



# PRINCE WILLIAM SOUND

## REGIONAL CITIZENS' ADVISORY COUNCIL

January 2024  
Status Report

As of December 8, 2023

### 3100 – Public Information Program

**Objectives:** Inform members of the 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](http://www.tinyurl.com/ObserverArchive).

### 3300 – Annual Report

**Objectives:** Prepare and publish PWSRCAC's Annual Report each year to:

1. Inform the general public, member entities, and agency and industry partners of PWSRCAC projects and activities; and
2. Support legal requirements for ongoing updates to the public.

**Accomplishments since last report:** The 2022-2023 report was completed by staff and the contracted graphic designer. An electronic version was posted to the website and printed copies mailed to the distribution list. Extra printed copies are available for booth events and other needs throughout the year.

### 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 contracted fishing vessel program training in the following communities: Cordova, Valdez, Whittier, Seward, Homer, and Kodiak. The on-water portion of the training, viewed by the public during this outreach tour 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:** Staff will work on determining the community and date for the Spring 2024 tour based on SERVS training dates once they are set.

### 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:

- **September 21** Homer Community Reception, Homer, AK
  - Homer area community members and partners were invited to join the Council Board and staff at the Pratt Museum for hors d'oeuvres, the opportunity to explore the galleries, and to listen to a talk by Mike O'Meara and Nancy Lord about EVOS. ~85 attended.
- **October 5** PWSRCAC Overview, Prince William Sound College, Valdez, AK
  - Outreach Coordinator Maia Draper-Reich gave a 30-minute PWSRCAC overview talk for students and staff in the Outdoor Leadership program. 7 people attended.
- **October 11, 23** PWSRCAC office visits for PWS College students, Valdez, AK
  - Outdoor Leadership students in the Recreation and Leisure in Modern Society class stopped by the PWSRCAC Valdez office as part of visiting nonprofits in town that help the Valdez community. They visited and spoke with Donna Schantz, Joe Lally, and Sadie Blancaflor to deepen their knowledge about the Council and our work. Following the success of this visit, faculty Benjamin Rush planned a second visit to learn about Donna and Joe's career pathways, as well as other PWSRCAC project managers.
- **November 8-10** Pacific Marine Expo, Seattle, WA
  - POVTS member Max Mitchell, OSPR member Matt Melton, and Maia Draper-Reich hosted the PWSRCAC booth to disseminate information about the Council and its mission and hand out PWSRCAC giveaway items. ~260 people stopped by the booth.
- **November 9** Alaska Invasive Species Workshop, Sitka, AK
  - Noah Schrof, Invasive Species intern based in Kodiak, presented online to a hybrid audience of ~100 at the workshop to share about his internship, updates on the monitoring work he's done, and what he learned.
  - Danielle Verna helped organize and facilitate this event.
- **November 30** Science Night, Anchorage, AK
  - ~95 Board members, volunteers, staff, partners, and other invitees attended the hybrid event to hear four presentations by scientists whose work relates to the mission and work of the Council.

### 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 received and reviewed nine project proposals on the RFP released during October-November, 2023. Final award announcements will be made by January 31, 2024.

Four contractors completed their summer project's final reporting requirements this fall (by September 30, 2023):

- Alaska Geographic – *Marine Stewardship Youth Expedition Prince William Sound*
- Copper River Watershed Project – *Bligh Reef Expedition*

- Center for Alaskan Coastal Studies – *Engaging Youth as Environmental Stewards: High School Internships & Camp Opportunities*
- Prince William Sound Science Center – *Copper River Stewardship Program*

Four contracts are currently underway for projects happening during the 2023/2024 school year:

- Alaska Marine Conservation Council/Kodiak Ocean Science Discovery Program – two contracts:
  - *Chemistry Introduction: Oil, Climate Change, and Ocean Acidification*
  - *Science & Engineering Club*
- Center for Alaskan Coastal Studies - *Afterschool Action to Lifelong Learners*
- UAA/PWS College - *Environmental Undergraduate Research Experience*

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

The booklet "Stories of a Citizens' Council" was redesigned and reprinted in November.

### 3610 – Web Best Available Technology

**Objectives:** This project helps ensure the Council's websites and web presence using 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:** The Council's website recently moved to a new hosting service, WP Engine, which specializes in WordPress websites (the technology that powers the Council's sites). The new service is much more user-friendly for site managers and WP Engine maintains top-notch technology on their servers. During this migration, the sites underwent some major technical upgrades, including an upgrade to the technology that manages the extensive library of PDF documents. This has helped improve searching for documents and has some promising features that can be implemented in future projects.

**Website data:** Website usage for [www.pwsrccac.org](http://www.pwsrccac.org) is tracked through Google Analytics for information such as numbers of visitors, location of visitors, how 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. [Contact project manager Amanda Johnson](#) for access to data reports.

### 3810 – Illustrated Prevention & Response System Outreach

**Objectives:** Work with artist and author Tom Crestodina to develop artwork for a book and other materials showcasing the oil spill prevention and response system in Prince William Sound.

1. Educate stakeholders and the general public about the importance of spill prevention and response, why the PWS prevention/response system is one of the best in the world, and how it can be kept that way.

2. Create new work partnerships with industry and regulators, similar to how groups collaborate during the fishing vessel training community outreach tours.

**Accomplishments since last report:** Staff are working to finalize the contract with Crestodina. Alyeska/SERVS, Crowley Alaska Tankers, and SWAPA have confirmed their interest in participating. Once the contract is signed, coordination will begin with industry groups on dates for Crestodina to visit Valdez to see vessels and equipment, and learn more about the oil spill prevention and response system in our region. Staff will also be working to form a project team with members of staff and the interested committees (POVTS, OSPR, and IEC). The project team will focus on providing Crestodina input on the book's content at different stages of development.

#### 5000 - Terminal Operations Program

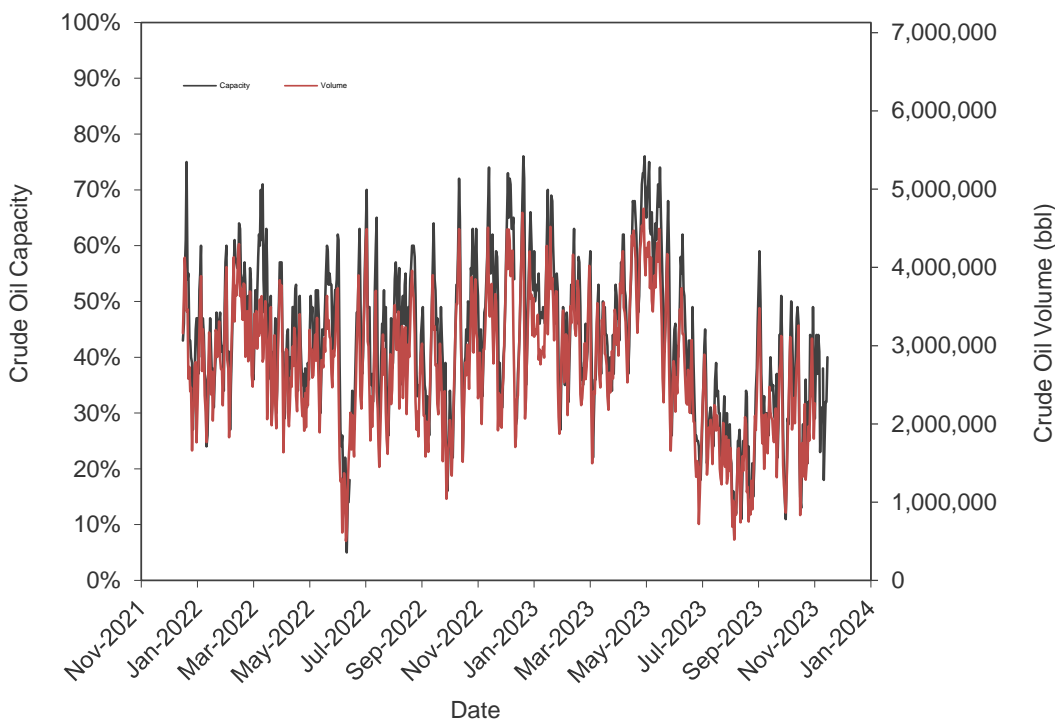
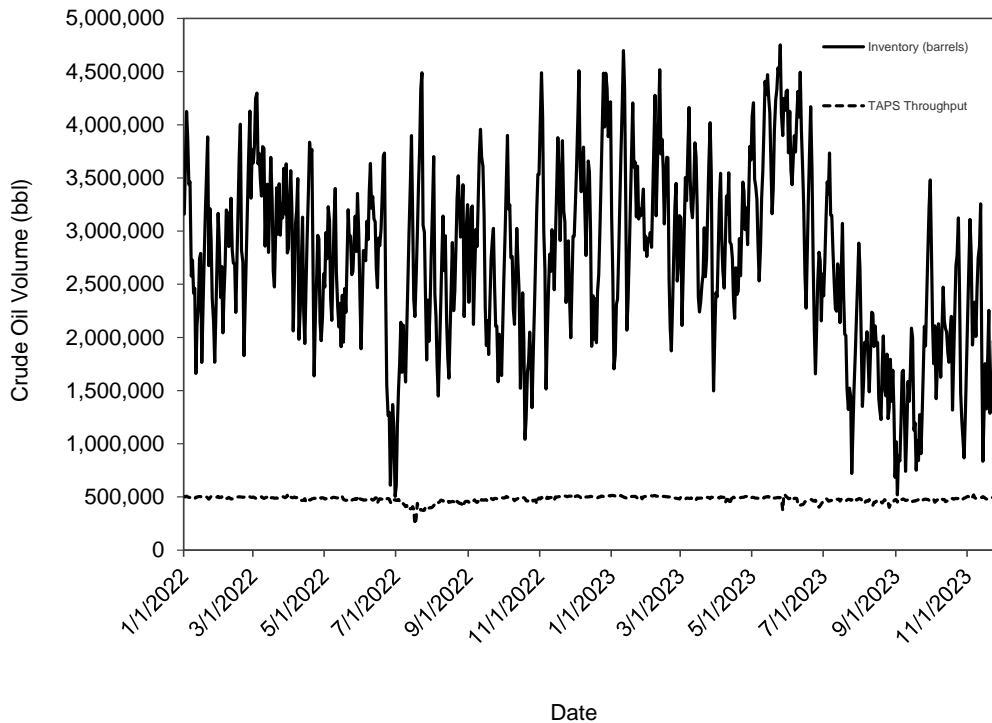
**Objectives:** The goal of the Terminal Operations and Environmental Monitoring (TOEM) Program is to prevent hazardous liquid spills and minimize the actual and potential environmental impacts associated with the operation and maintenance of the Valdez Marine Terminal.

#### Accomplishments since last report:

- **Tank Vent Damage:** At the September 2023 Executive Committee Meeting, Taku Engineering LLC's report titled "Crude Oil Storage Tank Vent Snow Damage" was accepted as final and distributed to regulators and the public. The Council received a request from Alyeska for additional information regarding Taku Engineering's calculations of the tank headspace conditions. In response, the Council transmitted a letter on November 3, 2023, offering a meeting with Taku to present their calculations and reiterating the Council's ongoing requests for additional information to compare Taku's results with those of Alyeska's engineers and further refine the model.
- **VMT Projects and Maintenance Monitoring:** The initial VMT Title V Air Quality permit was set to release on June 16, 2023, but has since been delayed. Currently, Alyeska is operating under a permit shield which allows Alyeska to utilize standards set forth in their 2012 Title V Air Quality Permit that expired in 2017. The TOEM Committee is currently reviewing these proposals in preparation for when the permit is published and opened for public comment.
- **Outstanding Alyeska responses to Council Recommendations and Information Requests:** At the September 2023 Board meeting, Andrés Morales committed to providing a timeline schedule for when the Council can expect responses to our outstanding requests for information/recommendations. On November 2, 2023, Alyeska transmitted this timeline schedule. Of note, the Council can expect to receive all outstanding tank information (for Tanks 93, 94 and 8) by the end of 2023/early 2024. The Council received all requested information from Alyeska regarding Tank 7 and Tank 2 in November 2023, which has been transmitted to our contractor for review.

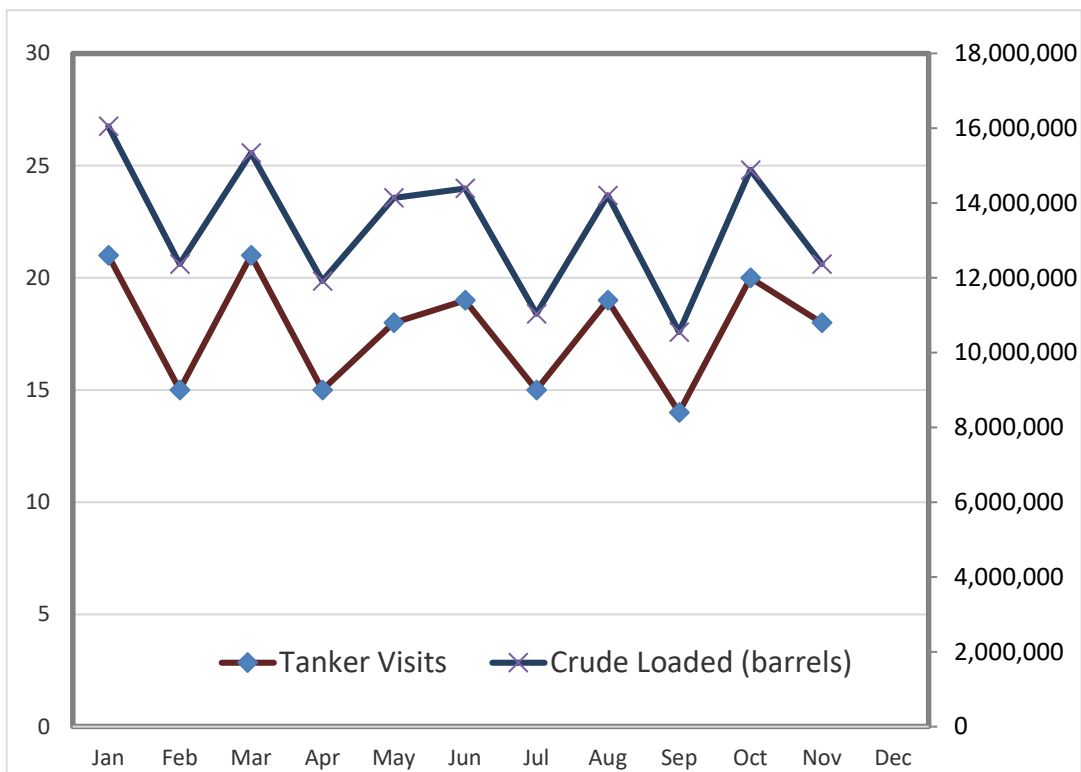
**Attachments:** Graphs depicting a variety of data related to the operation and environmental impacts of the Valdez Marine Terminal.

**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>)



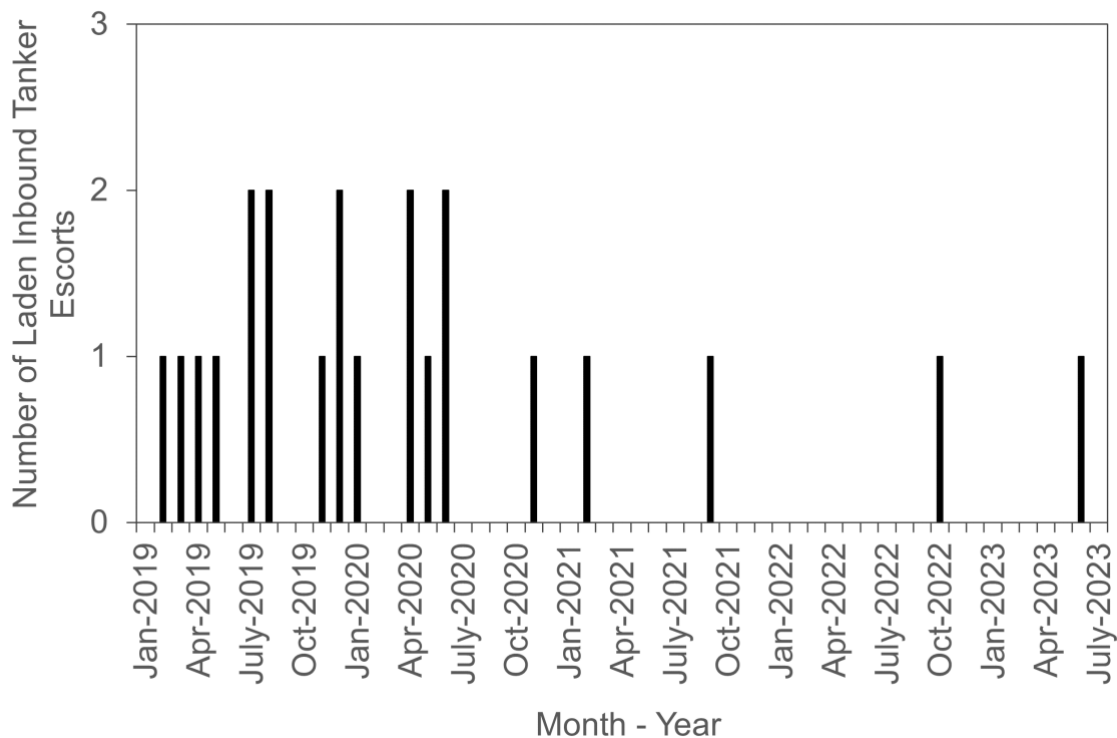
**Monthly number of tanker visits and crude oil volume loaded onto ships from VMT - 2023**

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



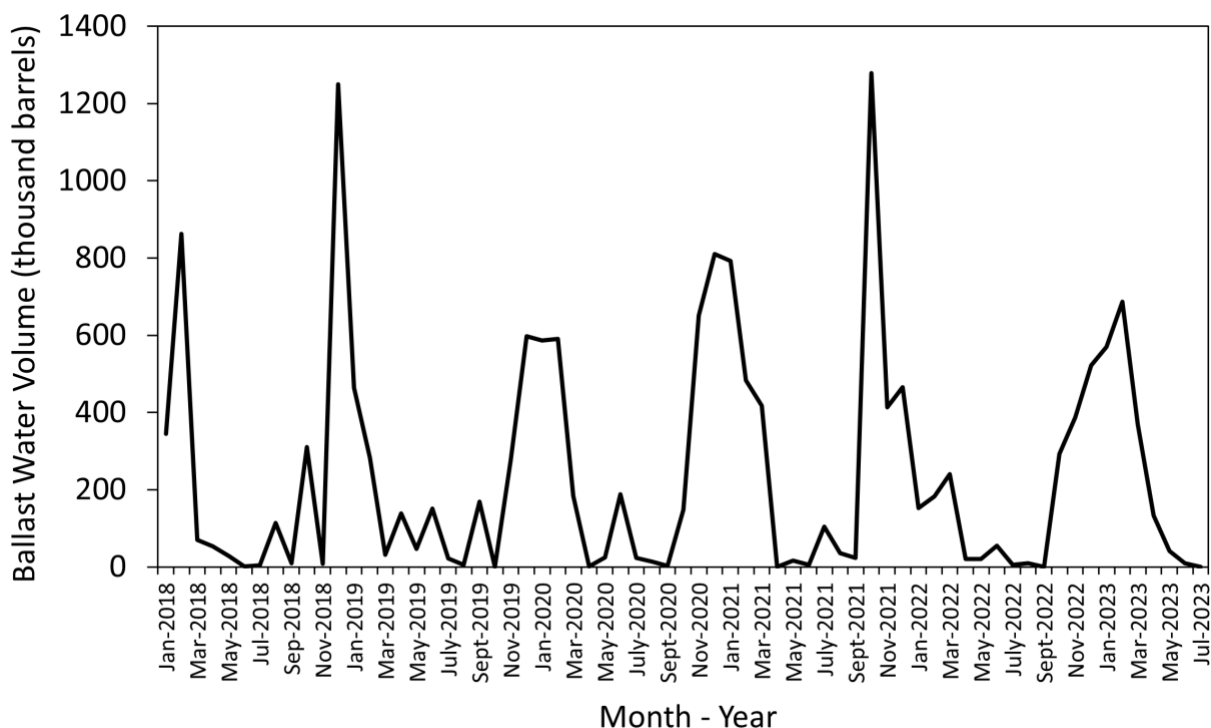
**Inbound laden tanker escorts to VMT**

(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.)



#### 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:** The API 653 reports for Tanks 7 and 94 were received from DEC in August 2023; Alyeska provided all requested information for Tank 7 and partially provided request information on Tank 94 on August 31, 2023. A draft report has been completed by Taku Engineering and is undergoing internal review by Council staff and the TOEM Committee.

#### 5591 - Crude Oil Piping Maintenance Review

**Objectives:** This project involves a technical review of the internal inspections of crude oil piping that occurred at the Valdez Marine Terminal (VMT) from 2016 through 2018, and a follow-on inspection of

the buried crude oil relief piping that occurred in 2022. The goal of this project is to ensure that the crude oil piping at the VMT is maintained using industry best practices, such that the risks of a spill are minimized.

**Accomplishments since last report:** This funding has been returned to contingency as Alyeska noted that the requested information for the completion of this project would be unavailable until FY25.

## 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](#). The ARRT met in September 2023 in Anchorage and discussed the following:

- Formation of a Tribal Engagement Task Force
- Activation drill in the Bering Straits in the summer of 2023
- EPA issuance of a final rule on Subpart J on dispersants post Deepwater Horizon:
  - New listing criteria, revising the efficacy and toxicity testing protocols, and clarifying evaluation criteria for removal products from the National Contingency Plan Product Schedule
  - Amending requirements for authorities, notifications, and data reporting when using chemical or biological agents in response to oil discharges
- Alternative Planning Criteria
- Pipeline and Hazardous Materials Safety Administration jurisdiction and authority
- Work continues on the Regional Stakeholder Committee (RSC) Task Force job aids for the RSC Liaison Officer and RSC members

**Prince William Sound Area Contingency Plan (PWS ACP):** The PWS Area Committee met in October and discussed the following:

- Maritime cyber security
- Replacement of the Mineral Creek lightering barge with the OSRB-5 barge
- Earthquakes in Prince William Sound
- Updates from the Geographic Response Strategies (GRS) subcommittee

### Of interest:

The National Oceanic and Atmospheric Administration (NOAA) published a Federal Register notice on July 7, 2023 titled **Final National Oceanic and Atmospheric Administration Tribal Consultation Policy and Procedures** available [HERE](#)

On January 26, 2021, the White House issued a Presidential Memorandum on Tribal Consultation and Strengthening Nation-to-Nation Relationships that reaffirmed the Executive Order on Consultation and Coordination with Indian Tribal Governments (2000). In response, NOAA sought review and comment on its Tribal consultation policy and procedures in November 2021. NOAA revised its Consultation Handbook describing procedures for government-to-government consultation with federally recognized Indian tribes and updated an associated NOAA Administrative Order (NAO 218-8) and the Indigenous Knowledge (IK) guidance. The effective date of this policy is June 28, 2023.



**ADEC Notice of Proposed Changes in Above Ground Storage Tanks Regulations for Class 2 Facilities in Oil and Other Hazardous Substances Pollution Control:** On June 22, 2023, ADEC issued a public notice on repealing regulations for Class 2 facilities in Alaska that can be viewed [HERE](#). These facilities store non-crude oil in above ground storage tanks with capacities between 1,000 gallons and 420,000 gallons. Recent articles on this can be viewed on Alaska Beacon [HERE](#). Note this does not impact the Valdez Marine Terminal.

**Article 2 of 18 AAC 75 – Financial Responsibility Dollar Amount Update:** On July 5, 2023, PWSRCAC submitted comments on ADEC’s Article 2 Oil Spill Financial Responsibility Dollar Amount Amendments available on ADEC’s website [HERE](#). Comments submitted by PWSRCAC and Cook Inlet RCAC are available [HERE](#).

PWSRCAC advocated to retain the requirement that financial responsibility applications should be made under oath or affirmation, and that certification of oil production facility’s maximum daily production of oil that determines the required amount of financial responsibility be notarized. PWSRCAC supports the increase in the Consumer Price Index (CPI) and further advocates that the adequacy of the updated base amounts be assessed to ensure that an operator has the financial ability to respond to damages caused by a spill.

#### **Outstanding Questions or Issues:**

**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 had planned 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. On June 27, 2023, the City of Valdez argued in front of the Alaska Supreme Court in the City of Valdez vs. the Regulatory Commission of Alaska. A decision by the Supreme Court will be issued at a future time.

### **6510 – Contingency Plan Review**

**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:**

##### ***PWS Tanker C-Plan:***

The Prince William Sound shippers submitted a major amendment to the PWS Tanker C-Plan and associated vessel response plans in September 2023. The amendment is proposing to update the plan to conform to the contingency planning regulatory changes in 18 AAC 75 in early 2023 as follows:

- Replacement of Mineral Creek lightering barge with OSRB-5 and associated reduced volume for

- storage
- Changes to the plan to align with new regulations
  - Administrative edits
  - Whether the required information is provided to establish that an operator has “primary operational control” of vessels in the plan

#### **VMT C-Plan:**

The public review for the 5-year renewal of the VMT C-Plan began in November with comments due mid-December 2023. There will be a presentation at the January 2024 PWSRCAC Board meeting on that review.

As part of that renewal and to address conditions of approval on secondary containment from the 2019 VMT C-Plan renewal, Alyeska is required to identify a method to evaluate the integrity of the catalytically blown asphalt (CBA) liner/secondary containment in the East Tank Farm by October 2023. Alyeska plans to use **Geoelectric Leak Location (GELL)** as a method to evaluate portions of CBA liner in the East Tank Farm. GELL can be used to characterize the liner by locating and identifying any defects or perforations that may be present in a survey area only on the CBA liner. Alyeska proposes to do a pilot study in the West Tank Farm (out of service) to calibrate the GELL method prior to implementation in East Tank Farm. There are four out-of-service crude oil storage tanks in the West Tank Farm and 14 in-service crude oil storage tanks in the East Tank Farm.

#### **6512 - Maintaining the Secondary Containment Systems at the VMT**

**Objectives:** This project entails promoting methods Alyeska could use to verify the integrity of the secondary containment systems at the Valdez Marine Terminal’s (VMT) East Tank Farm, otherwise known as the catalytically blown asphalt (CBA) liner. The goal of this project is to ensure that the buried CBA liner at the VMT will hold spilled oil long enough to be cleaned up prior to ground or surface water contamination.

**Accomplishments since last report:** Alyeska submitted their preliminary selection for testing methods on the secondary containment to ADEC on September 25, 2023.

Council staff worked with Dr. Craig Benson to review Alyeska’s proposal and draft comments on the language of the secondary containment liner testing selection method as part of the VMT C-plan renewal public comment period. These comments reference a letter containing PWSRCAC’s comments with Dr. Benson’s recommendations on the September 25, 2023, 2A preliminary inspection method engineering report. This letter was transmitted to both ADEC and Alyeska on December 15, 2023, along with the VMT C-Plan comments.

#### **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. Replacement components have been ordered and are on-site in Cordova. A purchase order has been issued for the Prince William Sound Science Center (PWSSC) to assemble the weather station.

The conductivity, temperature, and depth (CTD) sensor set up at the Valdez tide gauge station is working well. Our two weather stations at Cape St Elias and Nuchek are operating normally and the camera at Nuchek is working correctly.

The weather station at Kokinhenik Bar on the Copper River Delta has been installed. There will be a site visit to the station sometime in December to tighten anchor bolts, readjust guy wires, and troubleshoot the power system.

### 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:** The Fall service visit was completed, and buoys were placed back on station. Hulls were cleaned, zincs replaced, one wind meter replaced, and new charging cables installed. The next service call will be towards the beginning of May 2024. Contracts for JOA Surveys and PWSSC are in place for FY24.

### 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:** Dr. Rob Campbell of the Prince William Sound Science Center (PWSSC) presented the 2019-2022 Port Valdez Weather Buoy Data Analysis report at the PWSRCAC's

September 2023 Board of Directors meeting, and the Board accepted that report. The project team for this project agreed that a sole source contract with PWSSC to continue doing the Port Valdez Weather Buoy Data Analysis for the year 2023 is the best approach to build on the previous reports. Staff anticipates contracting with the PWSSC again to incorporate the weather data for 2023 next spring, after this year is completed.

#### 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:** The Council’s Peer Listener Manual was updated and revised by contractors and presented to the Board for acceptance at the September meeting.

#### 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:** Staff continues to engage with the ARRT initiated **RSC Task Force**. The task force has met several times since the September Board meeting. Focus has turned to developing the RSC member job aid and PWSRCAC submitted much of material currently residing on our “RSC web resources” website for the participant guide. The group has yet to review this material. It’s anticipated that the RSC task force developed job aids will be incorporated and referenced in the Inland Area plan first. It’s anticipated this plan should be up for public review in early 2024.

Staff continues to track the effort to convert **GRS to a GIS based system** and is updating the OSPR Committee accordingly. At this point, all of the original PDF GRS information has been ported over to the GIS system. The graphics are different and don’t look the same, as GIS systems work best with point data, meaning it’s easy to show boom anchor points for example, but not the actual string of boom between these anchor points. The group continues discussion surrounding how best to verify the accuracy and make updates to this information in light of modern satellite imagery and changing coastlines.

Robida attended a University of Alaska Fairbanks (UAF) sponsored Drone Career Expo on September 28 at the Valdez Elementary School. Robida was contacted about the project approximately two years prior and added input regarding how UAV’s could be used for spill response. UAF developed a curriculum that included input from other local Valdez entities such as the Valdez Native Tribe and Valdez Fisheries, and project videos and lessons were being pilot tested in one of the 4<sup>th</sup> grade classrooms at Hermon Hutchens Elementary School in Valdez to show children that careers exist in this field.

### 7035 - Virtual Meeting with Contracted Response Vessel Representatives

**Objectives:** This project funds a virtual meeting with fleet representatives from each of the ports where vessels are on contract with Alyeska/SERVS for oil spill response. PWSRCAC has conducted similar group meetings face-to-face in the past and they have proved to be a productive way to interact with program participants, assess the overall health of the contracted response vessel program, and inform Alyeska/SERVS of any concerns or potential recommended improvements from the perspective of program participants. Considering both the VMT and PWS Shipper plans rely on these contracted vessels to execute respective contingency plans, it's important that the program remains healthy, that training and exercise activity is engaging and effective, and there are enough vessels under contract to satisfy contingency plan requirements.

**Accomplishments since last report:** Work has not started on this FY2024 project yet. This meeting has historically been held in the spring timeframe; mid-March, prior to annual SERVS fishing vessel training. Staff is amenable to other dates, but is anticipating a similar spring timeframe.

### 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

**VMT On-Land Tactics Exercise – October 27, 2023:** Alyeska conducted an equipment deployment of some of the tactics they could use in the event of an oil spill to land at the VMT. This was a good training deployment for some of the newer TCC contracted responders.

**Kodiak Oiled Wildlife Training – October 9-11, 2023:** Alyeska conducted its annual oiled wildlife training for the Kodiak contracted vessels in their program October 9-11, 2023. This is excellent training that is good for three years and rotates annually between Kodiak, Homer/Seward, and Valdez/Cordova.

**VMT Annual IMT Exercise –October 4, 2023:** Alyeska conducted its annual VMT Incident Management Team (IMT) exercise on October 4, 2023. This exercise was a response to 1,200-barrel spill that was contained in one of the settlement ponds at the VMT. This exercise also included an equipment deployment at the terminal on the same day.

**Valdez Star Exercise – August 2, 2023:** The Valdez Star conducted a skimming deployment exercise in Port Valdez on August 2, 2023. This deployment included three vessels from the Alyeska

fishing vessel program to tow boom and focused on operation of the skimmer and coordinating with the other vessels while making turns.

**OSRB-2 Deployment Training – July 13, 2023:** This training involved SERVS training the TCC crews on the deployment process on the Barge OSRB-2. While it is unlikely the TCC crews would be used on the OSRB barges to recover oil during a spill, the cross-over training is a good opportunity to help the TCC crews understand to processes on board the barges.

**Tanker Washington and Tug Commander Emergency Towing Exercise – July 2, 2023:** The tank vessel Washington conducted an emergency towing exercise with the Tug Commander on July 2, 2023.

**Solomon Gulch Hatchery Boom Deployment – June 28, 2023:** This exercise involved a full deployment of the Solomon Gulch Hatchery. SERVS work vessels and TCC employees conducted the deployment on a day with poor visibility because of fog.

**Solomon Gulch Hatchery Deployment Training – June 24, 2023:** Alyeska deployed the sensitive area protection at the Solomon Gulch Hatchery on June 24. This deployment was focused on training the TCC crew on how to deploy this protection strategy and was an untimed training event.

**Tug Commander Vessel Dispersant Exercise – June 15, 2023:** The Tug Commander's crew demonstrated the dispersant spray system in Port Valdez on June 15, 2023. This is annual training that the tugs Commander and Champion are required perform each year.

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

Marathon Annual Shipper's Exercise – October 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:** Alan Sorum has been researching and following IMO regulatory efforts to reduce greenhouse gases with the Chair of the POVTS Committee.

Sorum has joined a discussion group of scientists, community members, emergency managers, and others interested in mitigating the hazards presented by landslides, especially those that generate tsunamis.

Sorum has been working with the City of Valdez to convey the importance of Port Valdez to the Alaska Delegation members and the need to provide a replacement Coast Guard Cutter in Valdez.

Working with AOOS, we were able to apply extra funds from the CTD sensor grant to help fund the weather station on the Copper River Delta.

### 8018 – State of the Industry: Advances in Escort Tugboat Technology and Regulatory Framework

**Objectives:** This project proposes to review current global advances being used in the design of capable escort tugboats and regulations requiring the use of these vessels.

**Accomplishments since last report:** This project was deferred due to a lack of responses from the RFP.

### 8025 – Vessel Operator Tsunami Hazards Guidance Workshop

**Objectives:** The goal of this project is to convene a 2-day workshop, with participants representing a diversity of vessel operators, emergency management, and the scientific study of tsunami impacts. Work products generated by the event will include preliminary guidance for vessel operators facing the threat of a tsunami and a list of research topics that could improve future guidance. The proposed guidance will be designed to be applicable in Prince William Sound and similar areas that have complex steep shorelines, and which face the potential of landslide-generated tsunamis.

**Accomplishments since last report:** A facilitation contract with Nuka Research and Planning Group has been completed. Dates have been set for June 3-4, 2024. The workshop is being held in concert with the AlaskaEX24 Statewide Tsunami Exercise to be held in Valdez on May 29-30, 2024. A save the date email has been sent out to potential attendees.

### 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 comprehensive search of NTSB accident and incident reports has been completed. Reports were considered relevant to this review if communication or language was explicitly or indirectly identified as a contributing or causative factor in the accident or incident. Forty-one reports were identified as relevant and are currently undergoing thematic analysis.

A comprehensive literature search for empirical and synthetic articles in applied linguistics and maritime communication, as part of Phase 1, is scheduled to be delivered in December 2023.

### 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. Science Night 2023 successfully took place on November 30 in Anchorage,

with 95 attendees hearing talks from four speakers presenting on diverse topics related to the EVOS region.

#### 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:** The final report from the March 2023 surveys was presented to the Board for acceptance at the September meeting. All data from the survey was uploaded to AOOS and NOAA's ERMA platform for use by the public and spill responders.

#### 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:** 2023 was an “expanded” LTEMP sampling year, where environmental samples were collected from Port Valdez as well as additional monitoring stations in Prince William Sound. Analytical results from samples shipped to various laboratories for analysis were received this fall. Staff from Owl Ridge Natural Resource Consultants interpreted the data and drafted a summary report and technical supplement for SAC's review and comment. The final report and technical supplement will be presented to the Board at the January meeting. LTEMP celebrated 30 years in 2023, and a history of the program was presented at Science Night.

#### 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:** The final report and executive summary were presented to the Board at the September meeting. SAC intends to further discuss the results with the contractor this winter.

#### 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:** Settlement plates were successfully retrieved by the contractor via vessel and floatplane charters in late September throughout Prince William Sound. Preliminary analysis took place in Cordova at the Prince William Sound Science Center. A complete analysis and draft report are expected early summer 2024.

#### 9521 - Marine Invasive Species Internship

**Objectives:** Support local students to monitor for invasive species potentially arriving in the PWSRCAC region from tanker ballast water and biofouling. Target species include European green crab and tunicates in the communities of Valdez, Cordova, and Kodiak.

**Accomplishments since last report:** High school students in Valdez and Kodiak monitored for invasive species throughout the summer. Fortunately, none were found. Intern Noah Schrof from Kodiak presented his project virtually at the Alaska Invasive Species Partnership Workshop to an audience of approximately 100 people.