



**May 2020
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:

- Feb Traveled to Kenai to present on the ADEC public scoping notice and support the Kenai Peninsula Borough's resolution, which was submitted as comments to the public scoping.
- Mar While many professional development conferences have been canceled due to the situation with COVID-19, the ScienceTalk conference Taylor was scheduled to attend moved online. Taylor attended sessions virtually on March 26 and 27.

3410 – Fishing Vessel Program Community 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.

Discussion: This program has been held successfully in prior years in Cordova, Whittier, Seward, and Homer. This year we hoped to host the event in Kodiak or Valdez. With the SERVS fishing fleet trainings being canceled due to the COVID-19 pandemic, this project could not occur. Meanwhile, we learned some significant challenges for hosting the event in Kodiak or Valdez. In Kodiak, there is not a charter boat available large enough unless we spend significantly more than budgeted to bring a charter from Seward. In Valdez, the on-water training days traditionally overlap with Council Board meetings and Board action would be needed to adjust meeting days/times to allow for the outreach event to occur. These funds will not be used this year. Staff recommends continuing the project next year.

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:

- 10-14 February Booth at Alaska Forum on the Environment, *Anchorage*
- 25 February Council Meeting presentation, *Kenai Peninsula Borough*

Scheduled Upcoming Events and Milestones:

- 18 May Prince William Sound Natural History Symposium, *Whittier*

With the merited and widespread cancelations of large in-person events this quarter, most of the planned outreach activities and events have been put on hold, postponed, or canceled. Currently this has not impacted the budget, except that not all travel funds will be used.

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:

- 14-16 February Alaska Tsunami Bowl & ROV Challenge, *Seward*
- 27-29 March Alaska Science & Engineering Fair, *Anchorage* *Virtual*
- March Spring Break ROV camps, *Homer*
- February-March 6th Grade Students make EVOS-inspired short films, *Valdez*

Scheduled Upcoming Events and Milestones:

- June and July Field programs, *Prince William Sound & Kenai Fjords*

Due to school closures and travel restrictions, some planned activities for this project have been postponed or canceled. Others are being completed via distance learning with students.

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 booth at conferences and events.

Annual Report: This year’s report is complete and available online:

<http://www.pwsrcac.org/announcements/year-in-review-july-2018-june-2019/>

3610 – Web Best Available Technology

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 (data from 10/24/2019 to 3/24/2020) compared to the previous six months (3/24/2019-10/24/2019):

	12/24/2019-3/24/2020	9/24/2019-12/24/2020
Total sessions (a session is the period of time a user is actively engaged with the website)	4,153	4,276
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)	2,987	3,235
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)	2.23	2.09

Top content for 12/24/2019-3/24/2020
1. New buoys
2. Regulatory reform information
3. Requests for proposals
4. About staff/employment
5. FV Training

Top content for 9/24/2019-12/24/2020
1. New buoys
2. Personal stories from Exxon Valdez
3. Requests for Proposals
4. Science Night
5. Regulatory reform

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 spill, and displaying these stories online via Project Jukebox, the Council may further promote environmental safeguards to help prevent and respond to future oil spills in the Prince William Sound. Further, the Exxon Valdez Project Jukebox assists in the promotion of all Council activities to a growing digital audience.

Accomplishments since last report: Staff are IEC are evaluating interviews to determine which are most appropriate for inclusion in Project Jukebox.

Staff coordinated with Helvey Communications on several deliverables for the FY19 and FY20 contracts. Presentations regarding logo concepts have been done for several groups including IEC, Board members and committee chairs, and staff. With the May meeting being held virtually, action to potentially approve a logo update has been shifted to the September 2020 Board meeting. Due to this, timelines for other deliverables will need to shift and contract extensions will be done accordingly, moving funds for both contracts into FY21.

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: IEC has selected an intern from Alaska Pacific University to update the Alaska Oil Spill Curriculum and create a searchable web tool for the lesson plans. Given current circumstances with school closures, the intern is adapting certain lessons for at-home delivery.

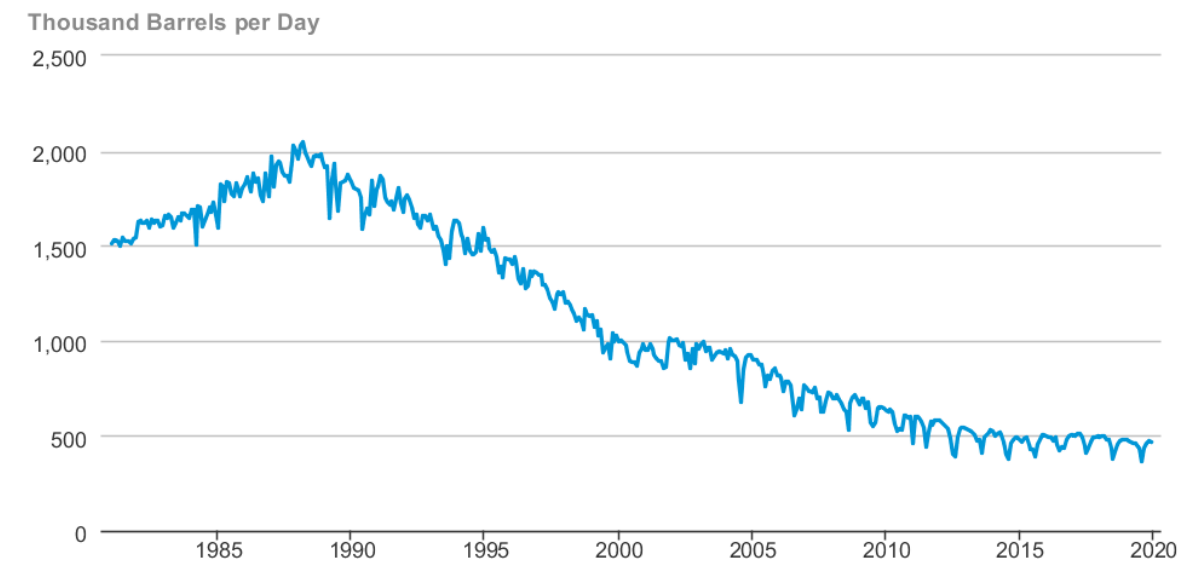
5000 - Terminal Operations Program

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

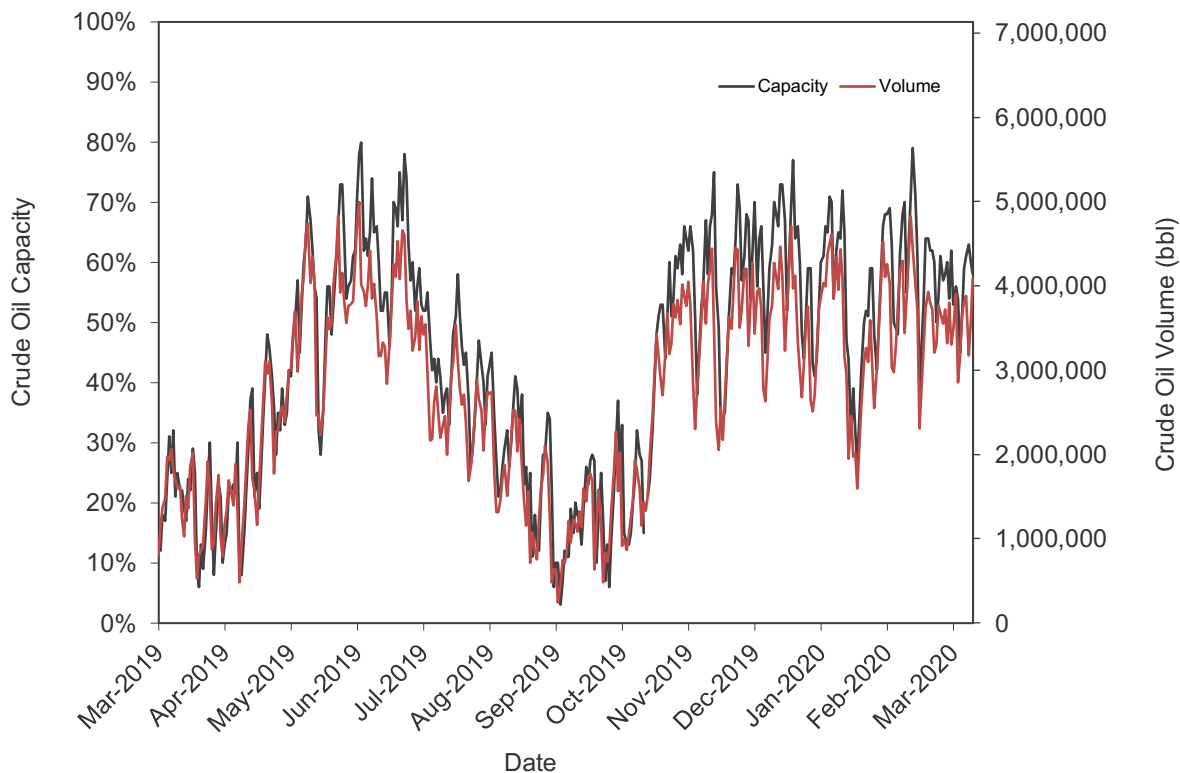
Accomplishments since last report: Monitored spills associated with operation and maintenance of the terminal, crude oil laden tanker ship tug escorts, 2019 & 2020 VMT projects, and water quality of effluent discharged from BWTF and sewage treatment facility.

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

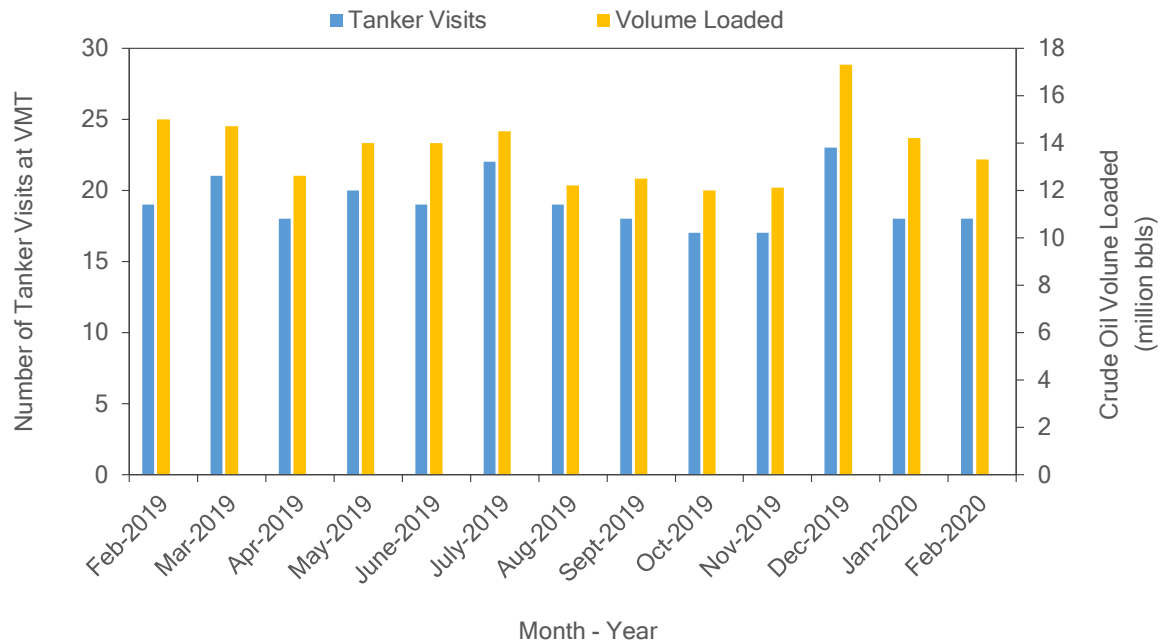
- **Trans-Alaska Pipeline Throughput, Thousand Barrels per Day** (Source: U.S. Energy Information Administration)



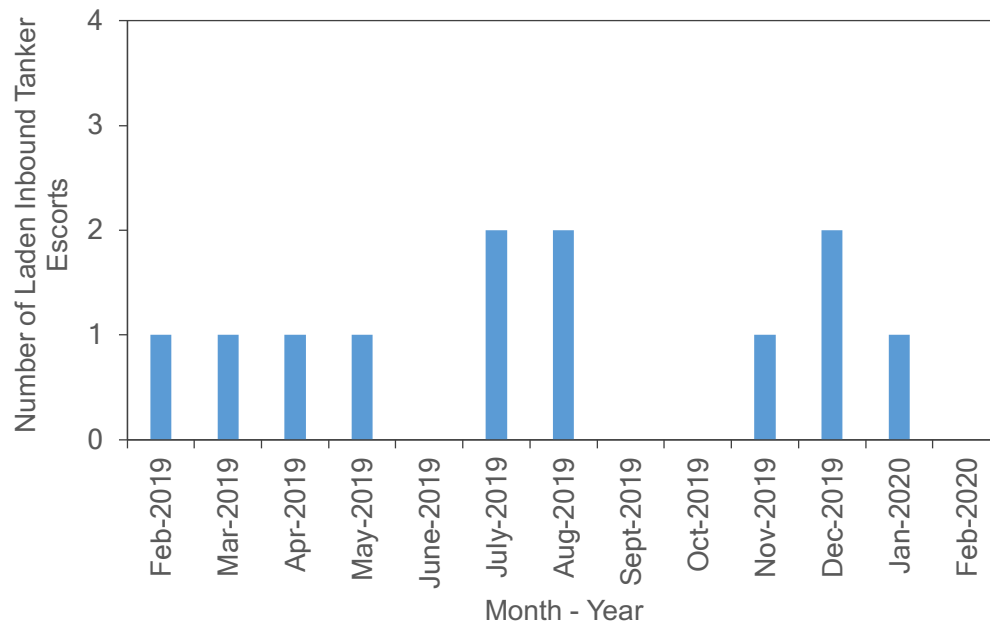
- **Crude oil stored at the Valdez Marine Terminal** (Source: Alaska Department of Revenue Tax Division and Alyeska Pipeline Service Company. *Current as of 3/16/2020)



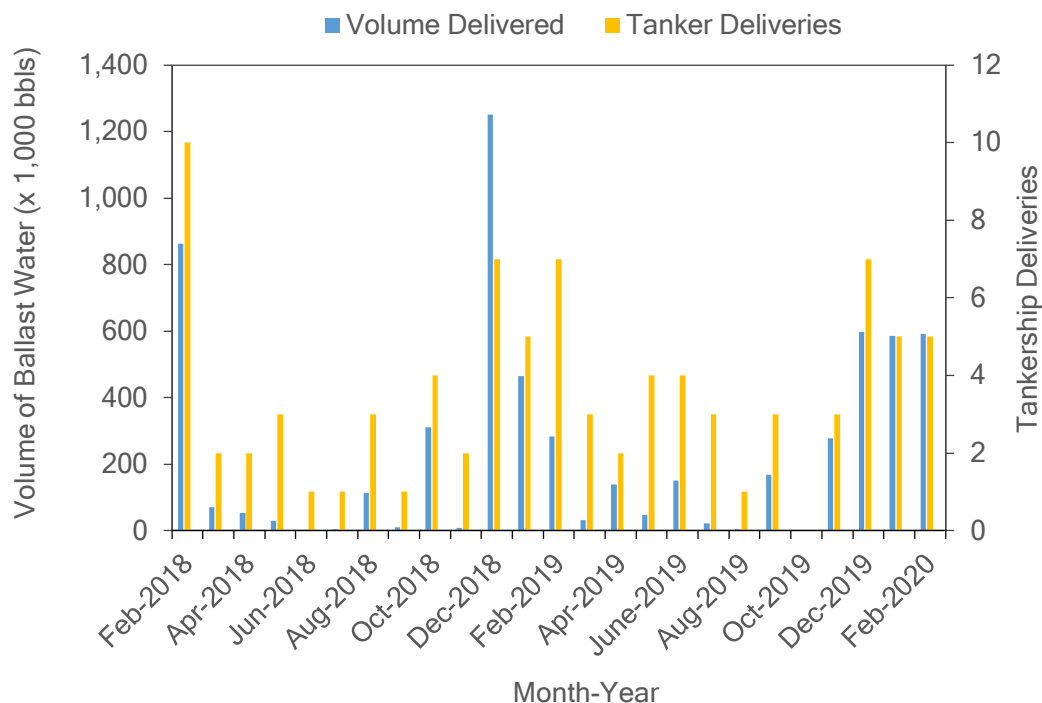
- **Crude oil loaded and tanker visits at VMT.** (Source: Alyeska Pipeline Service Company Vessels Nearby Schedule. Partitioned by VMT vessel arrival date.)



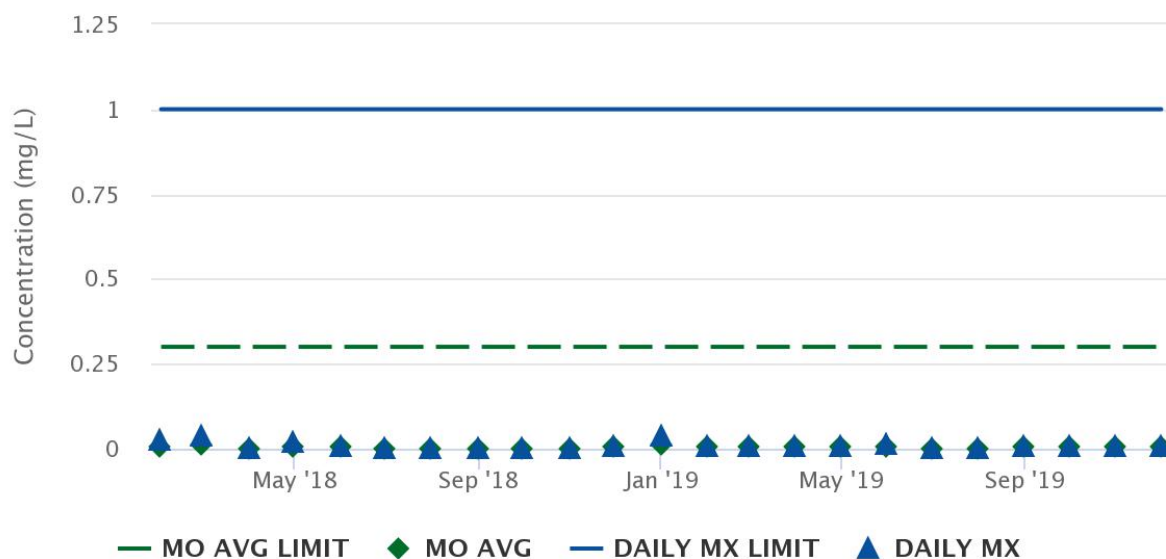
- **Inbound, laden tanker escorts.** (Source: Alyeska Pipeline Service Company Vessels Nearby Schedule. Partitioned by VMT vessel arrival date and determined based on if vessel was escorted inbound or not)



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- **Ballast water deliveries to Ballast Water Treatment Facility from tanker ships** (Source: Alyeska Pipeline Service Company Vessels Nearby Schedule. Partitioned by VMT vessel arrival date.)



- **Benzene, toluene, ethylbenzene, and xylene (BTEX) discharged from the Valdez Marine Terminal's Ballast Water Treatment Facility** – The solid line depicts the maximum permitted limit, while the dashed line depicts the average. The diamonds depict the average monthly concentration, while the triangles depict the maximum concentration measured within a month (Source: EPA Enforcement and Compliance History Online)



5056 – Tank 8 Internal Inspection Review

Objectives: The focus 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: A request for proposals for this project was advertised on February 14, 2020. All proposals are due by March 31, 2020. The TOEM Committee is scheduled to review proposals on April 7 & 8, 2020. The contract award announcement is scheduled for April 30, 2020. As of today, March 25, two proposals have been received for this project.

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 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.

Accomplishments since last report: A request for proposals for this project was advertised on March 5, 2020. All proposals are due by April 3, 2020. The TOEM Committee is scheduled to review proposals on April 7 & 8, 2020. The contract award announcement is scheduled for May 15, 2020. As of today, March 25, one proposal has been received for this project.

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 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.

Accomplishments since last report: Work is ongoing for the second project deliverable, requesting and analyzing the Valdez Marine Terminal's cathodic protection systems testing data. The Council's contractor, National Pipeline Services, has requested and is analyzing both storage tank and pipe testing data, as well as cathodic protection system maintenance protocols. As of today, March 25, Alyeska has not provided all piping data requested and additional tank testing data has also been asked for by National Pipeline Services. Delays have been encountered to complete this second project deliverable because of the length of time it has taken Alyeska to respond to information requests. The recent coronavirus crisis has added at least a couple more weeks of delay. Despite delays in receiving requested data from Alyeska, it is expected that this project will be completed in time to be presented at the September 2020 Board meeting, as planned.

6000 – Oil Spill Response Program

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

Accomplishments since the last report:

Alaska Regional Response Team (ARRT): The ARRT met on January 30, 2020 in Anchorage. Highlights of the meeting are as follows:

- The Wildlife Protection Committee has been working on updating the Wildlife Protection Guidelines (formerly Annex G in the Unified Plan). The public review of the Wildlife Protection Guidelines took place from January 31, 2020 to March 6, 2020.
- To increase cultural resources capacity for oil spill response within Alaska, two Historic Properties Specialist (HPS) Workshops were held in Anchorage in October and November. The pool of potential HPSs was increased due to this workshop.
- The Science and Technology Committee (STC) is working on Unmanned Aerial Systems (UAS) for spill response. Guidelines are being developed to incorporate UAS in spill response. The STC is also working on updating In Situ Burn checklist.
- The Statewide Planning Committee is working on updating the Regional Contingency Plan.
- A tabletop exercise was conducted on how the ARRT supports On-Scene Coordinators.
- The Status of Revitalization was discussed at the meeting which outlines and clarifies the changes to the ARRT over the past couple of years. Information can be found at: <http://alaskarrrt.org/Home/Documents/11368>.

Wildlife Protection Guidelines: On March 6, 2020, PWSRCAC submitted comments in response to the public review of the Wildlife Protection Guidelines. PWSRCAC commented that significant improvements were made to these guidelines.

Prince William Sound Area Committee (PWSAC): The Administrative Subcommittee has been working on updates to the contact information in the PWS Area Contingency Plan, and an updated version is expected in the near future.

The PWSAC met on March 17, 2020. Agenda items included subcommittee status update by USCG and ADEC, USCG National Review Panel Process, information on cultural resources and spill response, and USCG Preparedness for Response Exercise Program (PREP) exercise.

Arctic and Western and Arctic Alaska Area Committee (AWA-AC): The AWA-AC met on November 19, 2019 in Anchorage.

- Version 2018.1 of the Arctic and Western Alaska Area Contingency Plan (AWA-ACP) was signed in November, 2019.
- The next revision is slated for June 2020. This revision is expected to include Unmanned Aerial System (UAS) protocols and stakeholder engagement plan response template. Best practices are being developed for use of UAS during an oil spill response.

The meeting scheduled for April 13, 2020 has been cancelled due to COVID-19.

ADEC Public Scoping on Oil Discharge Prevention and Contingency Plan Requirements: On March 11, 2020, PWSRCAC uploaded comments on ADEC's public scoping to their website. Comments received can be viewed on ADEC's website [HERE](#).

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 Renewal: The VMT C-Plan was approved on November 15, 2019. The Alaska Department of Environmental Conservation's (ADEC) cover letter and Basis of Decision document can be found on OSPR's website [HERE](#).

Following the plan approval, PWSRCAC submitted three informal requests for review on decisions made by ADEC which can be viewed at the link above on the following issues:

1. integrity of the secondary containment liner
2. spill source containment deficiencies with Drainage 58
3. number of personnel needed to meet regulatory requirements for a Response Planning Standard-sized spill

Alyeska also submitted a request for informal review on the secondary containment liner which is currently going through ADEC's review process.

Additionally, PWSRCAC submitted a request for adjudicatory hearing on the Duck Flats and Solomon Gulch Hatchery protection matrix in the renewed VMT C-Plan, as the request for adjudicatory hearing is still pending on the expired VMT C-Plan. PWSRCAC, together with the City of Valdez, Prince William Sound Aquaculture Corporation, and Valdez Fisheries Development Association, jointly submitted a request for adjudicatory hearing on December 16, 2019. This document can be viewed on the OSPR website at the link above.

VMT C-Plan Amendment 2020-1: A 30-day public review on VMT C-Plan Amendment 2020-1 began on February 21 and comments were due March 21, 2020. Amendment 2020-1 incorporates revisions to the VMT C-Plan based on the consensus terms reached during the Collaborative Process with respect to the *Solomon Gulch Hatchery and Valdez Duck Flats Sensitive Area Mobilization Decision Matrix*. The parties agreed that Alyeska would replace the matrix with language that rapid and immediate boom deployment to protect the Valdez Duck Flats (VDF) and Solomon Gulch Hatchery (SGH) would be required whenever a spill of 5 bbls (210 gallons) or greater occurred, or an unknown volume reached Port Valdez. Comments can be viewed on the OSPR website above.

VMT Coordination Group meeting: The VMT Coordination Group met on February 4, 2020. Updates were provided by Alyeska, ADEC, Bureau of Land Management, and the U.S. Coast Guard. The next meeting is scheduled for May 26, 2020.

PWS Tanker C-Plan

PWS Tanker C-Plan: ADEC's decision on the PWS Tanker C-Plan amendment submitted in September 2019 was issued on March 3, 2020. The amendment proposes to change ice scouting measures. PWSRCAC's comments submitted during the public review expresses our concerns on this change. Documents for the amendment can be viewed on OSPR's website [HERE](#).

6530 - Weather Data / Sea Currents Project

Objectives: The purpose of this project is to gather and review regulatory agency decisions and Council comments on the Prince William Sound Tanker Oil Discharge Prevention and Contingency Plan since PWSRCAC inception. Key issues will be identified, and the evolution of contingency planning for this plan will be documented. Reviewing c-plans is a major task for PWSRCAC as outlined in both the PWSRCAC/Alyeska contract and OPA 90.

Accomplishments since last report: A Request for Proposal was issued in February, and proposals were due on March 24, 2020. Due to the situation with the COVID-19, the deadline was extended to April 21, 2020.

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.

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: Staff is waiting for a draft MOU to arrive from NOAA that will establish a PORTS (Physical Oceanographic Real-Time System) site for Port Valdez. NOAA will be using our buoy data along with information derived from their weather stations and tide gauges located in Valdez. A press release is being prepared to announce this event.

NOAA describes this system as "PORTS® is a decision support tool that improves the safety and efficiency of maritime commerce and coastal resource management through the integration of real-time environmental observations, forecasts and other geospatial information. PORTS® measures and disseminates observations and predictions of water levels, currents, salinity, and meteorological parameters (e.g., winds, atmospheric pressure, air and water temperatures) that mariners need to navigate safely." An example for Cherry Point can be seen at <https://tidesandcurrents.noaa.gov/ports/index.html?port=cp>

AOOS is asking for input on their five-year program planning. One of their priorities is going to be improving marine safety and fisheries management. There is an interest in weather-related projects. We will be submitting a request for them to help support operation of the weather buoys.

The Council is inviting proposals from a contractor to provide support services for its two weather/metocean buoys.

<http://www.pwsrccac.org/wpfb-file/request-for-proposals-port-valdez-metocean-buoy-project-support-pdf/>

6533 - Hinchinbrook Entrance Wind and Wave Extremes

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/direction, temperature, humidity, and barometric pressure at the Cape. A subsurface moored wave gauge will be installed to ground truth 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. Establishment of a weather station at Cape Hinchinbrook will be proposed once a permit is secured.

Members of the Board and staff met with Rear Admiral Matthew T. Bell Jr. in Juneau. This project was discussed with the Admiral, who seemed to support it. Staff was able to meet with permitting personnel in Juneau and an initial application has been filed with the Coast Guard.

AOOS is asking for input on their five-year program planning. One of their priorities is going to be improving marine safety and there is an interest in weather-related projects. We will be submitting a request for them to help support operation of the weather buoys and the Cape Hinchinbrook weather station.

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 has shared a number of exercise reports on **Drainage 58 (D58)** through the recent years, discussing how changes to boom anchor points are needed, and would improve containment efforts. Staff also has had concerns over the skimming capacity. The two Crucial skimmers working inside containment have a name plate capacity of 2,516 bbls combined, but with a leak rate of 22,500 bbls per hour in the scenario, this equates to a deficit of 19,984 bbls per hour in removal capacity. Staff has worked to highlight these concerns via VMT workgroups, letters to Alyeska, and c-plan comments. After the most recent and last major update to the VMT c-plan was approved on November 15, 2019, ADEC picked up on Council's concern, and set a Condition of Approval mandating that a Drainage 58 deployment be conducted to examine these specific tactics prior to October 31st, 2021. While Council appreciates this ADEC ask, Council believes allowing two years to address an already known problem seems flawed. For that reason, Council submitted an "Informal Review" to ADEC following plan approval, asking that D58 concerns be addressed as soon as possible. This informal review on D58 (along with our two other topics submitted: number of response personnel and secondary containment concerns) was accepted by ADEC. Staff will communicate as this process unfolds.

A number of events have been postponed due to the COVID-19 pandemic. These include:

Oiled Otter Rehabilitation Training. Robida, along with OSPR chair Jim Herbert, had anticipated attending the annual “Care and Rehabilitation of Oiled Sea Otters” course on Saturday, March 14th in Anchorage. The course is presented by Dr. Randall Davis of the International Wildlife Research (www.wildliferesearch.com). Davis ran the “otter hospital” and managed sea otter care during the EVOS event in 1989. He and his team literally wrote the book on oiled sea otter care, and established many of the procedures and the standards of care that are still in place today. The course is targeted at veterinary and wildlife professionals. Should there be another large spill event, this pool of individuals would ultimately be activated as paid contractors for sea otter care. The course ensures that these responders not only know how to help rehabilitate otters, but also can protect themselves with proper protective equipment and have requisite safety training before handling otters.

SERVS Spring FV spill training. SERVS will move all training to this fall timeframe, but specific dates and details are still unknown.

The AK Oil Spill Technology Symposium. This event was slated to occur April 14, 15, 16 in Fairbanks, but was postponed as of March 13. The very last day of the event was going to be an in situ burn field demonstration at Poker Flats Research Station. The conference, and demonstration especially, were built around other work that Exxon was conducting at Poker Flats. As the organizers look at new dates, they’ll also need to consider Exxon’s new dates as well. At this point, organizers are anticipating looking at dates in September and October, but obviously everything is rather fluid right now.

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 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:

Non-mechanical Response Exercise – September 23, 2019: Alyeska conducted a non-mechanical response exercise in conjunction with the Whittier annual fishing vessel training. This exercise focused on having their contractor demonstrate water quality monitoring and simulated towing of fire boom.

Upcoming Drills and Exercises

- Andeavor PWS Shipper’s Exercise – October 14 & 15

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: The RFP was completed and went public as of February 14. The RFP then closed on March 16 with a total of one submission being received from Nuka Research and Planning Group, LLC. The proposal review team met on March 19, discussed this proposal, and recommends that Nuka be hired for 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: Glosten has finished the first deliverable and is in the process of writing the draft final report. Currently the plan is to have Glosten make a report on the project at the May Board meeting and finish final approval at a later date. We aren't sure what format the Board meeting will take yet.

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: Nuka Research is continuing well with the project. Sharry Miller is slated to meet with the POVTS Committee to secure feedback on how best to proceed with a portion of their effort. We plan to have Nuka make a presentation at the May Board meeting, depending on how it is conducted.

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 would provide 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: Project reports and information are being provided to regulatory agencies. An effort is underway to add the results to Coast Pilot descriptions of the anchoring locations. The Council is encouraging ADEC to update its website.

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: Project manager, Austin Love, was scheduled to attend the 2020 Alaska Marine Science Symposium, in late January, in Anchorage. Unfortunately, due to poor weather, he was not able to fly out of Valdez to attend the conference. However, in lieu of the symposium, Austin was able to conduct a teleconference with researchers and managers from Gulf Watch Alaska in order to learn more about what that environmental monitoring program involves and find ways the Council may be able to partner with Gulf Watch Alaska in the future. Since that January teleconference, Austin has partnered with Gulf Watch Alaska researchers, and some of their staff are going to collect environmental samples from the Knight Island region on behalf of the Council in June 2020.

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: Since the last report, the project's proposer, Dr. Mary Anne Bishop from the PWS Science Center, has provided a more detailed project proposal to the Council. That proposal was reviewed and discussed by the Scientific Advisory Committee during their March 5, 2020 committee meeting. Additional comments on the project proposal were provided by Jim Herbert (OSPR Committee chair) and David Janka (long-time Council contractor and owner/operator of Auklet Charters in PWS). At the end of the meeting the Scientific Advisory Committee passed a motion showing the committee's continued support of this project in FY 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: The report summarizing the findings from the 2019 Port Valdez mussel, sediment, and passive sampling device hydrocarbon monitoring, is in "draft-final" form. This draft-final report, commonly referred to as the "LTEMP Report," is up for Board acceptance during the May 2020 Board meeting. This report is authored by Payne Environmental Consultants with input from PWSRCAC staff and the Scientific Advisory Committee.

Planning for the 2020 environmental monitoring field work is well underway. Quotes are or have been delivered from the various contractors involved in this project and that information has been used to update the draft FY 2021 Council budget. Monitoring equipment and supplies have or will be ordered. The first environmental monitoring field work is planned to begin in May 2020 with the deployment of passive sampling devices at three locations in Port Valdez, and field work should be completed by June 2020.

9511 - Herring and Forage Fish Surveys

Objectives: 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
- Make aerial survey maps readily available for use by spill response managers

Accomplishments since last report: The Board accepted the 2019 project summary report during the January 2020 Board meeting. PWSRCAC staff have worked with staff from NOAA and the PWS Science Center to get the forage fish survey maps into the Arctic Environmental Response Management Application (aka ERMA). To date, the maps have not been uploaded to Arctic Environmental Response Management Application.

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: Mia Siebenmorgen Cresswell, the Council's invasive species monitoring intern in Cordova, has submitted a draft invasive species monitoring manual. The purpose of that manual is to document what an invasive species intern needs to know in order to perform monitoring for the Council. Mia identified a need for such a manual in conversations with Council staff because the written information that was passed on to her was not organized in a way that was very useful. Council staff will be working with Mia to help her finish the manual. Additionally, Council staff is talking with Mia about doing the internship again this summer, possibly recruiting the next Cordova intern, and giving a presentation to students in Cordova about her internship experience.

The metagenetic analysis of 2018 and 2019 Port Valdez and Prince William Sound plankton samples has been completed. This work has/is being done by researchers at Moss Landing Marine Laboratories in California. A rough draft of a report interpreting and summarizing the results of the metagenetic analysis has been provided to Council staff. A draft report is due to the Council by the second week of April 2020. That draft will be reviewed by the Scientific Advisory Committee and Council staff. As appropriate, Moss Landing Marine Labs will revise the draft report based on comments received and submit a draft-final report to the Council. That draft-final report should be ready for Board acceptance during the September 2020 meeting.

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 (dispersants ETA tool)

Accomplishments since last report: Council staff met with ADEC staff to introduce them to the dispersants ETA tool and discuss potential next steps. ADEC staff believed the tool showed promise, but additional tool vetting and education work is needed. One part of the vetting could be to test the outputs and utility of the tool by feeding it environmentally sensitive resource information, from ICS 232 forms used in recent oil spill drills (e.g. the October 2019 BP PWS Shipper Exercise). Another step could be to introduce the tool to the Alaska Regional Response Team (ARRT) during their fall 2020 meeting in Valdez. A third step could be to test the tool during the fall 2020 PWS Shipper Exercise.

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: Work by NOAA's Northwest Fisheries Science Center is ongoing.

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: PWSRCAC staff and volunteers continued reviewing and updating the guidebook's appendices. Former Council project manager Joe Banta is coordinating this work with a project team made up of Davin Holen and Jeffrey Brooks (Scientific Advisory Committee Members), Patience Anderson Faulkner (Board and Information and Education Committee Member), and Betsi Oliver (Council Outreach Coordinator). The updated appendices will not be ready in May 2020 as originally planned. The project will take longer because the project team has identified the need to contract with social scientists to help update the appendices and funding for social science contractors is planned to be proposed in the FY 2021 Council budget.

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 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 Alaska Department of Fish and Game (ADF&G) has mostly finished all analyses and is working to write a report summarizing and discussing the results. ADF&G researchers and managers met with Council project manager Austin Love, as well as SAC members Davin Holen and Jeffrey Brooks, on March 6 to present the results of their work. After the presentation it was agreed that a journal length, peer-reviewed type report would not be appropriate given the results of the project. Instead it was agreed that ADF&G would produce a "technical paper" for the Council. ADF&G commonly creates such technical papers for their work, when results aren't necessarily appropriate for a peer-reviewed journal. That technical paper will be the final deliverable for this project and is expected to be finished in time for presentation at the September 2020 Board meeting.