**Website data:** Website usage for [www.pwsrccac.org](http://www.pwsrccac.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 year prior to this report (data from August 1, 2018 to August 1, 2019):

*Right:* 24 percent of visitors to our site are using their mobile phone or tablet.



Total sessions (a session is the period of time a user is actively engaged with the website)	15,418
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)	11,499
Pages per session (an <i>average</i> number of individual pages that are 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)	2.19
Top 5 categories of content (other than the home page)	<ol style="list-style-type: none"> <li>1. Personal Stories from EVOS (The Spill book and Project Jukebox)</li> <li>2. About The Council/Staff &amp; Employment/Board of Directors</li> <li>3. Oil Spill Response/Fishing Vessel Training</li> <li>4. Marine transition</li> <li>5. Exxon Valdez Oil Spill</li> </ol>

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:** Contract with a public relations firm to work with the Council to develop a long-term communications and public image strategy. Develop Council image, messaging, and voice, as well as contemporary ways to communicate who we are and what we do to the public within the EVOS region and beyond. Implement the strategy and evaluate its effectiveness in the short term. Make changes as necessary and implement for the long term.

#### Accomplishments since last report:

June-Aug	Staff coordination with Helvey Communications on several deliverables for the FY19 contract, which has been extended through December 2019. The graphic designer has begun mockups that will be used to gather feedback and refine logo adjustment work.
Aug	Helvey attended the IEC in-person meeting to present on the current direction for logo adjustment and get further insights from IEC members during the work session.
Aug	FY20 contract signed by PWSRCAC and Helvey Communications. Elements of the FY20 contract not related to the logo adjustment will begin in the coming months.

### 5000 - Terminal Operations Program

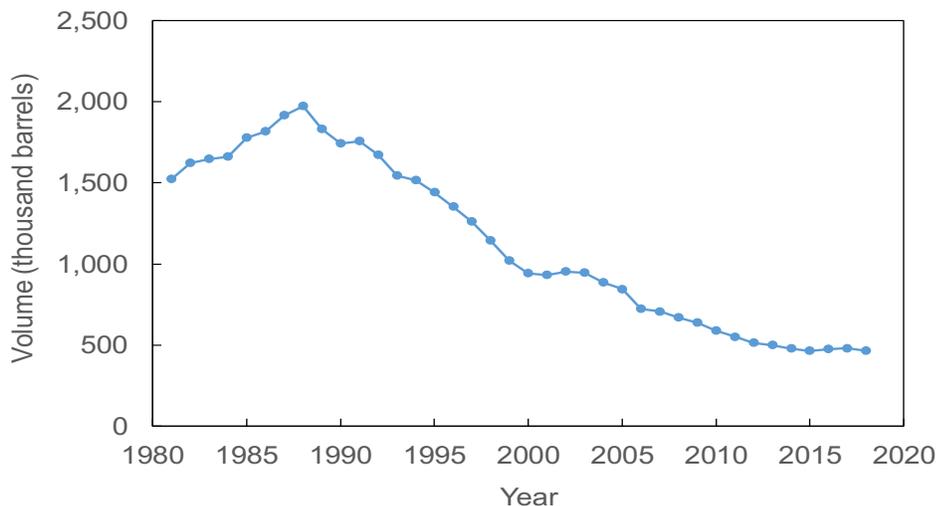
**Objectives:** The purpose of this program is to monitor the actual and potential environmental impacts stemming from the operation of the Valdez Marine Terminal (VMT).

#### Accomplishments since last report:

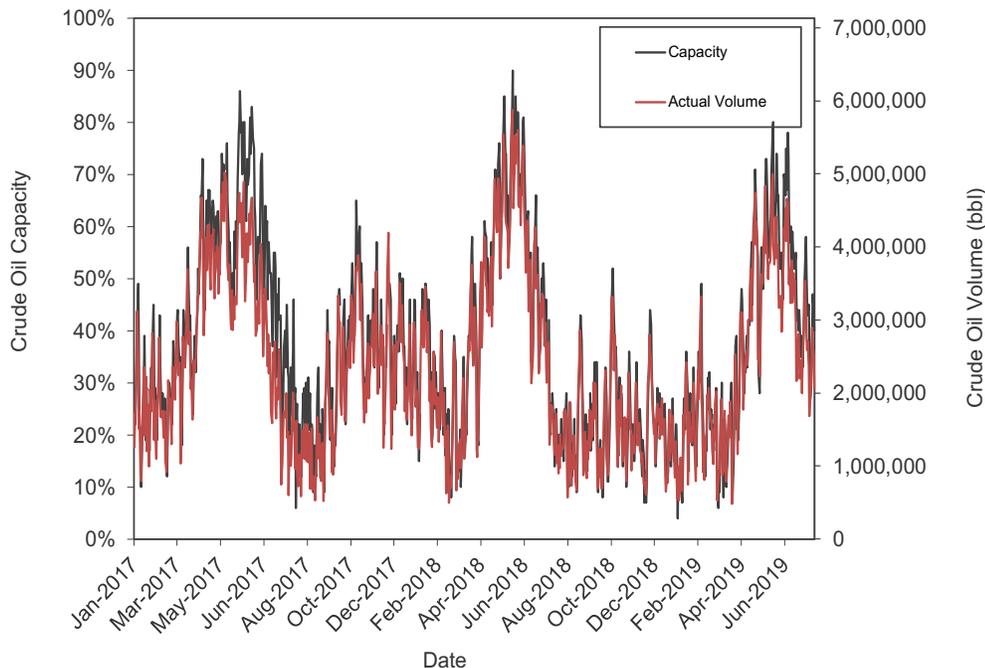
- Reviewed information about 2019 VMT Projects from Alyeska
- Requested the 2018 VMT Integrity Management Report from Alyeska
- The TOEM Committee visited the VMT to observe recent and current maintenance projects
- Monitored spills associated with operation and maintenance of the terminal
- Monitored crude oil inventory at the facility
- Monitored crude oil laden tanker ship tug escorts
- Monitored water quality of effluent discharged from BWTF and sewage treatment facility

Graphs depicting a variety of data related to the operation and environmental impacts (potential and actual) of the Valdez Marine Terminal.

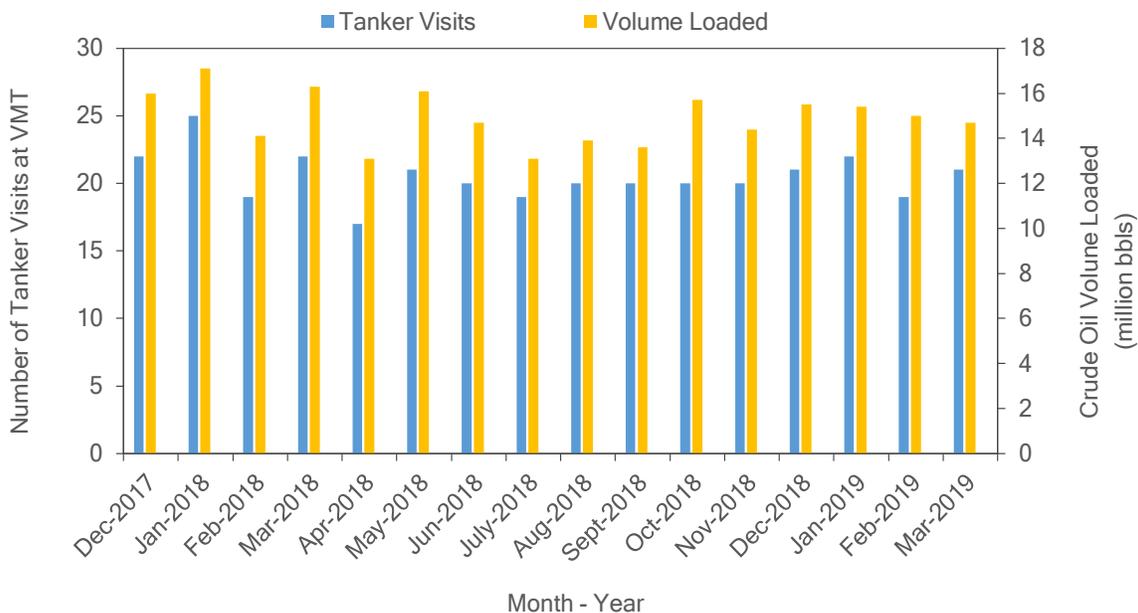
- **Trans-Alaska Pipeline Throughput, Thousand Barrels per Day** (Source: U.S. Energy Information Administration. \*Current as of 12/31/2018)



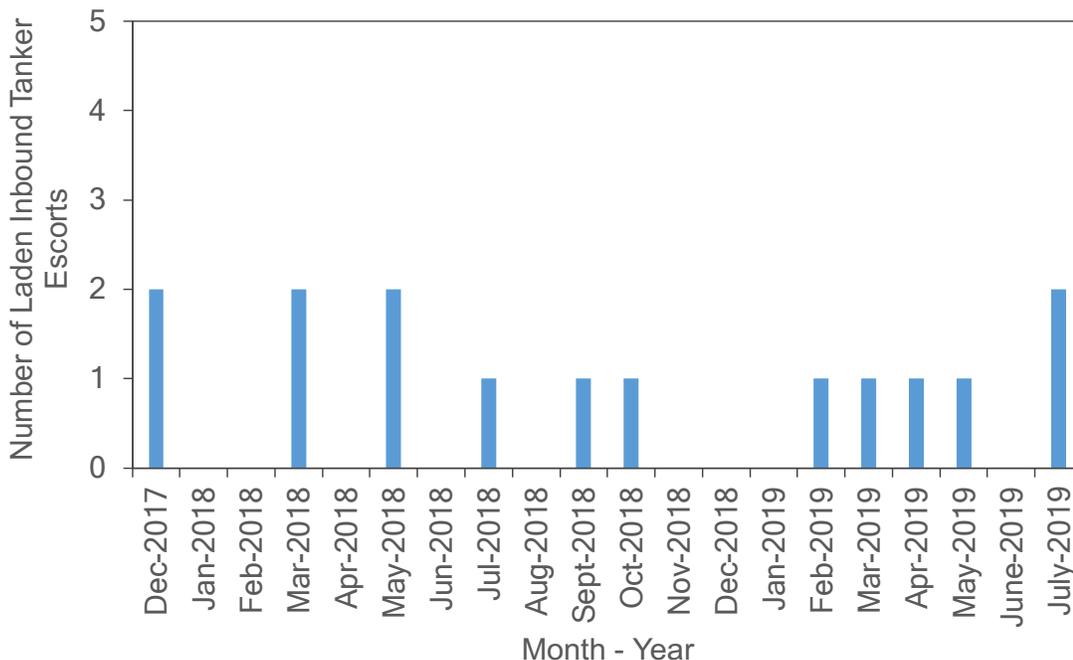
- Crude oil stored at the Valdez Marine Terminal** (Source: Alaska Department of Revenue Tax Division and Alyeska Pipeline Service Company. \*Current as of 7/31/2019)



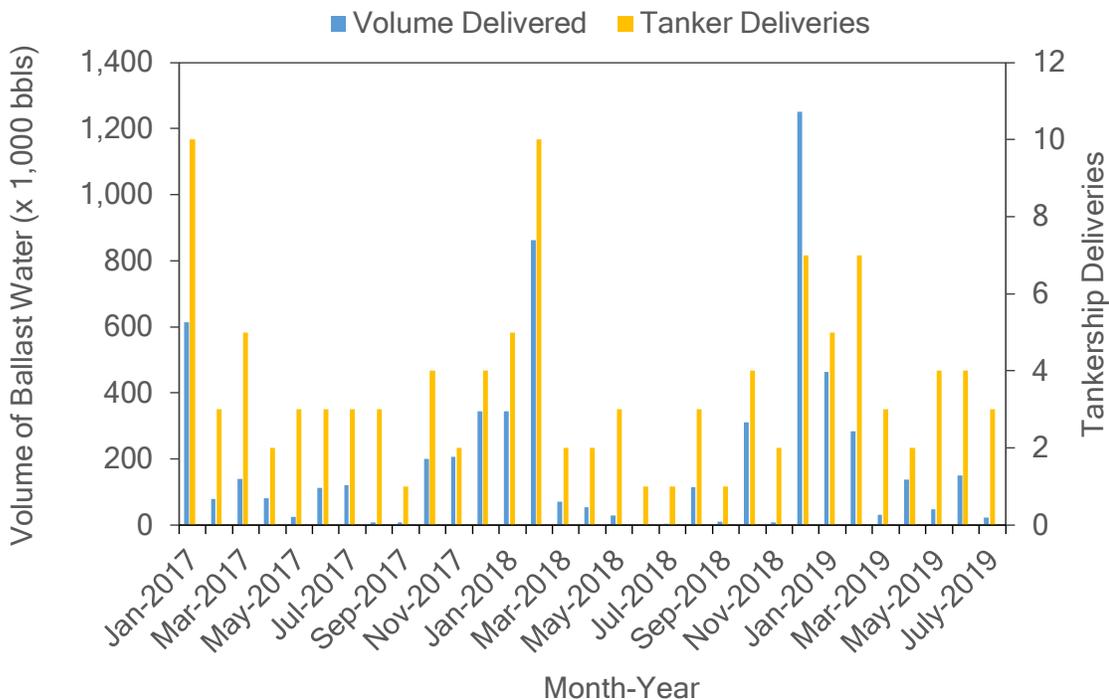
- Crude oil loaded and tanker visits at VMT.** (Source: Alyeska Pipeline Service Company Vessels Nearby Schedule. Partitioned by VMT vessel arrival date. \*Current as of 7/31/2019)



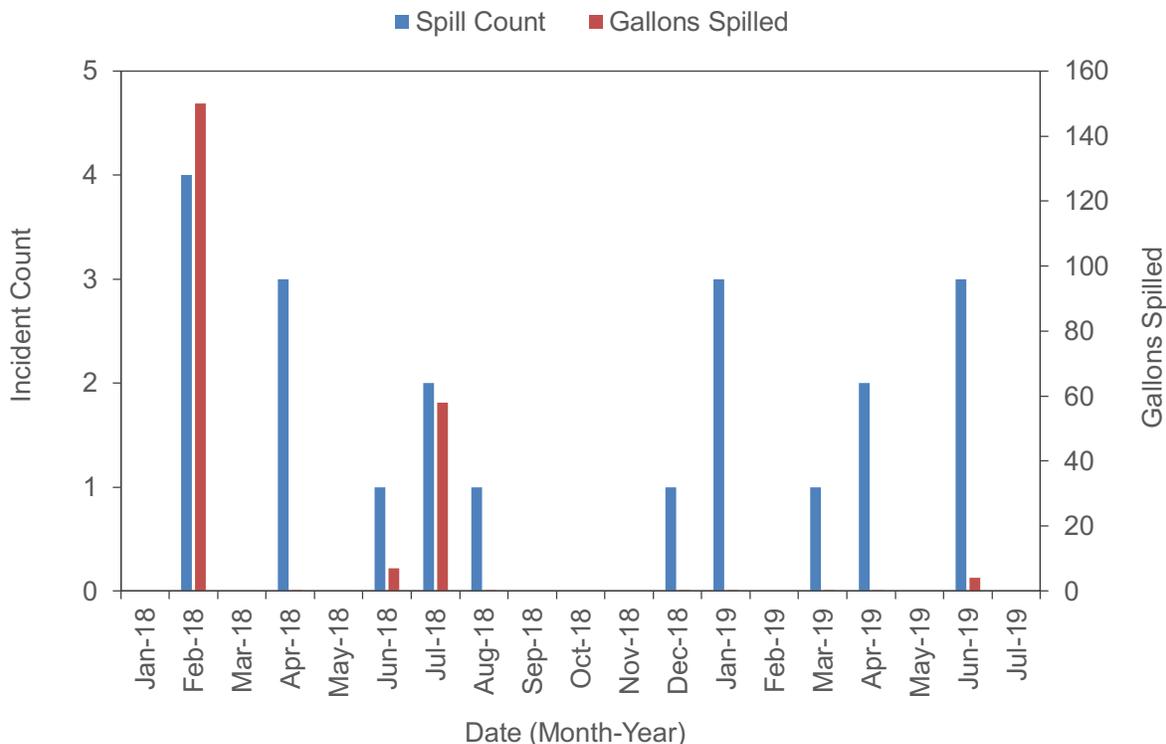
- Inbound, laden tanker escorts.** (Source: Alyeska Pipeline Service Company Vessels Nearby Schedule. Partitioned by VMT vessel arrival date and determined based on if vessel was escorted inbound or not. \*Current as of 7/31/2019)



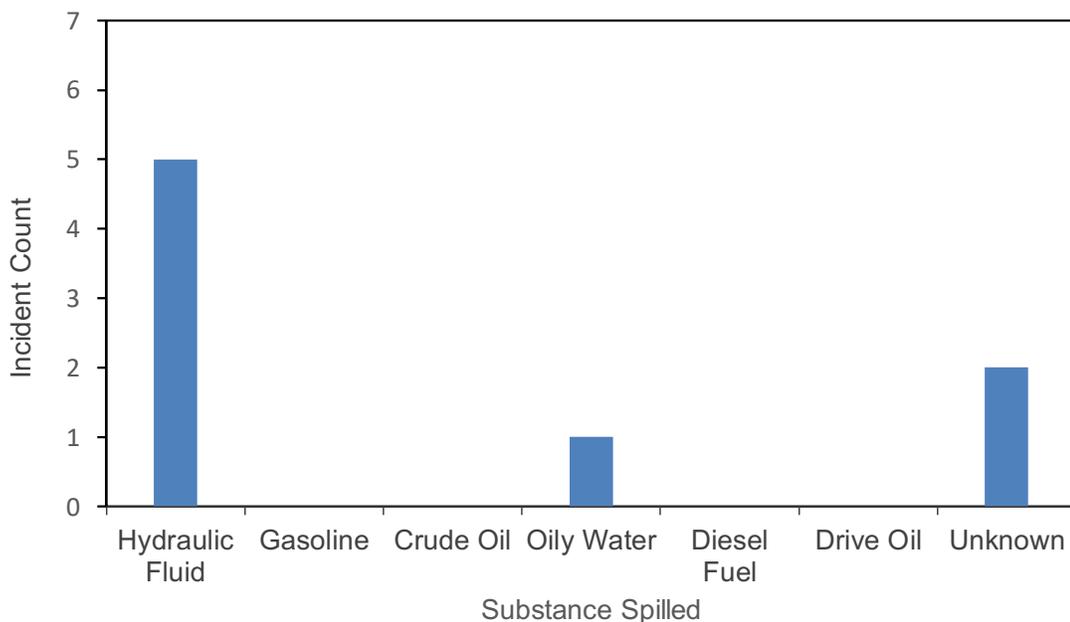
- Ballast water deliveries to BWTF from tanker ships** (Source: Alyeska Pipeline Service Company Vessels Nearby Schedule. Partitioned by VMT vessel arrival date. \*Current as of 7/31/2019)



- 2018-2019 spill count and volume due to operation and maintenance of VMT and SERVS.** – Includes all reported spills both into and outside of secondary containment areas (Source: Alyeska Pipeline Service Company Operations Control Center Spill Notification Form. \*Current as of 07/31/2019).



- Substances spilled in 2019** – (Source: Alyeska Pipeline Service Company Operations Control Center Spill Notification Form. \*Current as of 07/31/2019).



### 5051 – Water Quality Permit Review

**Objectives:** The purpose of this project is to review, evaluate, and provide input and recommendations on the terminal's water quality permit, which is currently being renewed.

To complete this project a project team will be put together to review the current permit. That project team will come up with a set of questions or problems they feel need to be addressed regarding the current permit. If those questions require technical expertise not available to the Council internally or what cannot be answered by Alyeska or our regulatory stakeholders, outside technical expertise may be required. If so, water quality expertise will be hired to help answer the project team's outstanding questions.

Once the project team is satisfied with its evaluation of the current water permit they will also review and evaluate the permit application submitted by Alyeska as well as the draft permit issued by ADEC. The process used to evaluate the current water permit will be applied to the application documentation and draft permit. Upon completion of reviewing those documents, the project team will develop comments regarding the draft permit and submit them to ADEC for their consideration.

**Accomplishments since last report:** On April 26, 2019 PWSRCAC submitted comments the ADEC Division of Water Quality pertaining to the Valdez Marine Terminal's Water Quality Permit. The comments were due to ADEC by April 29, 2019. We are awaiting ADEC's response to comments document and that will be reviewed by the TOEM Committee, PWSRCAC Staff, and contractors from Payne Environmental Consultants Inc.

### 5052 – Secondary Containment Liner Integrity

**Objectives:** The purpose of this project is to research testing methods that could be used by APSC to evaluate the integrity of the catalytically blown asphalt (CBA) liner used in the secondary containment systems at the Valdez Marine Terminal (VMT). Specific project objectives include:

- Research and review testing methods that could be used to evaluate the integrity of the CBA liner.
- Recommend testing methods that could be used at the VMT to ensure that the CBA liner in the East Tank Farm is in good working order.

**Accomplishments since last report:**

- XCOM approved a letter to Alyeska including advice that Alyeska consider implementing Geosyntec's recommendations. Geosyntec's final report and the Council white paper was included with that letter.
- Sent XCOM-approved letter to Alyeska on 3/4/2019. Received a brief reply from Alyeska on 3/19/2019 stating that they are reviewing the Council's advice and Geosyntec's final report.
- Alyeska provided a letter to PWSRCAC on 8/14/2019, as a final response to PWSRCAC's 3/4/2019 recommendation letter.

### 5056 – Tank 8 Internal Inspection Review

**Objectives:** Crude oil storage Tank 8 at the Valdez Marine Terminal is undergoing an internal, American Petroleum Institute Standard 653 (API 653), inspection in 2019. The last time Tank 8 was internally inspected was in 2007. Tank 8 has a storage capacity of more than 500,000 barrels, is 250 feet in diameter, and about 62 feet high. These extensive API 653 tank inspections are a critical part of how Alyeska Pipeline Service Company (Alyeska) maintains the 14 operational crude oil storage tanks at the Valdez Marine Terminal. PWSRCAC is responsible for monitoring aspects of the Valdez Marine Terminal's maintenance that are essential toward reducing the risk of an oil spill from the facility. The focus of this project is to review and thereby monitor this important aspect of the maintenance of the Valdez Marine Terminal, the 2019 internal inspection

of crude oil storage Tank 8. The goal of this project is to monitor Tank 8's 2019 API 653 internal inspection. To accomplish that goal PWSRCAC wants to hire a consultant to complete the following objectives:

- Review and summarize Alyeska procedures applicable to Tank 8's internal inspection;
- Review and summarize inspection report(s) for internal inspection of Tank 8;
- Review and summarize sections of the Valdez Marine Terminal's Oil Discharge Prevention and Contingency Plan related to crude oil tank inspections;
- Review and summarize sections of the Alaska Department of Environmental Conservation's (ADEC) regulations pertaining to the inspection of Tank 8;
- Understand the extent to which Alyeska implements industry best practices regarding the internal inspection of crude oil storage tanks;
- Develop recommendations to improve methods, procedures, and inspection reporting associated with Tank 8's internal inspection;
- Develop recommendations to improve sections of the Valdez Marine Terminal's Oil Discharge Prevention and Contingency Plan related to crude oil tank inspections;
- Develop recommendations to improve ADEC's regulatory standards pertaining to the inspection of Tank 8.

**Accomplishments since last report:** A draft request for proposals document was written by Austin Love and reviewed by the TOEM Committee. The request for proposals needs to be finished and published.

#### 5591 - Crude Oil Piping Inspections Review

**Objectives:** From 2016 through 2018 Alyeska conducted projects that resulted in a majority of the Valdez Marine Terminal's crude oil piping being comprehensively, internally inspected for the first time since the terminal was constructed in 1977. The goal of this project would be to provide the Alyeska with comments, advice and/or recommendations pertaining to the maintenance of crude oil piping at the VMT. In addition to that goal, this project should help PWSRCAC more fully understand the results of these inspections and how Alyeska plans to use the data gained from these projects in the overall integrity management of crude oil piping at the VMT. To accomplish those goals, the objectives of this project include:

- Review and summarize the overall results of the in-line inspections that occurred from 2016-2018 at the VMT;
- Review and summarize the reports, processes, and procedures used by Alyeska or their contractors to validate and analyze the 2016-2018 inspection data;
- Comment on the extent to which Alyeska or their contractors used best industry practices in regards to those aforementioned reports, processes, and procedures;
- Develop recommendations that could be made to those reports, processes, and procedures such that the risk of oil spills from the VMT's crude oil piping are minimized.

**Accomplishments since last report:** A draft request for proposals document was written by Austin Love and reviewed by the TOEM Committee. The request for proposals needs to be finished and published.

#### 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. A number of different types of cathodic protection systems are used throughout the 1,000 acre Valdez Marine Terminal to protect the metal surfaces of piping and storage tanks. The goals of this project are to improve the Council's current understanding of these critical systems and, if warranted, identify ways their operation and maintenance 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.

**Objectives:**

- Summarize the various cathodic protection systems operating at the Valdez Marine Terminal (VMT) including location, age/condition, operational status, design life, and basic technical specifications;
- Review VMT-applicable cathodic protection operation and maintenance procedures and manuals, and provide recommendations, if warranted, for improving said documents;
- Review the recent Alyeska cathodic protection system annual reports and provide recommendations, if warranted, for improving future reports;
- Review the VMT's cathodic protection systems testing data and provide recommendations, if warranted, to improve the operation and maintenance of those systems.

**Accomplishments since the last report:**

- Alyeska provided feedback to PWSRCAC and a mutually agreeable scope of work was developed.
- The contract with National Pipeline Services, LLC was finalized.
- Planning is occurring to execute the first deliverable of the project, a site visit to the VMT by National Pipeline Services. That site visit and meeting with Alyeska staff is scheduled for September 25, 2019.

### 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) Meeting:** The ARRT met in Fairbanks on May 16, 2019. Attachment A includes the highlights of the meeting. Meeting summaries and presentations can be viewed [HERE](#).

The next ARRT meeting is scheduled for January 30, 2020 in Anchorage.

**Prince William Sound Subarea Committee (PWSAC) Meeting:** The Prince William Sound Subarea Committee last met on May 21, 2019. The next area committee meeting is tentatively scheduled for October 22, 2019 in Valdez, and the public is welcome to attend.

**PWSAC Administration Subcommittee:** The Administration Subcommittee met on July 16, 2019 and was attended by staff members Jeremy Robida and Linda Swiss. Chair Ron Doyel, ADEC, and Vice Chair LT Rachel Foote, USCG, provided the Area Contingency Planning Administration Subcommittee charter. PWSRCAC has been tasked with updating contact information for the communities of Chenega, Valdez, and Whittier, and updating contact information for fishing cooperatives and fleets.

**Arctic and Western Alaska Area Committee (AWA-AC):**

The following AWA-AC subcommittees have been formed (note the list includes which staff has been assigned to each subcommittee):

1. **Geographic Response Strategies (GRS):** conduct administrative reviews and on-site evaluations and updates of existing GRS [Jeremy Robida].

2. **Exercise and Training:** ensure maximum coordination between Area Committee and federal, state, tribal, local and industry entities [Roy Robertson].
3. **Area Contingency Plan Administration:** review, update and maintain version control over area plan; ensure relevant federal and state plan requirements are met and agency policy mandates are followed [Linda Swiss].
4. **Regulator Coordination and Advisory:** establish and maintain regulatory consistency across National Response System agencies [regulators only].
5. **External Communications:** increase public awareness of the National Response System and related environmental, prevention, preparedness, and response capabilities [Betsi Oliver].

The AWA-AC met on May 15, 2019 in Fairbanks. Highlights are as follows:

- It was reiterated that the purpose of the Area Committee is to prepare the Area Contingency Plan, advise the On-Scene Coordinators, and conduct outreach activities.
- AWA-AC is a clearinghouse for planning and response-related news.
- Tasks include developing and updating the area plan, maintaining current stakeholder points of contact, fostering collaborative relationships, and keeping those interested informed.
- Plan revisions to the Arctic and Western Alaska Area Contingency Plan (AWA-AC Plan) are expected to go out for public review in August 2019.
- Geographic Response Strategies (GRS) will be validated in Akutan summer 2019. The GRS Subcommittee is working on the process to update GRS in the plan.
- It is expected that there will be a seminar on the National PREP Guidelines and ADEC Oil Spill Response Exercise Guidance in fall of 2019.
- A Worst Case Discharge workgroup has been created under the AWA-AC.

The next AWA-AC meeting is scheduled for November 22, 2019.

### 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 21, 2014 and will be in effect until November 21, 2019.

#### **Accomplishments since last report:**

**VMT C-Plan Renewal:** The 5-year renewal of the VMT C-Plan began in November 2018. The expiration date of the current plan is November 21, 2019.

PSWRCAC submitted comments in January 2019, and ADEC issued Requests for Additional Information (RFAIs) in March. ADEC decided more information was needed to find the application complete, and issued a second round of RFAIs in June. Alyeska responded to both rounds of RFAIs, and the 10-day public review on those responses ran from July 19 until July 29, 2019. Copies of the cover letter and comments can be viewed on the OSPR website [HERE](#).

Note that PWSRCAC submitted a separate, joint comment letter to ADEC along with the City of Valdez, Prince William Sound Aquaculture Corporation, and Valdez Fisheries Development Association objecting to inclusion of the 2017 Solomon Gulch Hatchery Valdez Duck Flats Sensitive Area Protection Mobilization Decision Matrix (Matrix) in the plan renewal. The Matrix is the subject of the ongoing administrative appeal and current collaborative process. Former ADEC Commissioner Larry Hartig stayed the 1997 Matrix pending the appeal. It is the parties' position the 1997 Matrix should physically remain in the plan until the appeal has been settled.

**VMT Coordination Group meeting:** At this time, no Coordination Group meeting is scheduled.

#### 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 which may affect the ability to prevent, respond to, contain, and clean up an oil spill.

**Accomplishments since last report:** Equipment at Nuchek and Cape St Elias is operating without incident. No additional changes since the last meeting.

#### 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. The first buoy is installed near Jackson Point in Port Valdez [61.0910°N 146.3811°W]. The second buoy will be 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:**

- Metocean Buoy 1 (MOB 1) is on station and reporting data at the VMT.
- A contract has been completed with the PWSSC to help with installation of MOB 2 and project support.
- Fairweather Science was contracted to help secure required permits from the US Army Corps of Engineers (USACOE) and Alaska Department of Natural Resources (ADNR) for MOB 2.
- Permits from USACOE and ADNR for MOB 2 have been issued. A permit from the Coast Guard should be in hand prior to the Board meeting.
- MOB 2 will be assembled the week of August 19<sup>th</sup> and placed in the Valdez Small Boat Harbor for testing. MOB 2 should be on-site near the Valdez Duck Flats during the first half of September.
- Staff has been working with NOAA to gain wider distribution of the buoy data.
- A website has been started at <http://www.pwswx.pwssc.org/MOB1.html>

### 6534 - Cape Hinchinbrook Weather Surveillance

**Objectives:** Working cooperatively with the Prince William Sound Science Center, this project seeks to provide improved observations of weather and wave conditions seen at the Hinchinbrook Entrance to Prince William Sound. The primary focus of this effort will be the eastern portion of the Entrance that encompasses the established vessel traffic lanes that pass by Cape Hinchinbrook. It is proposed to install an X-band (8.0 to 12.0 GHz) wave radar, upland weather station and supporting equipment at Cape Hinchinbrook.

This equipment will be used to measure the spectra of wave height and direction on the water at the Entrance and provide observations of standard meteorological variables, wind speed and direction, temperature, humidity, and barometric pressure at the Cape. A subsurface moored wave gauge will be installed to validate the radar observations. Power to the equipment installed on the uplands will be provided by solar panels and a wind generator. Data generated by the equipment will be telemetered out via cellular modem link to the Naked Island communications site.

Collection of weather data affects the safe navigation of vessels and aids the ability to prevent, respond to, contain and clean up an oil spill. This project supports the Council's mission by providing the organization with the best scientific knowledge on weather in the region to help make informed decisions and comments that are scientifically justified in an area of spill response where there is a significant data gap.

**Accomplishments since last report:** The project was included in the long-range planning process and funding has been secured to pursue a land use permit from the Coast Guard and/or the Forest Service. Establishment of a weather station at Cape Hinchinbrook will be proposed once a permit is secured. No other changes since the last report.

### 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:** Staff covered several of the **Annual F/V trainings** this past spring. Robida attended the Seward session, while Roy Robertson caught the second half of the Cordova training and the associated equipment deployment. There are two blocks of training scheduled for Cordova this fall, and one session in Whittier.

Robida, along with staff members Betsi Oliver, Brooke Taylor, and volunteer Linda Robinson attended the **2019 Clean Pacific Conference in Vancouver, BC** in June. The conference was smaller in attendance and booth count than Robida remembers from the past, but the event as a whole was still productive. Robida attempted to concentrate on the spill response-related lectures, while the others generally attended lectures more focused on planning and public relations.

A large number of staff helped evaluate the **annual Alyeska Valdez Marine Terminal (VMT) exercise on 6/27**. This exercise will include both command post-tabletop and field deployment activities. The field activities were located in the decommissioned west tank farm area to simulate a spill scenario in the active east tank farm area. These tabletop and field activities were run concurrent with one another. An exercise report is being generated and further discussion is expected at a future OSPR meeting. The event as a whole went well.

### 7520 - Preparedness Monitoring

**Objectives:** PWSRCAC's Drill Monitoring Project falls under a broader program called Oil Spill Response Operations. Objectives for the Drill Monitoring Project are to promote oil spill response

operational readiness within the EVOS region by observing, monitoring, and reporting on spill response drills, exercises, and training in the EVOS region; to provide citizens, regulatory agencies and responders (Alyeska and the shippers) with independent observations and recommendations to improve preparedness; and to provide citizen oversight.

Targets of the Drill Monitoring Project included:

- Monitor and report on regular oil spill drills and training exercises at the Valdez Marine Terminal 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:**

##### **Alyeska Valdez Marine Terminal IMT and Field Exercise – June 27, 2019**

This was Alyeska's annual large-scale exercise for the VMT and included a field exercise in the west tank farm on the VMT at the same time the tabletop portion of the exercise was running at the VEOC.

##### **Port Valdez OSRB-3 Open Water Deployment – May 21, 2019**

OSRB-3 conducted a training deployment exercise in the Port of Valdez.

##### **Polar Resolution Towing Exercises – May 16, 2019**

The tugs Commander and Challenger conducted a towing exercise with the Polar Resolution on May 16 in central Prince William Sound.

##### **Nearshore Readiness Exercise in Nelson Bay – April 26, 2019**

Following the Cordova fishing vessel training, SERVS conducted a nearshore readiness exercise in Nelson Bay.

#### **Upcoming Drills and Exercises**

Alaska Tanker Company and BP Shipping PWS Shippers Exercise – October 9-10, 2019

### **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 assets.

**Accomplishments since last report:** Since the Councils' own incident response plan (IRP) speaks to how PWSRCAC would interact with the public in a real spill or other incident, staff has been spending time polishing up this response plan in preparation of this project. The IRP is currently being reviewed by staff as time allows. Staff has also been drafting the RFP related to this project.

### **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 (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 the monthly SERVS/PWSRCAC communication meetings, monthly ADEC/PWSRCAC communications meetings, and supporting maintenance for the NOAA weather stations.

#### 8012 - Tanker Towline Deployment BAT Review

**Objectives:** Oil tankers operating in Prince William Sound are required to carry emergency towing equipment packages. The availability of this equipment can allow a stricken tanker to be towed safely to a place of refuge, where further action can be taken to stabilize the vessel.

A key action that must occur in the use of one of these towing systems is to successfully make the final connection between the tow package messenger line on a rescue tugboat and the vessel to be towed. Messenger lines to stricken vessels can be passed by hand, heaved or thrown aboard, projected by mechanical means or picked out of the water. Weather is often a factor in vessel casualties and retrieving a line can be difficult and dangerous in poor weather.

**Accomplishments since last report:** A Request for Proposals (RFP) was developed by the POVTS Committee and published on July 3, 2019. <http://www.pwsrcac.org/announcements/review-of-tanker-towline-technology/>

One proposal was received from Glosten on August 9, 2019 and is being evaluated by the POVTS Committee and staff.

#### 8040 - Prince William Sound Vessel Traffic BAT Review

**Objectives:** The US Coast Guard operates 12 Vessel Traffic Service (VTS) facilities across the country. Personnel at these facilities use surveillance and communications systems to reduce vessel collisions, allisions and groundings. Prince William Sound (PWS) has a VTS established primarily to ensure the safe transportation of crude oil from the Valdez Marine Terminal to the Gulf of Alaska.

This project will review what constitutes best available technology in the field of vessel traffic control, conduct a survey of PWS VTS stakeholders and develop recommendations for potential improvements to the PWS VTS.

**Accomplishments since last report:** A Request for Proposals (RFP) was developed by the POVTS Committee and published on July 30, 2019. <http://www.pwsrcac.org/announcements/review-of-vessel-traffic-service-technology/>. The deadline for submission of proposals is September 20.

#### 8560 - Potential Places of Refuge

**Objectives:** The Council partnered with the Alaska Department of Environmental Conservation (ADEC) in 2004 to develop a matrix listing potential places a vessel in distress could be taken that provides shelter from the weather.

A review of the ADEC website shows that information developed in the 2004 effort has not been updated. This project would seek to update the Potential Places of Refuge (PPOR) matrix to reflect current conditions and develop an interactive job aide to assist the places of refuge decision-making process.

The first phase of this project covering the central Sound, received its initial funding at the September 2015 Board meeting in Kodiak and the project was successfully completed by Safeguard Marine, LLC. The POVTS Committee evaluated the results of the first year's work and has gone on record recommending completion of the final two phases of the effort. A presentation was made about the project to the Prince William Sound Subarea Committee and it was positively received by representatives of Andeavor (Tesoro).

The Board approved funding to complete work on the two remaining areas in the northern and southern parts of the Sound that include five different sites.

**Accomplishments since last report:** Safeguard Marine, LLC has completed this project and the final report was accepted by the POVTS Committee. The final report is on the Board agenda for acceptance at this meeting.

#### 9000 - Environmental Monitoring Program

**Objectives:** Coordinate projects developed and overseen by the Scientific Advisory Committee and obtain scientific knowledge and technical information with regard to 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:** PWSRCAC staff have met multiple times to plan Science Night. The date is set for Thursday, December 5, 2019 and the tentative timing of the event is 5-9 PM. The event will be held at the Embassy Suites in Anchorage and staff is working with the venue on the food and layout for Science Night. Staff have not identified any presenters yet but plan to begin doing so soon and have a good list of people and organizations to begin contacting. Staff have compiled a spreadsheet of Science Night presenters and topics from 2009-2018. Staff have discussed having a theme for this year's event and think that the 30<sup>th</sup> Anniversary of the Exxon Valdez Oil Spill would be appropriate.

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

**Objective:** 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 four consecutive years
- Analyze data obtained during winter bird surveys
- Report the results of the analysis and publish in a peer reviewed journal

**Accomplishments since last report:** No significant work has been completed on this project since the last report. There has been concern from PWSRCAC Board members, volunteers, staff, and stakeholders regarding the study design of this project's bird surveys. For example, concern has been expressed regarding the proposed location and duration of the surveys. In order to address these and other concerns regarding the study design, it is suggested that a Bird Survey Project Team be created to work on the scope of this project.

#### 9510 - Long Term Environmental Monitoring Program

**Objectives:** Comprehensively monitor the environmental impacts related to the actual and potential environmental impacts of 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 and mussels
- 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 contracts pertaining to this project were finalized. Contractors for the project include: Payne Environmental Consultants Inc., Kimberlin's Water Taxi and Freight, Auklet Charter Services, Alpha Newfields Analytical Services, Oregon State University, and the United States Geological Survey.

All environmental samples were retrieved in June. Samples included passive sampling devices, blue mussels, and marine sediments. Passive sampling devices were retrieved from Gold Creek, Jackson Point, and Saw Island. Mussels were retrieved from Gold Creek, Jackson Point, Saw Island, and the Valdez Small Boat Harbor. Sediment samples were retrieved offshore of Berth 4 and Gold Creek. One additional mussel sample was retrieved from the Valdez Small Boat Harbor in late June. The intent is to send that sample to Alpha Newfields for hydrocarbon analysis and it is currently being stored in a freezer until funding in the approximate amount of \$1,374 can be secured for that additional analytical work.

All environmental samples, with the exception of the aforementioned late-June mussel sample, were sent off to various labs for analysis. Sediment and mussel samples were sent to the Newfields lab for hydrocarbon analysis. Passive sampling devices were sent to Oregon State University for hydrocarbon analysis. Mussel samples were sent to the United States Geological Survey for genetic analysis.

Laboratory analyses are underway and one set of data has been received. On August 20, 2019 NewFields Environmental provided the analytical chemistry results for mussel and sediment samples gathered in Port Valdez in June 2019. The analytical work by Oregon State University and the United States Geological Survey is still underway.

Comments from SAC members and PWSRCAC staff were submitted to Payne Environmental Consultants Inc. on the 2018 LTEMP report. Payne Environmental revised the report based on those comments and submitted an updated report in late July 2019. SAC and PWSRCAC staff asked for copyedit revisions to the draft report during the August 15, 2019 meeting. SAC voted to accept that report as final, including the aforementioned revisions during their August 15 meeting.

#### 9511 - Herring / Forage Fish Survey

**Objective:** Monitor schools of herring and other forage fish species in order to identify areas in Prince William 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
- Advocate that areas where forage fish concentrate be considered for environmental protection

**Accomplishments since last report:** All aerial surveys of forage fish were completed in June 2019 by the Prince William Sound Science Center. Those surveys were managed and performed by Scott Pegau. They completed surveys along the entire coastline of Prince William Sound. Working with a couple vessels they were able to do some aerial survey validations. That on-the-water validation work confirmed they were able to correctly identify a four herring and four sandlance schools from the air. Overall Pegau commented that they "saw a few more sandlance than we have in recent years, but the herring numbers were on the low side." The data from the June 2019 aerial surveys is available online through the [AOOS data portal](#). Pegau is currently writing a summary report of the June 2019 forage fish surveys.

#### 9520 - Marine Invasive Species

**Objectives:** Understand and minimize the environmental impacts of harmful invasive species 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:** All contracts pertaining to this project were finalized. Contractors for this project include the Prince William Sound Science Center and Moss Landing Marine Laboratories, an affiliate of San Jose State University.

Plankton samples were obtained in Port Valdez and Prince William Sound by the Prince William Sound Science Center. A field report of the sampling work was written by Rob Campbell at the Prince William Sound Science Center and is available upon request. All plankton samples were shipped down to Moss Landing Marine Laboratories in California.

Invasive crab monitoring was conducted in Valdez and Cordova. A new PWSRCAC intern, Mia Siebenmorgen, is conducting the monitoring in Cordova and sampled in May, June, and July. Valdez invasive crab monitoring was conducted in May in partnership with a Valdez High School science teacher, Jenny Heckathorn, and some of her students. No invasive crab or other species were found in Valdez or Cordova.

Comments from the SAC and PWSRCAC staff were submitted on July 17 to Moss Landing Marine Laboratories on their report regarding the 2017 plankton metagenetic analysis. Moss Landing Marine Laboratories made revisions to the report based on those comments and submitted an updated draft to PWSRCAC on August 1. SAC and PWSRCAC staff asked for some minor revisions, including copyedits, to the draft report during the August 15, 2019 SAC meeting. SAC voted to accept that report as final, including the aforementioned revisions during their August 15 meeting. The report was revised by Moss Landing Marine Labs and the final version was delivered to the Council on August 20, 2019.

#### 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 spreadsheet
- Develop dispersants environmental tradeoff analysis tool
- Educate appropriate stakeholders about dispersants environmental tradeoff analysis tool

**Accomplishments since last report:** Merv Fingas from Spill Science provided an updated version of PWSRCAC's dispersants scientific literature spreadsheet on June 17. That update included adding 130 references from 2018 and 2019 to the spreadsheet. In total the dispersants literature spreadsheet now contains 1,591 report or publication references. The updated spreadsheet and metadata report is available upon request.

#### 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:** The memorandum of agreement with NOAA's Northwest Fisheries Science Center was finalized and PWSRCAC provided them with all funding, \$80,000.00,

under that agreement. This funding is the second year of what should be three years of funding for the current work with 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

**Accomplishments since the last report:** No significant work has been completed on this project since the last report. With the guidebook now updated, PWSRCAC staff have been discussing the need to review and update the guidebook's appendices. Joe Banta has expressed interest in helping PWSRCAC update the appendices. PWSRCAC staff have also discussed the need to have SAC members involved in updating the appendices.

#### 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 socio-economics 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 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:** This project is not going as originally scheduled. Therefore, a contract change order was completed in July 2019 extending the due dates of the five deliverables associated with this project. The Alaska Department of Fish and Game is the contractor for this project and they have experienced some changes in personnel that have delayed the execution of this work. Originally, this work was all supposed to be completed by the end of February 2019, but the end date of this project has been extended until the end of February 2020.

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