



PRINCE WILLIAM SOUND

REGIONAL CITIZENS' ADVISORY COUNCIL

May 2023
Status Report
 As of March 20, 2023

3100 - Public Information Program

Objectives: Inform general public, member entities, and agency and industry partners of PWSRCAC projects. Support legal requirements for ongoing updates to the public.

Accomplishments since last report: Staff continues to inform the general public and others about PWSRCAC's projects and mission through publications and online presence.

3200 - The Observer

The Observer: The Council's newsletter, *The Observer*, is produced three times per year in both print and email format. Individual articles are posted to the Council's website. The article archive is available here: www.tinyurl.com/ObserverArchive.

3300 - Annual Report

Objectives: 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; and support legal requirements for ongoing updates to the public.

Accomplishments since last report: Work to create the content and design for the 2021-2022 report was completed. The report has been posted to the Council's website and printed copies have been distributed.

3410 - Fishing Vessel Program Community Outreach

Objectives: For bringing the realities of oil spill response tactics, equipment, and planning to life for citizens within the Exxon Valdez oil spill region communities, the fishing vessel community outreach program is a perfect venue. Each fall and spring SERVS holds its 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 prevention and response equipment and tactics. This project contracts a local tour boat that will allow interested students, members of the public, and media to observe and learn about oil spill prevention and response.

Accomplishments since last report: The spring 2023 tour will be held in Valdez, AK on Wednesday, May 3rd, traveling through Port Valdez to observe an operational readiness exercise. Staff from PWSRCAC and Alyeska will present to the community members and PWSRCAC members on board.

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:

- **January 20** – PWSRCAC 101, New Orleans Regional Planning Commission – Emergency Preparedness Partnership, via Zoom to New Orleans, LA
 - Maia spoke to members of the Partnership, which exists to leverage public and private sector resources to support emergency management in Southeast Louisiana and South Mississippi.
- **January 23** – Former PWSRCAC intern Mia Siebenmorgen Cresswell was awarded the Ocean Youth Award, part of the 2023 Ocean Leadership Awards from the Alaska Sealife Center following a nomination put forward by PWSRCAC.
- **February 6-10** - Alaska Forum on the Environment (AFE), Anchorage, AK
 - Maia, IEC member Kate Morse, POVTS member Max Mitchell and staff member Jaina Willahan hosted the PWSRCAC booth to disseminate information about the Council and its mission and hand out PWSRCAC giveaway items. ~200 of people stopped by the booth.
 - As part of the Oil Spill track, Alan Sorum and Peter Soles (Glosten) presented a session titled “Throwing a Lifeline to Oil Tankers: New Technology for Emergency Towing,” including showing the Council’s [summary video](#).
 - The summary video was also shown during the AFE Film Festival session.
- **February 16** - PWSRCAC 101, Prince William Sound College, Valdez, AK
 - Maia presented to the three students and one staff involved in the ongoing Youth Involvement project titled “Environmental Undergraduate Research Experience.”
- **March 3-5** – Alaska Tsunami Ocean Sciences Bowl, Seward, AK
 - Maia and Jim Herbert served as competition officials for the annual quiz bowl event hosting high school teams from around the state including several from the EVOS region.
- **March 16-18** – ComFish Alaska, Kodiak, AK
 - Maia and Kodiak-based volunteers hosted the Council’s booth at this expo event.

Maia also attended the Alaska Natural Resources and Outdoor Education symposium on February 24th in Anchorage to hear talks and network with other environmental educators in the region.

3530 – Youth Involvement

Objectives: Select proposals for youth activities, in collaboration with partner agencies and organizations throughout the Exxon Valdez oil spill region. Coordinate activities to facilitate hands-on learning about topics related to the Council’s mission. Where appropriate and feasible, participate in mission-relevant youth activities.

Accomplishments since last report: The Information and Education committee accepted six proposals, utilizing the remainder of the FY2023 Youth Involvement contracting funds. These projects are in the contracting process with work beginning in March and concluding in September. One

contract is currently underway with the PWS College: Environmental Undergraduate Research Experience for \$4,896 and will wrap up June 30, 2023.

A revision of the Youth Involvement Request for Proposals (RFP) is underway with the intention of completing an update before the RFP is next released in April 2023.

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.

Accomplishments since last report: The Public Communications Project Manager attended the Nonprofit Technology Conference in April. Agenda: www.nten.org/ntc/ This event was held in Denver. Please contact Amanda Johnson for more information about this conference. Staff has begun preparing the booklet *Stories of a Citizens' Council* for a reprint.

3610 – Web Best Available Technology

Objectives: This project helps ensure the Council's websites and web presence uses the best and most up-to-date technology available by funding new features, repairs, and upgrades to the Council's websites. This includes regular maintenance and technical upgrades as well as upgrades to such aspects as user experience and branding.

Current projects: Staff is implementing security upgrades and preparing for a technical upgrade.

Website data: Website usage for www.pwsrccac.org is tracked through Google Analytics for information such as numbers of visitors, location of visitors, how visitors found the site, which pages are visited most often, how much time is spent on particular pages, whether visitors were engaged enough to visit more than one page and much more.

Hot topics from 12/15/2022 to 3/15/2023 (other than home page)

Sorted by number of visits:

1. Now hiring: Terminal Operation Project Manager
2. Columbia Glacier
3. Personal Stories of Exxon Valdez disaster (Project Jukebox interviews and The Spill)
4. Staff/Board of Directors/Volunteers/About the Council
5. Requests for Proposals

Sorted by time spent on page:

1. Dismantling, Removal, and Restoration Fund
2. Guide for dealing with an oil spill
3. Fire protection systems at the terminal
4. Contingency Plans
5. Tanker Escort Zones

Sorted by engagement (visited more than one page):

1. Dispersants Research/New Board position

2. Environmental Monitoring
3. Oil Spill Prevention Planning
4. LTEMP
5. Terminal Operations

Please contact [Project Manager Amanda Johnson](#) if you would like more details.

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.

Accomplishments since last report: Staff has determined that there is not capacity this year for Maia to hire and supervise an intern as she learns her role. Other staff have not proposed an internship project at this time. The internship project is moving through the LRP process for fiscal year 2024.

5000 – Terminal Operations Program

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

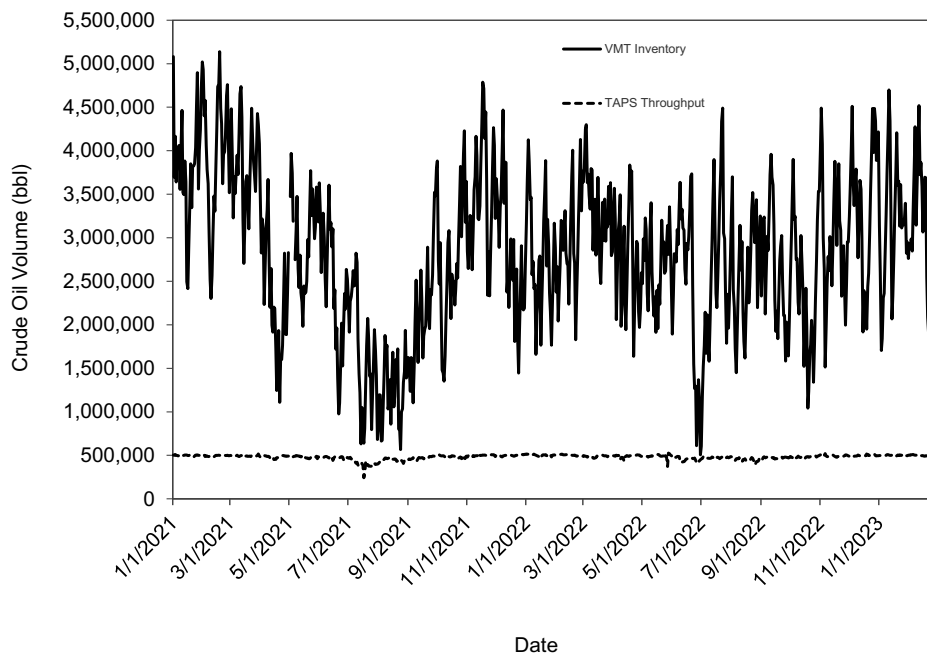
Accomplishments since last report:

- **2023 VMT Projects and Maintenance:** Council, state and federal regulators received a comprehensive briefing from Alyeska on 2/23/23 regarding the planned projects and maintenance at the VMT for the upcoming year.
- **Tank Vent Damage and Tank 93 Recommendations Status:** During the March 1, 2023 TOEM Committee meeting Alyeska staff updated the Council on items related to the tank vent damage issue, including changes to the VMT’s snow removal plan and the status of Alyeska’s work to identify engineered ways to prevent vent damage in the future (e.g. snow splitters). Alyeska staff also shared their initial thoughts regarding the Council’s recommendations pertaining to ballast water Tank 93, stating they agreed with one of them and disagreed with the other (see project #5081 below for more information).
- **Outstanding Alyeska responses to Council Recommendations and Information Requests:** The Council is waiting for responses from Alyeska regarding multiple information requests and recommendations related to a number of TOEM projects. Some of the requested information is needed to make progress on current TOEM projects that are being delayed without the information. Council staff met with Alyeska staff on 2/22/23 to discuss the status of fulfilling all current information and recommendations requests. On 3/20/23 Alyeska provided some of the requested information and a response to recommendations from the Council pertaining to ballast water storage Tank 93. However, none of the received information will help make significant progress on any current TOEM projects.

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

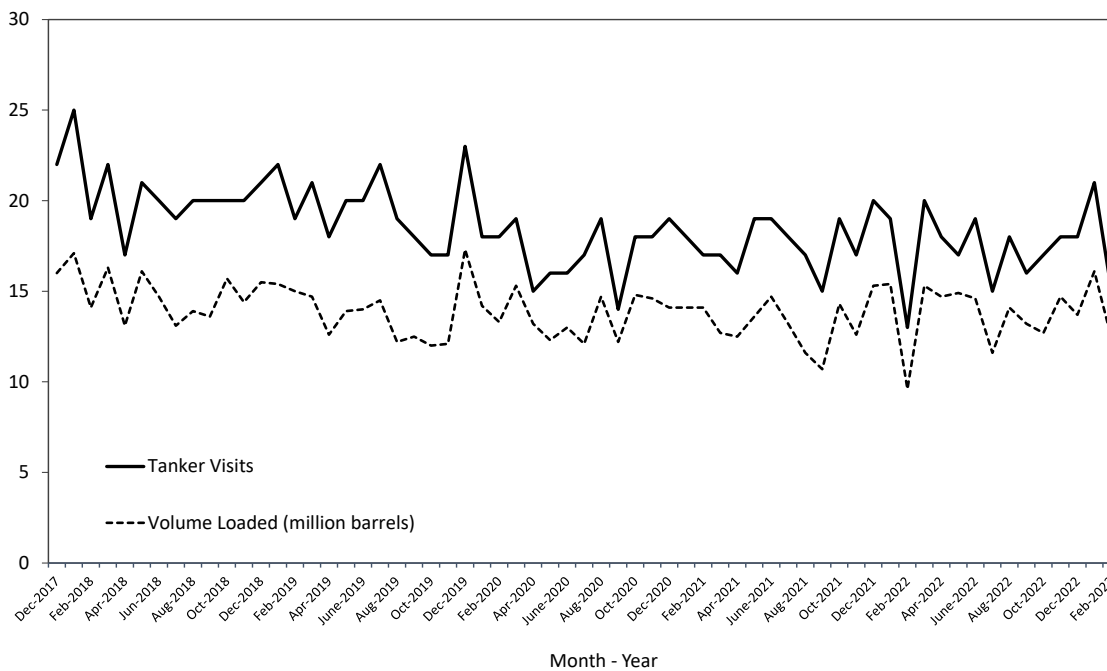
Daily Oil Inventory at the Valdez Marine Terminal and Trans-Alaska Pipeline Throughput

(Source: Alaska Department of Revenue - Tax Division, <http://tax.alaska.gov/programs/oil/production.aspx>)



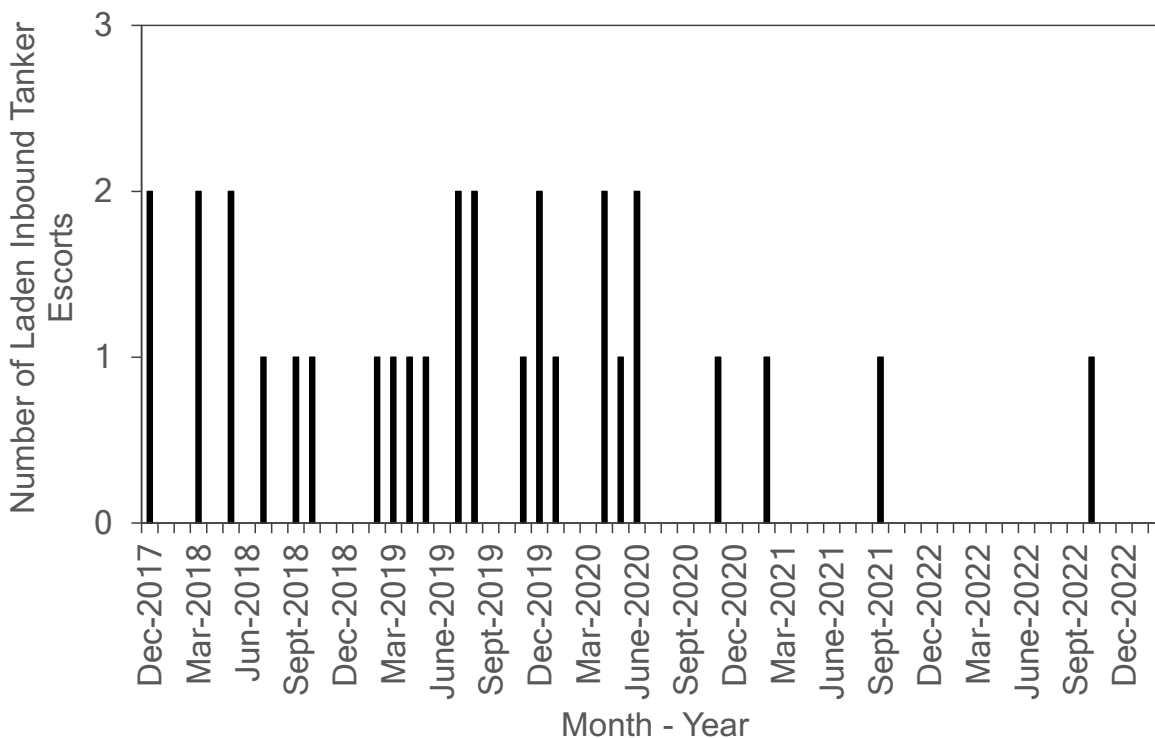
Number of tanker visits and crude oil volume loaded onto ships from VMT

(Source: Alyeska Pipeline Service Company. Partitioned by VMT vessel arrival date).



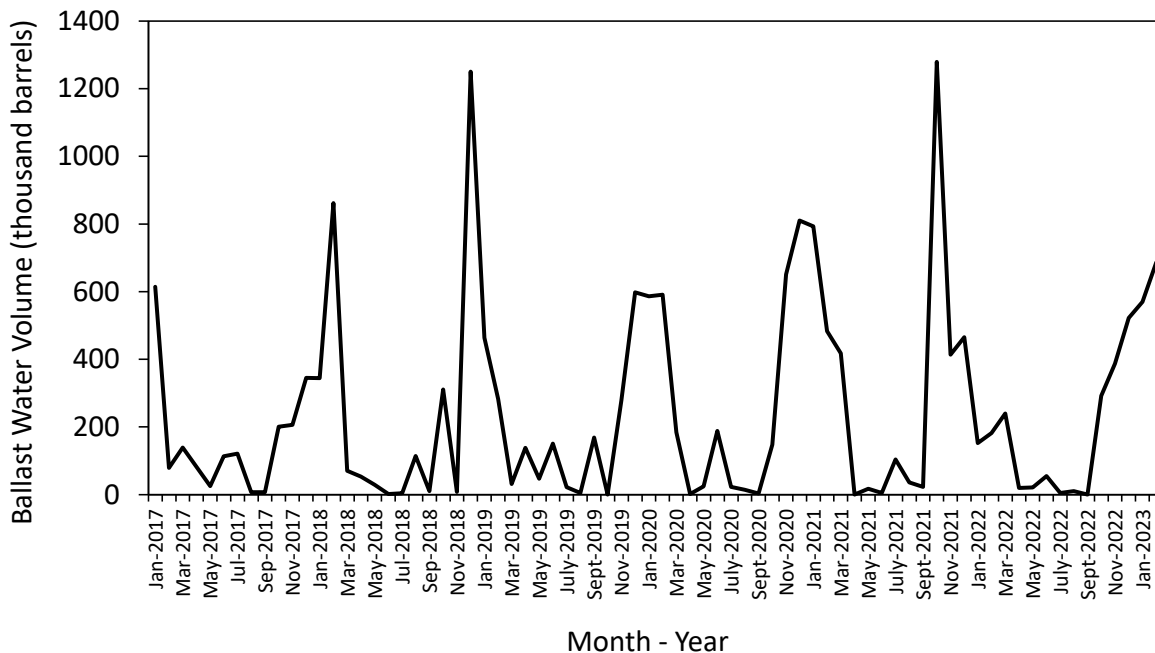
Inbound laden tanker escorts to VMT

(Source: Alyeska Pipeline Service Company. Partitioned by VMT vessel arrival date)



Monthly ballast water deliveries to Ballast Water Treatment Facility from tanker ships

(Source: Alyeska Pipeline Service Company. Partitioned by VMT vessel arrival date.)



5040 - Valdez Marine Terminal Spill Prevention Plan Review

Objectives: The goal of this project is to minimize the risk of hydrocarbon spills from the Valdez Marine Terminal through review of Alyeska’s Oil Spill Prevention Plan documentation and implementation.

Accomplishments since last report: This project was deferred in FY 2023 due to lack of available funds.

5053 – System Integrity Review

Objectives: This project was developed to review and assess information provided to PWSRCAC by concerned Alyeska employees related to system integrity and safety culture issues at the Valdez Marine Terminal. Objectives of this effort include: validating any system integrity or safety issues in a manner that leads to the correction of such issues; helping to protect Alaska, its oil production capability, and livelihoods, while protecting the individuals involved; and providing advice and recommendations to Alyeska with which Alyeska can remediate any identified issues.

Accomplishments since last report: Billie Garde of Clifford & Garde was retained to review and validate any system integrity or safety culture issues provided to PWSRCAC by concerned Alyeska employees. Ms. Garde presented her draft findings to the Board at its December 20, 2022 special Board meeting. Then, on March 16, 2023, Ms. Garde and Executive Director Schantz, President Archibald and Vice President Bauer met with members of Alyeska’s Executive Team to review and discuss the draft report in detail. It is expected that the Board of Directors will accept the final report at its April 14, 2023 special Board meeting. After that time, the report will then will be released to the Alaska Congressional Delegation, regulators, and the public

5056 – Tank 8 Internal Inspection Review

Objectives: The FY2021 goal of this project was to review the records and procedures used to maintain the integrity of Tank 8, in order to ensure the risk of a spill from this large oil storage tank are minimized. The FY2022 goal of this project is to ensure that the design of Tank 8’s new floor and cathodic protection system (scheduled for installment in 2023) are aligned with industry best practices and designed to protect the tank bottom for the life of the structure.

Accomplishments since last report: On October 25, 2022 the Council sent Alyeska a letter formally transmitting the Taku Engineering, Tank 8 report and listing eight recommendations stemming from the report, to which the Council requested “a written response from Alyeska describing why Alyeska will or will not implement these recommendations partially or in full.” Alyeska has not provided a written response to those recommendations.

During the January 2023 Board meeting, Alyeska staff informed the Council that Tank 8 will be taken out of service in 2023 and the plan to install a new floor and CP system in the tank is on hold until the owner companies make a decision regarding that work, and returning that tank to service.

5081 – Crude Oil Tank 7 and Ballast Water Tank 94 Maintenance Review

Objectives: This project would entail performing a technical review of the maintenance of crude oil storage Tank 7 and ballast water storage Tank 94 at the Valdez Marine Terminal. Both Tank 7 and Tank 94 underwent comprehensive internal inspections in 2021. The last time Tank 7 underwent a similar internal inspection was in 2008, and Tank 94’s last internal inspection occurred in 2012. The 2021 internal inspections of both tanks will result in a large amount of new information pertaining to the past, current, and future maintenance of each storage tank. Additionally, since their last internal inspections were completed back in 2008 and 2012, Alyeska has gathered and maintained other information, such as cathodic protection system testing records and external inspection results

pertinent to the maintenance of Tanks 7 and 94. The new information generated from the 2021 internal inspections and the other, older information must all be considered to continue to safely maintain each of these tanks. This project is necessary to ensure that Alyeska is using industry best practices and considering all the pertinent information in the decisions they make to safely maintain both tanks, now and in the future.

Accomplishments since last report: Progress on these FY 2022 and 2023 projects has stalled because of delays in receiving information from Alyeska – this situation is largely the same as it was during the last report. Tank 2, 7, and 94 are all back in service now, and the information the Council needs to complete these projects should be available. The Council first requested the Tank 2 information on 3/2/2023 and the Tank 7 and 94 information on 10/7/2021. Alyeska staff have reported the following reasons for delayed responses to these requests including: the COVID-19 pandemic, time for legal review, lack of available staffing, and the need to dedicate staffing to regulatory and legal issues related to the March 2022 tank vent damage problems.

On January 4, 2023 the Council sent Alyeska a letter with a list of two recommendations, a request for a written response, and a memorandum by Taku Engineering pertaining to ballast water storage Tank 93. The two Council recommendations were:

- Upgrade the Tank 93 cathodic protection system, by placing two dedicated Anodeflex loops under the new annular plate, during the annular ring replacement in 2023.
- Install an annular plate drip ring on Tank 93, such has been done recently for Tank 94.

On 3/20/2023 Alyeska provided a written response stating that “An annular plate drip ring will be installed on Tank 93. The cathodic protection system will not be modified. The existing CP system meets applicable CP requirements.”

During their March 1, 2023 meeting, the TOEM Committee reviewed and discussed a technical memorandum titled “Tank 2 Site Visit” by Taku Engineering. The committee passed the following action regarding the memo “Recommend that the Board accept the memo as final, make it publicly available, and promote its findings and conclusions to Alyeska, state and federal regulators.”

5640 – ANS Crude Oil Properties

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

Accomplishments since last report: During their January 2023 regular meeting, the Scientific Advisory Committee reviewed a draft report by Dr. Fingas and passed the following action “Accept the Review of ANS Oil Properties Report with minor revisions.” Dr. Fingas will provide the Board with a presentation summarizing the key findings of his report during the May 2023 meeting.

6000 – Oil Spill Response Program

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

Accomplishments since the last report:

Alaska Regional Response Team (ARRT): General information on the ARRT can be found [HERE](#), and meeting summaries and presentations can be found [HERE](#).

ARRT March 2023 meeting highlights:

- Corexit 9500 will no longer be manufactured; stockpiles still available
- USCG is looking at restructuring regional and area contingency plans
- Following up on the White House Memo dated January 26, 2021 on tribal relations, ARRT will be reviewing guidance on interacting with tribes
- Cultural Resources Committee: Charter signed, reviewing Alaska Implementation Guidelines
- Wildlife Protection Committee: working on administrative updates; one-stop-shop for wildlife protection guidelines [HERE](#); finalizing Pribilof Islands Wildlife Protection Guidelines
- Science and Technology Committee: Catherine Berg presented on remote sensing of oil in ice; the report should be available summer 2023; a video on Unmanned Aerial System (UAS) and remote sensing technology for oil spill response in arctic waters is available [HERE](#).
- Statewide Planning Committee: monthly meetings; working on quarterly newsletters
- Regional Stakeholder Committee (RSC) Task Force: work continues on job aids for a Liaison Officer and RSC members
- Prince William Sound Area Contingency Plan signed January 2023; PWS Area Committee meeting scheduled for April 18, 2023 in Cordova
- Arctic and Western Alaska Area Contingency Plan signed January 2023; added section on intentional wellhead ignition; future focus on in-situ burning on pre-assessed areas, risk assessment, marine firefighting and salvage; developing risk assessment methodology for statewide applications
- Alaska Inland Area Contingency Plan public review expected summer 2023; working on in-situ burning decision making checklist

Outstanding Questions or Issues:

ADEC Public Review of updates to 18 AAC Chapter 75: Changes to Article 4 of 18 AAC Chapter 75, issued on January 6, 2023, went into effect on February 5, 2023.

ADEC issued regulatory changes to 18 AAC 75 on January 6, 2023. Information on these changes can be viewed on ADEC's website [HERE](#). Some of the changes to the regulations include:

- Requiring one operations-based exercise during each five-year plan cycle and limits additional exercises to not more than one additional operations-based exercise in each 12-month period
- Eliminated a best available technology conference for prevention and response equipment
- Removal of references to regional citizens advisory councils as named reviewers
- Consolidation of sections on plan contents and plan approval criteria into new section
- Adopted formula for calculating oil recovery capacity of equipment using 20% of manufacturer's rated throughput capacity unless another rate is appropriate
- Removed requirement that contingency plans show compliance with other state and federal training programs

BP-Hilcorp Transaction: On December 14, 2020, the Regulatory Commission of Alaska (RCA) issued an Order Granting Applications Subject to Conditions regarding the transfer of TAPS assets (including the Valdez Marine Terminal) from BP Pipelines to Harvest Alaska. PWSRCAC plans to submit an amicus curiae brief in support of the City of Valdez appeal to the RCA's March and December 2020 Orders allowing Hilcorp/Harvest Alaska to keep financial information confidential and granting the transfer of BP's assets to Hilcorp. *This case is still pending in the Alaska Supreme Court.*

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, Andeavor (subsidiary of Marathon Petroleum), Crowley Alaska Tankers, Hilcorp North Slope, and Polar Tankers, was renewed on January 31, 2022 and will expire in 2027. Alyeska Pipeline Service Company (Alyeska) Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan (VMT C-Plan) was renewed on November 15, 2019 and will expire in 2024.

Accomplishments since last report:

Crowley Alaska Tankers: Crowley Alaska Tankers applied to ADEC to charter a foreign flagged vessel in February 2023. ADEC approved this as a minor amendment to Crowley’s tank vessel plan. The SUMMIT SPIRIT was approved for the operating period of March 1, 2023 to March 31, 2023.

Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan (VMT C-Plan):

Secondary Containment Liner:

- Dr. Craig Benson, secondary container liner expert who presented his research at the January 2023 PWSRCAC Board meeting, also presented his research to APSC staff on March 16, 2023. Dr. Benson’s research focused on methods to evaluate liner integrity and determining how much of the liner should be tested to be “statistically significant.”
- In following up on Dr. Benson’s presentation, APSC has begun addressing Dr. Benson’s recommendations. Initial work by the APSC team suggests that Electrical Leak Location (ELL) is the most viable option to determine integrity of the secondary containment liner and agree that a pilot study in the West Tank Farm is a good idea.
- As of the VMT Coordination meeting on February 23, APSC is planning to do a pilot study on ELL at the West Tank Farm in 2024.

VMT Coordination Workgroup meeting: The VMT Coordination Workgroup met on February 23, 2023. Highlights of the meeting include:

- SERVS updates: OSRB5 is scheduled to arrive in April; Allison Creek is expected to be replaced in the first quarter of 2024; SERVS is testing a new style of boom (Eco-Speed).
- VMT updates::
 - Ballast water system related work: maintenance for Tanks 93 and 94 and ballast water piping; 90’s tanks retaining wall; maintenance activities on DAF cell 6
- Oil movement and storage work:
 - Tank 8 will be taken out of service for now and cleaned; the cathodic protection system and floor will not be replaced in 2023; decisions still being made on Tank 8 work and returning it to service.
 - Drain piping of West Metering sump will be replaced
 - In-line inspection will be done on the Main A and B headers from East to West Metering
 - Tank 2 is back in service storing oil
 - Power vapor: inspection of power house stack; working on boilers’ continuing work with Copper Valley Electric
- Marine:
 - Bird deterrent work continues
 - Systems integrity work for marine structure coatings, inspection, repair

- Improvements to Berth 4 operator's station
- Snow removal:
 - Alyeska is closely monitoring the Sugarloaf SNOWTEL weather station to help manage snow loads
 - As of February 23, 2023, the crude oil storage tanks at the East Tank Farm had been cleared four times
- VMT C-Plan status:
 - APSC expects to submit a plan renewal in the summer of 2023
- APSC did a demonstration of their Geographic Resource Database which is mostly marine based.

6512 - VMT Secondary Containment Liner Integrity

Objectives: The goal of this project is to ensure that the secondary containment liner at the Valdez Marine Terminal will adequately protect the environment in the event of an oil spill.

Accomplishments since last report: On February 21, 2023 the Council provided Alyeska with a letter listing four recommendations, a request for a written response, and the final report by Dr. Craig Benson. The four recommendations were:

- Electrical leak location and electrical resistance tomography surveys are recommended for evaluating the CBA liner at Valdez Marine Terminal.
- A pilot study should be conducted in the out-of-service West Tank Farm area to evaluate the electrical leak location and electrical resistance tomography methodologies, especially the ability of both methods to detect defects with the thick earthen layer overlying the CBA liner.
- If the objective of liner testing at the Valdez Marine Terminal is to identify all liner defects (holes, cuts, cracks, or other features that fully penetrate the CBA liner and provide a pathway for liquid flow), then essentially the entire area of the liner must be evaluated.
- If the objective is to estimate the total number of defects (not location or size) by extrapolating outcomes obtained by evaluating a fraction of the area, at least 20% of the liner area should be assessed.

During a VMT Coordination Workgroup meeting on February 23, 2023 Alyeska staff stated they had received the letter and report and are planning to implement the first two recommendations. Alyeska staff indicated they are planning to conduct a pilot study in the West Tank Farm in 2024 to evaluate the effectiveness of using the electrical leak location method to test the buried liner.

On March 16, 2023, Dr. Benson and Council staff met (via videoconference) with Alyeska engineering staff and contractors to summarize the findings and recommendations of Benson's report and to field questions from those in attendance.

6530 - Weather Data / Sea Currents Project

Objectives: This project studies wind, water current, and other environmental factors near the Valdez Marine Terminal, in Prince William Sound, and in the Gulf of Alaska. Weather conditions affect the safe navigation of vessels and aids the ability to prevent, respond to, contain, and clean up an oil spill. Accurate weather data for the region supports research and decision making in areas like oil spill response, traffic management, vessel performance specification, and contingency planning.

Accomplishments since last report: The weather station at Cape St Elias is showing its age and we will plan to update it in the spring of 2023. The CTD sensor set up at the Valdez tide gauge station is working well.

Our two weather stations in Port Valdez are operating normally and we have had no maintenance issues with them. The camera at Nuchek is out of service and needs to be removed for service.

6531 – Port Valdez Weather Buoys

Objectives: This project originally assembled and deployed, and continues to maintain, two buoys which measure ocean currents and common weather parameters in Port Valdez. The first buoy is installed near Jackson Point [61.0910°N 146.3811°W] in the vicinity of the Valdez Marine Terminal (VMT). The second buoy is installed at the Valdez Duck Flats [61.1201°N | 146.2914°W]. The Prince William Sound Science Center (PWSSC) partners with the Council to facilitate this project.

The Oil Pollution Act of 1990 requires the Council to study wind and water currents and other environmental factors in the vicinity of the terminal facilities which may affect the ability to prevent, respond to, contain, and clean up an oil spill.

The Council's Board of Directors has long advocated that robust weather monitoring systems be installed in the vicinity of the VMT. This includes proposals to install ultrasonic anemometers at the loading berths and a weather station at the VMT. The Council's Board 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: Buoys are currently reporting correctly and on station. In January, the VMT buoy ran out of power. Both buoys were brought into harbor and recharged. We are working with JOA Surveys to improve the charging system used on the buoys. As of the beginning of March, both buoys are now getting adequate light and keeping their batteries charged.

6536 – Port Valdez Weather Buoy Data Analysis

Objectives: In 2019, PWSRCAC was able to install two weather buoys in Port Valdez, one in the vicinity of the Valdez Marine Terminal and the other near the Valdez Duck Flats. The buoys are expected to collect weather data for at least five years. This series of projects will take the data collected in each of the five years and perform an analysis to determine any weather trends throughout the year and seasonally. The analysis includes current and wind direction and speed information, wave direction and heights, and other pertinent information that can be obtained from the weather data.

Accomplishments since last report: PWSRCAC is in the process of contracting with the Prince William Sound Science Center to analyze the data from 2022. The Project Team met on March 15, 2023, with Dr. Rob Campbell to discuss the project and get it underway for this year.

6537 – Copper River Weather Station Project

Objectives: Deploy a weather station on the Copper River Delta to better capture outflow wind events.

Accomplishments since last report: The Forest Service has issued a land use permit for the weather station and a purchase order was issued to the Science Center to help assemble and install the weather station. Most of the required equipment has been purchased and is currently being shipped to the PWS Science Center in Cordova. We hope to begin installation of the weather station around the end of May.

6560 – Peer Listener Training

Objectives: Update the Council’s Peer Listener program, which was created and implemented shortly after the Exxon Valdez oil spill to promote community resiliency through a peer-to-peer support network. The update will include assessing the current program, reviewing similar programs nationwide, and revising the Peer Listener Training manual and delivery methods according to contemporary best practices.

Accomplishments since last report: A request for proposals for Phase 2 updates to the Peer Listener Training Manual was advertised early this year. A contractor was chosen by the project team and supported by SAC. A draft revised manual is anticipated to be completed this spring and will be reviewed by SAC.

7000 – Oil Spill Response Operations Program

Objective: This program encompasses monitoring and reporting on the activities related to the operational readiness of the oil spill response personnel, equipment, and organization of the TAPS shipping industry. The program also encompasses monitoring actual oil spill incidents within our region and evaluation of overall response readiness. Additionally, the program includes the planning and implementation of PWSRCAC’s Incident Response Plan.

Accomplishments since last report: The **OSPR Committee** met on February 17. As the featured topic, Mike Donnellan with ADEC discussed the statewide effort to convert GRS site information into a GIS-based format. This work has been ongoing for years and while Robida has kept OSPR informed on progress, the committee appreciated a deeper dive by Donnellan who is the point person with ADEC managing this conversion.

The ARRT’s **Regional Stakeholder Committee Task Force** continues to meet on a regular basis. Robida presented on this topic at the January Board meeting, noting that the job aid being developed for the Liaison officer contains language that’s a bit more flexible versus currently approved Area Plan language. In some aspects, this flexibility is fine and warranted, and in other places, it’s a bit grey as to whether this more flexible language will result in a less robust RSC process. Ultimately, it will be incident specific events and response leadership that drive the RSC process, and the job aid does contain enough information to provide for a robust process. For that reason, PWSRCAC has been satisfied with language in the liaison job aid. Once the liaison-specific job aid is finished, attention will turn to the RSC member job aid. During the upcoming mid-May Hilcorp shipper exercise, the RSC process will be implemented, with the focus being the required steps to get the process initiated and prepare and invite RSC participants. The draft liaison job aid will be used during this exercise. The next task force meeting is April 28, 2023.

Staff continues to participate in **VMT Contingency Plan Coordination Workgroup meetings**, with the most recent meeting being held on February 23. Topics for this meeting included a SERVS operational and equipment update, a discussion about upcoming summer maintenance projects at the VMT,

discussion on secondary containment integrity testing being driven by a condition of plan approval, an update on Alyeska's Geographic Resource Database, and various organizational updates from those present at the meeting. More detailed information on these quarterly meetings is being shared with the OSPR and TOEM Committees.

The **Alaska Regional Response Team (ARRT)** met on March 8. Various area committees provided updates on their specific plans and happenings in their areas of interest, and there were status updates on the Pribilof Islands Wildlife Protection Guidelines, spill response exercise activity in the Bering Strait between the USA and Russia, the International Maritime Organization (IMO) risk assessment work being led by the Arctic and Western Alaska area committee, a potential change to Area Plan formatting, and a briefing on the recent National Response Team meeting in Portland.

Staff also continues to participate in different **Area Planning meetings and various related sub-committees**. The Inland Area Committee met on March 6. The Arctic and Western AK (AWA) admin sub-committee met on March 4. And finally, the GRS sub-committee under the AWA met on March 17.

The next PWS Area Committee meeting will be held in person, in Cordova, on April 18 so that attendees can participate in the Alyeska-led wildlife exercise and possibly view some of the SERVS fishing vessel training happening during this timeframe. Robida was asked to present on the **Copper River GRS** topic at this meeting. OSPR's FY2024 project idea to hire a contractor to facilitate a workgroup and build out Copper River and Delta Flats GRS's ranked 13 out of 23 project ideas in FY2024. Robida intends to speak to the Council's past project work of capturing this history via white paper, but mainly plant the seed that this future FY2024 project could potentially start up next fiscal cycle, and we'd need local participants to help in this endeavor.

By the time the Board meets in May, annual **SERVS spring FV training** will be completed. Staff members Robertson and Robida will have covered some of this training and associated operational readiness exercises. Robertson will have covered the Seward training along with Brooke Taylor and Maia Draper-Reich, and both Robertson and Robida will be in Whittier and Cordova for portions of those trainings. A portion of the Valdez training will likely be covered as well. The schedule for spring training is as follows:

3/31 - 4/02	Kodiak Fishing Vessel Training
4/5 - 4/8	Homer Fishing Vessel Training
4/11 - 4/12	Seward Fishing Vessel Training
4/15 - 4/17	Whittier Fishing Vessel Training w/ ORE
4/17	Non-Mechanical Exercise
4/19 - 4/26	Cordova Fishing Vessel Training w/ ORE
4/20	2023 VMT Wildlife Equipment Deployment - Cordova
4/23	IBR Facility Demonstration (Exercise)
4/29 - 5/3	Valdez Fishing Vessel Training w/ ORE

There are two **new barges** coming into PWS in the future. The barge *Mineral Creek*, which has served as the lightering and nearshore support barge, is being replaced by a barge that's very similar to the other four open-water OSR's in service. The new barge will be known as *OSRB-5*. This barge is currently under construction in Oregon and expected to be launched to water in February, and arrive in PWS in March. It will still take a bit of time to set other ancillary response gear on the barge, train crew, install one last generator on the barge in Valdez, and get full ADEC approval, so the barge won't be fully in service until sometime in May. Just like the *Mineral Creek*, the *OSRB-5* will have the large drop-down Yokohama fenders needed for ship-to-ship lightering and be able to support nearshore operations with mini barge offload stations.

The barge *Allison Creek*, used as additional storage for the *Valdez Star* vessel, is being replaced and a new barge will be constructed in Anacortes, WA. Delivery is estimate for March 2024.

There's been an uptick in deployments this spring and staff have observed the following **exercise and deployments** since the January Board meeting:

- 02/10/2023 OSRB deployment in Port Valdez
- 03/06/2023 Valdez Star Deployment in Port Valdez
- 03/16/2023 Alyeska IMT training event at the SERVS VEOC

7050 - Out of Region Equipment Survey

Objective: The project will identify "out-of-region" spill response equipment that's available to cascade into PWS and/or the Gulf of Alaska vicinity during a major oil spill. This is equipment that is called for via planning assumptions to support a large spill response effort and outfit nearshore recovery task forces beyond what is already available from the SERVS inventory. This project will document who owns this equipment, discuss the formal equipment sharing/purchase relationships that are already in place between the various PWS shippers and the greater worldwide Oil Spill Removal Organization (OSRO) community, as well as any governmental equipment sources such as the USCG or Navy Supervisor of Salvage (NAVSUPSALV). The project will also address timing and logistical information related to movement of such equipment.

Accomplishments since last report: The Board approved the report at its September 2022 meeting and the report was formally transmitted to the USCG MSU Valdez, U.S. EPA, ADEC, BLM, AK Dept. of Fish and Game, RPG, and Alyeska/SERVS. This project is complete.

7520 - Preparedness Monitoring

Objectives: PWSRCAC's Drill Monitoring program falls under a broader program called Oil Spill Response Operations. Objectives for the Drill Monitoring program are to promote oil spill response operational readiness within the EVOS region by observing, monitoring, and reporting on oil spill prevention and response drills, exercises, and training; to provide citizens, regulatory agencies, and responders (Alyeska and the shippers) with independent observations and recommendations to improve preparedness; and provide citizen oversight. Tasks to be completed include:

- Monitor and report on regular oil spill drills and training exercises at the VMT and throughout the Exxon Valdez oil spill region to citizens, the Board, industry, and regulatory agencies
- Provide quarterly recommendations to the PWSRCAC Board of Directors
- Keep PWSRCAC's standing committees (OSPR, TOEM, POVTS, IEC, and SAC) informed
- Produce an annual report on effectiveness and progress of the regularly monitored drills and exercises
- Continue developing and implementing staff training for drill monitoring

Recent Exercises

Open-Water OSRB Deployment - February 10, 2023

SERVS conducted a OSRB deployment in Port Valdez on February 10.

SERVS Valdez Wildlife Training - Oct 17-19, 2022

SERVS annually conducts wildlife training to maintain the three-year training requirement for the vessel crews in its wildlife program. This year Cordova and Valdez hosted the training. PSWRCAC member Jeremy Robida attended the Valdez wildlife training.

VMT IMT and Field Exercise – Oct 11-12, 2022

Alyeska held their annual Incident Management Team (IMT) tabletop exercise with an equipment deployment on October 11th and 12th. The scenario was a response to an immediate 20,000 bbl. oil spill to water at Berth 4 that continued to spill until 59,000 bbls. were lost. There was a deployment of two of the VMT's self-propelled skimmers demonstrated on the 12th as part of the exercise.

Upcoming Drills and Exercises

VMT Oil Wildlife Exercise April 2023

ATC and Hilcorp Shipper's Exercise – May 2023

8000 – Maritime Operations Program

Objectives: This program reviews port organization, operations, incidents, and the adequacy and maintenance of the Coast Guard Vessel Traffic System, and coordinates with the Port Operations and Vessel Traffic Systems (POVTS) Committee. Major program components include participation with the Valdez Marine Safety Committee (VMSC), monitoring changes to the tanker escort system, reviewing Best Available Technology documents for the tanker escort system and the Vessel Emergency Response Plan (VERP), participating in monthly SERVS/PWSRCAC and ADEC/PWSRCAC communication meetings, and supporting maintenance for the NOAA weather stations.

Accomplishments since last report: The Project Manager has been researching and following IMO regulatory efforts to reduce greenhouse gases with the Chair of the POVTS Committee.

Maia Draper-Reich and Alan Sorum of staff and Peter Soles of Glostien made a presentation on the line throwing device trials at the Alaska Forum on the Environment meeting in February of 2023.

A working group has been formed to plan a workshop on tsunami science and vessel response strategies pending results of the long-range planning process.

Staff has been working with the POVTS Committee to evaluate Rick Steiner's whale strike reduction proposals.

Staff is researching inspection or certification protocols of bollards used by Alyeska at their facilities.

8010 – Escort Tugboat Best Available Technology Assessment

Objectives: This project proposes to assess current best practices and use of technology in the design of highly capable escort tugboats. Using the standards described in this process, a comparison will be made to vessels currently being used for this purpose in Prince William Sound.

Accomplishments since last report: This project was deferred in FY 2023.

8300 - Sustainable Shipping; Phase I: Regulatory Mandate Review

Objectives: This project, Phase I: Regulatory Mandate Review, will review and report on the evolution of regulatory requirements affecting the transition of ocean shipping, and tankers in particular, to a sustainable model. Providing technical advice to the Board on the development of more sustainable shipping will require that the POVTS Committee become aware of the developing regulatory climate,

follow the development of best technologies, and track the implementation efforts of the TAPS shippers and marine support contractors.

Accomplishments since last report: Nuka Research is working on this project. They have gotten some cooperation from the shippers on research for this project. A presentation is planned for the May Board meeting.

8520 – Miscommunication in Maritime Contexts

Objectives: Seeking to identify and address various causes of miscommunication, the proposed project will provide a comprehensive perspective by collecting information on the linguistic, cultural, and pragmatic needs and practices of native and non-native English-speaking mariners in Prince William Sound. The proposed project would entail the first two of four phases.

Accomplishments since last report: A contract was completed with Sky Island Language Learning Research. The project is delayed due to contractor's schedule. This is a two year contract, so there will be time to catch up in the new fiscal year.

9000 – Environmental Monitoring Program

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

- Project manager to attend at least one technical scientific conference.
- Plan and complete budgeted environmental monitoring and scientific research projects.
- Conduct PWSRCAC Science Night.

Accomplishments since last report: Projects managed under this program continue to be planned and executed successfully. The Project Manager has registered to attend and present a poster at the International Conference on Marine Bioinvasions in Baltimore, Maryland, May 16-18, 2023.

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

Objectives: Provide up to date information on winter marine bird density and distribution throughout the Prince William Sound tanker transit zone, including under-surveyed areas such as the open waters and adjacent bays in and around Port Valdez, Valdez Arm, Tatitlek Narrows, Port Fidalgo, and Port Etches. The notable tasks to be accomplished under this project are as follows:

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

Accomplishments since last report: A contract was finalized with the Prince William Sound Science Center for the FY2023 surveys and data analysis. The surveys were completed successfully between March 2-7, 2023.

9510 – Long-Term Environmental Monitoring Project

Objectives: Comprehensively monitor the actual and potential environmental impacts related to the Valdez Marine Terminal and associated crude oil tankers and provide the Council with information

about the presence and effects of hydrocarbons generated by the terminal facility and associated tankers. Here are the notable tasks to be accomplished under this project:

- Obtain environmental samples in Port Valdez: marine sediments, mussels, and passive sampling devices
- Analyze environmental samples
- Interpret and report results of sample analysis
- Present analytical findings to the PWSRCAC Board of Directors
- Maintain Environmental Monitoring Project plan

Accomplishments since last report: Planning for the 2023 LTEMP scope of work is underway. 2023 is an “expanded” LTEMP sampling year, where environmental samples are collected from not only Port Valdez, but additional monitoring stations in Prince William Sound and the Gulf of Alaska. The “expanded” scope is executed every five years. Cost estimates have been obtained from the two analytical laboratories, Alpha Analytical and Oregon State University. A cost estimate is pending from the scientific support contractor, Owl Ridge Natural Resource Consultants, who would interpret and report on the analytical results of the 2022 and 2023 samples. Two vessel transport contractors (Just Coz LLC and Kimberlin’s Water Taxi & Freight) have been selected through the request for proposals process. One more transport contractor needs to be identified for floatplane charter work to access remote mussel sampling locations.

Dr. Liz Bowen and collaborators have provided the Council with two reports pertaining to their chemical and genetic analyses on mussels obtained during the April 2020 oil spill from the Valdez Marine Terminal. One of the reports is an “executive summary” intended for the Board of Directors as the primary audience, while the second report is a full-length scientific report geared towards scientists. The Scientific Advisory Committee and Council staff have reviewed drafts of both reports and provided comments for the authors to consider implementing in final versions of the reports.

9511 – Herring and Forage Fish Surveys

Objectives: Monitor schools of herring and other forage fish species to identify areas in Prince William Sound where these fish tend to concentrate. The notable tasks to be accomplished under this project are as follows:

- Conduct aerial surveys of forage fish in Prince William Sound for four consecutive years
- 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 final report and recommendations were presented to the Board at the January 2023 meeting.

9512 – Determining Concentration and Composition of Oxygenated Hydrocarbons from the VMT

Objectives: Determine the types and amount of oxygenated hydrocarbons that are released from the Ballast Water Treatment Facility at the Valdez Marine Terminal. The notable tasks to be accomplished under this project are as follows:

- Collect water samples from the VMT Ballast Water Treatment Facility following discharge of oily ballast water by tankers.
- Analyze the samples to determine the chemical composition and concentration of oxygenated hydrocarbons.
- Interpret and report findings of the analysis and prepare the report for publication in a peer-reviewed journal.

- Produce recommendations on future research to understand the fate, transport, and toxicity of oxygenated hydrocarbons in the marine environment.

Accomplishments since last report: Twelve sample sets were collected, shipped, and delivered to the Contractor in New Orleans. Analysis is underway. Results and a draft report will be reviewed by the Scientific Advisory Committee this spring. The Contractor will be presenting this project at two upcoming scientific conferences – AMOP and the American Society for Mass Spectrometry Conference.

9520 – Marine Invasive Species

Objectives: Understand and minimize the environmental impacts of invasive species potentially arriving in the PWSRCAC region from tanker ballast water and hull fouling. Here are the notable tasks to be accomplished under this project:

- Obtain plankton samples in Port Valdez at three sites: the small boat harbor, Valdez Container Terminal, and Valdez Marine Terminal
- Perform metagenetic analysis on plankton samples to identify variability in the plankton community between locations and through time, and identify any nonindigenous species
- Interpret and report results of plankton metagenetic analysis
- Conduct monitoring of invasive crab and tunicate species in Valdez, Cordova, and Kodiak

Accomplishments since last report: Recruitment for 2023 Marine Invasive Species Monitoring Interns in Cordova, Valdez, and Kodiak will begin this spring. Planning for the 2023 broadscale survey in PWS is underway in coordination with the Contractor. Settlement plates will be deployed in late June and retrieved for analysis in late September.

9550 - Dispersants

Objectives: Review and potentially update the Council's 2006 dispersant use position statement. Develop supporting documentation to support staff and volunteers in communicating the position with regulators and incident responders.

Accomplishments since last report: The supporting materials to aid communication of the Council's updated position on chemical dispersants were presented to the Board at the January meeting. Dr. Merv Fingas of Spill Science updated the dispersants literature database with the latest peer-reviewed literature through 2022 and drafted a summary report. The report was presented to the Board Executive Committee in February.

9643 – Subsistence Harvest Surveys

Objectives: Update subsistence harvest information for Prince William Sound communities by conducting household surveys, key respondent interviews, and mapping to inform a long-term dataset on community subsistence harvest practices and access.

Accomplishments since last report: Staff were notified by Board member Angela Totemoff, representing Tatitlek Corporation and Tatitlek IRA Council, that this project does not have support from Tatitlek Corporation, the Tatitlek IRA Council, the Chenega Corporation, and the Chenega IRA Council. Based on this lack of support, the communities of Tatitlek and Chenega will not be participating in the surveys at this time. The contract for this project has been terminated with the Alaska Department of Fish and Game.