



COOK INLET REGIONAL CITIZENS ADVISORY COUNCIL

BOARD of DIRECTORS MEETING

AGENDA

Friday, December 3rd, 2021

For meeting details, please visit our website at www.circac.org
or contact ShaylonCochran@circac.org.

9:00 am

Call to Order/Roll Call

Approval of Agenda *(Action Item)*

Approval of Minutes – September 10, 2021 Board of Directors Meeting *(Action Item)*

Welcome & Introductions

Agency Ex Officio Directors Remarks

CIRCAC Member or Public Comment

(3 minute limit per speaker)

9:30 am

Presentations on Related Activities

- Update on Regulatory Review – Jason Brune, Commissioner, AK Dept. of Environmental Conservation
- Update on Operations – Captain Marc Bayer, Marine Operations Director, Marathon Petroleum

10:50 am

Executive Committee Report

- Proposed 2022 Operating & Program Budgets
(Action Item)

- 2022 CIRCAC Board Meeting Schedule
(Information Item)

11:20 am **Executive Director's Report**

11:45 am **Staff Reports - Status of Programs & Projects**
(Information Items)

- Public Outreach
- Environmental Monitoring
- Prevention, Response, Operations and Safety
- Protocol Control
- Administration

12:15 pm **Calendars & Miscellaneous** *(Information Items)*

- AK Marine Science Symposium – Jan. 25-27, virtual
- AK Forum on the Environment – Feb. 7-10, virtual

Closing Comments

12:35 pm **Adjourn**
(est.)



**Board of Directors
December 3, 2021**

Information Item

AGENDA ITEM: 2022 Board Meeting and Annual Meeting Dates

DESCRIPTION OF AGENDA ITEM:

Council Policies detail the annual process and timetable for filling positions on the Board of Directors and for Public Member committee seats, as these terms expire on a three-year rotating basis. The process for the elections and/or appointments of each seat involved in 2022 is undertaken by staff, working backwards on a 120 day timeline from the Annual Meeting. In addition, when in-person board meetings are held, Council staff requires the maximum amount of time to facilitate the meeting and the logistics of location, travel, lodging and meals.

Staff has reviewed the 2022 calendar for federal holidays, religious-affiliated holidays, and events for regional organizations' calendars in an attempt to avoid conflicts.

RECOMMENDED ACTION:

MARK YOUR CALENDARS. Though at this writing all CIRCAC meetings are being held remotely via tele- and videoconferencing, this recommendation presumes the possibility of a return-to-normal rotational meetings. The Executive Committee has approved the following meeting schedule dates and locations (times TBA) for 2022:

Friday, April 8	Kenai	Board of Directors and Annual Meeting
Friday, Sept. 9	Seldovia	Board of Directors
Thurs-Fri, Dec. 1-2	Anchorage	Board of Directors

Public Outreach Report – Nov. 2021

Advertising

Paid advertising continues to be the main avenue for public outreach, with event plans for 2021 largely cancelled. A scaled-down version of our radio campaign that was started in 2020 will be reevaluated for possible continuation through the winter as in-person outreach opportunities remain limited due to COVID-19-related restrictions. We've also continued some print advertising projects, with ads in special editions of the Peninsula Clarion and Alaska Business Magazine in addition to annual appearances in local Chamber of Commerce travel guides.

Project Planning

Staff have begun preliminary planning with partners at Nuka Research for an informational video to be produced in 2022.

Training/Meetings

Public Outreach staff participated in the Pacific States/British Columbia Oil Spill Task Force annual meeting and awards ceremony in an online format Nov. 17. Additional training for Incident Command Systems is planned for later this fall, to include 300-level training. This has also been a good time to log additional training via free, online video tutorials for graphic design, allowing more in-house production of outreach materials including the annual report, fact sheets, flyers, etc. Staff has also begun a comprehensive review of the CIRCAC website for possible updates.

Newsletters

September – No newsletter

[October](#) - CIRCAC Science Director named Legacy Award winner; BOEM announces upcoming public comment period for federal lease sale in Cook Inlet; Hilcorp completes pipeline work; CIRCAC secures BOEM grant.

[November](#) – DEC Public comment period opens; Randolph Yost departs Cook Inlet; *F/V Laura* response; BOEM Lease Sale public comment notice; scholarship applications open

Scholarships

The annual scholarship program officially launched on November 16. Jerry Rombach will remain the primary contact for the program this year with Shaylon taking a larger role in outreach and administering the program, working with applicants and the committee.

EMC Update – background and update* since Sep. 2021 board meeting **Staff Report: Susan Saupe**

(* For quick update, skip background and earlier 2021 updates and focus only on the bolded “December 2021 Update” section under each project).

Chemical and Biological Monitoring Program

1. On-line Data Access

Background: A robust CIRCAC on-line data-access tool is a high priority and we have been working with various contractors and partners to compile disparate datasets into an integrated database for query on-line. This is a complex problem given that studies differed in their sampling locations and dates, properties or analytes measured, sample matrices, field and analytical methods, etc...In 2016, CIRCAC submitted a study plan idea to BOEM to compile and provide on-line data access to Cook Inlet contaminant data. In BOEM’s 2021 Annual Studies Plan, they indicated their intent to support a project titled *Synthesis of Contaminants Data for Cook Inlet: Evaluation of Existing Data as “Baseline Conditions” and Recommendations for Further Monitoring*. **September 2021 Update:** On April 5th, we were notified that a sole source Notice of Funding Opportunity (NOFO) for CIRCAC was published that day on Grants.gov from BOEM (Opportunity number M21AS00345). A full proposal and three-year budget was due on May 5th. CIRCAC identified a team of contaminant experts and database developers and submitted a study proposal to:

- a. Conduct a meta-analysis of existing contaminant data sets to evaluate the comparability of prior statistical designs and analytic methods and, when combined, as representative of baseline conditions in the Cook Inlet area
- b. Identify and compile appropriate organic and inorganic contaminant data (e.g., hydrocarbons, metals, U.S. EPA priority pollutants, and technologically enhance naturally occurring radioactive material [TENORM]), as well as a comprehensive list of any known or potential contaminant sources for the Cook Inlet area.
- c. Compare contaminant data against Federal and State regulatory or other scientific threshold levels.
- d. Recommend a study approach, including a sampling plan, that would enhance assessing baseline contaminant conditions in Cook Inlet and monitor contaminants in areas potentially impacted by Federal OCS oil and gas related activities.

The study team includes personnel from CIRCAC, Kinnetic Laboratories, Inc. (KLI), Axiom Data Science, Inc., and Payne Environmental Associates, Inc. We were notified over the summer that the technical review was positive and that BOEM was conducting a financial and risk review with the intent to award a three-year contract (total of \$325,000 from BOEM to CIRCAC with additional match from CIRCAC).

December Update: We finalized a Cooperative Agreement (CA) between BOEM and CIRCAC (M21AC00022) in late September for the project *Synthesis of Contaminants Data for Cook Inlet*:

Evaluation of Existing Data as "Baseline Conditions" and Recommendations for Further Monitoring. Our first task under the CA was to submit a Draft Science Plan to BOEM and host a Post-Award meeting with their Contracting Officer and Environmental Studies Program Representative in Virginia and their Program Officer and other staff from the Alaska Regional Office in Anchorage. We completed that document and hosted the Post-Award meeting (virtually) on October 28th and the Science Plan was approved with minor editing. We're finalizing contracts and Scopes of Work for CIRCAC subcontractors and we've begun gathering and compiling historical data sets. Cassandra and Maddie of CIRCAC registered CIRCAC on the required on-line financial reporting and "drawdown" websites for managing payments from BOEM and to our sub-contractors.

2. Exploring radium isotopes as tracers of groundwater inputs, flushing rates, and produced water in Cook Inlet:

Background: EMC is supporting work by Dr. William Burt of UAF to conduct baseline surveys of Radium isotopes across Cook Inlet to assess the potential utility of Radium as a freshwater tracer and estimator of residence time for Inlet waters. Dr. Burt received most of his funding through the Coastal marine Institute (CMI) and is also collaborating with Principal Investigators at the University of Hawaii, Kachemak Bay Research Reserve, and the Ocean Acidification Research Center at UAF. His initial pilot project was planned for Kachemak Bay and is testing methods and looking at radium isotope signatures along a glacially influenced gradient. The original plan was that in Year 2 or 3, an exploratory radium survey would take place in Cook Inlet, refined by information gained from the pilot study. Overall, the project aims to highlight the significant value of radium isotope monitoring in the Cook Inlet region by using these isotopes to address multiple key questions and issues for both BOEM and the oceanographic community. CIRCAC's match towards the project will support: (1) sampling within and at the mouths of major rivers to characterize river and groundwater end members, (2) collecting sediment grabs and suspended particle samples to approximate sediment and particle fluxes, (3) sampling along a transect out of the Inlet to assess surface water concentrations of radium isotopes inside/outside the Inlet as well as the offshore transport, and (4) sampling along surface transects in close proximity to a produced water discharge source to examine a produced water signal. **March 2021 Update:** Though Dr. Burt's project team faced significant challenges for sampling in 2020 due to COVID restrictions, they were able to sample in Kachemak Bay in September 2020. Dr. Burt presented his research at the virtual Kachemak Bay Science Conference that took place in March 2021. Our future Cook Inlet project will build on the work that he has done in Kachemak Bay (also see attached email). **September 2021 Update:** So far, Dr. Burt's UAF field team successfully completed three sampling campaigns in Kachemak Bay; in September 2020 and May and July, 2021. Additional funding is allowing a dual-tracer approach since radium and radon each have specific advantages as tracers of land-ocean interaction. The Kachemak Bay portion of the overall study is quantifying groundwater nutrient fluxes (using radon primarily) along with flushing rates (using radium) in Jakolof Bay, a predominantly mud-flat dominated sub-bay within Kachemak Bay, including seasonal and tidal cycle variability. Combined with prior radium-based studies in rocky beach environments near Kasitsna Bay, as well as literature data, the results will be extrapolated across Kachemak Bay and the Gulf of Alaska. Further sampling across Kachemak Bay will explore how radium isotope

inputs vary with watershed characteristics, local geology, and circulation patterns. The focus of the study so far has been Kachemak Bay, but sampling in the more logistically challenging areas of Cook Inlet will begin in 2022.

December 2021 Update: We've been in discussions with Dr. Burt about sampling in Cook Inlet in 2022. Plans are still being worked out, but sampling will likely take place over a several day period in May to measure background radium isotope concentrations.

3. Oxidized Petroleum Contaminants in Cook Inlet

Background: We will be coordinating with Dr. Pat Tomco of UAA to assist his research to more accurately assess the extent of potential petroleum-derived contaminants in Cook Inlet by including oxygenated PAH compounds (oxyPAH) in a pilot sampling program in Cook Inlet. Since the DeepWater Horizon oil spill, oxyPAHs have been identified as priority chemicals that should be monitored following an oil spill. However, in cold waters, these chemical compounds are poorly understood. Challenges to this research include the high cost of analyses, applications are still being developed, and there are limited contract laboratories who can conduct the analyses. This opportunity to collaborate will allow CIRCAC to expand our hydrocarbon monitoring efforts to include these additional contaminants. EMC's FY2021 budget allocated funds towards this project as the characterization of oxy-hydrocarbons is a natural collaboration for our long-term monitoring efforts to understand the fate and transport of petrogenic compounds in the Gulf of Alaska. **March 2021 Update:** Dr. Tomco received an additional award from the ConocoPhillips Arctic Science and Engineering Fund for "Oxidized petroleum detection in Alaska: Water, sediment, and biological tissues." His project will advance tools and techniques for tracking oxidized petroleum residues that result from spilled oil in the Alaskan marine environment and will characterize baseline levels of oxidized petroleum residues in water, sediment, and biological tissues in Cook Inlet. **September 2021 Update:** Dr. Tomco is ready to execute his BOEM-funded study *Hydrocarbon Oxidation Products in Cook Inlet: Formation and Bioaccumulation in Mussels* by beginning laboratory experiments on the bioaccumulation of photo-oxidized Cook Inlet crude oil in Cook Inlet mussels. Due to one of the Principal Investigators leaving the Alaska Sea Life Center where the original experiments were to take place, the negotiations/agreements for covering the nonfederal match pushed back the timeline so sampling could not be coordinated with other partners this summer. Since CIRCAC had previously committed to match this project for the collection of Cook Inlet samples, we committed to covering costs to collect, store, and transport samples from Kachemak Bay this fall. Additional collections are planned for the west side of Cook Inlet in 2022.

December 2021 Update: For Dr. Tomco's project *Hydrocarbon Oxidation Products in Cook Inlet: Formation and Bioaccumulation*, we helped arrange and paid for logistical costs for mussel collections in Kachemak Bay and transport of the samples to Seward in October. In addition to the work Dr. Tomco's lab is doing to identify oxyPAH chemical characteristics using Cook Inlet crude, the mussel samples will provide new information on the bioavailability and bioaccumulation potential of oxyPAH.

Coastal Habitat Mapping Program

Alaska ShoreZone

1. ShoreZone Imaging, Mapping, and Website

Background: CIRCAC has sponsored ShoreZone aerial surveys and mapping since 2001 when we initiated the Alaska program in Cook Inlet and demonstrated a pilot version of an on-line data and imagery portal. Unfortunately, it means that our earlier surveys are also the oldest surveys done in Alaska, using the oldest technology. Though we were able to fund resurveys of all of Cook Inlet in 2009, some of the shorelines in our areas of concern have low resolution imagery mapped onto low resolution digital shorelines. The Alaska ShoreZone Program is currently administered and hosted by NOAA (<https://www.fisheries.noaa.gov/alaska/habitat-conservation/alaska-shorezone>) and recently transitioned from flash to javascript for accessing the on-line data and imagery (https://alaskafisheries.noaa.gov/mapping/sz_js/).

The Alaska Ocean Observing System (AOOS) also serves ShoreZone habitat data and shoreline imagery through their on-line data portals in a way that allows integration with dozens of other data layers. This AOOS functionality is what allowed us to develop the Cook Inlet Response Tool (CIRT) with AOOS to access ShoreZone imagery and data along with other information used for oil spill planning and response (<https://portal.aos.org/cirt.php>). CIRCAC has funded redesign of the Shore Station Database and added all of the newest shore stations from the Alaska Peninsula surveys (described below). **March 2021 Update:** EMC has set aside funding to resurvey the outer Kenai Peninsula coastline and will be conducting that survey in summer 2022. We are able to leverage additional funding from the National Park Service (NPS) to extend the survey further east and ensure that we capture the shorelines of the Kenai Fjords National Park. **September 2021 Update:** Originally planned for surveying in 2020, we again had to cancel the surveys in 2021 when our Canadian contractors made the call in April to postpone due to the fact that they were behind the U.S. in vaccine availability. We are now planning to prioritize the outer Kenai Peninsula shoreline survey for May 2022. In April, Mike and I submitted project proposal requests to Senators Murkowski and Sullivan and Representative Young for ShoreZone projects to support oil spill planning and response. We were able to schedule webinar presentations of our study requests with Sen. Murkowski and her staff and Rep. Young and his staff on April 23 and May 13, respectively.

December 2021 Update: Vessel and aerial surveys are scheduled for summer 2022 along the outer Kenai Peninsula. We are also working to identify funds and partners to update ShoreZone surveys along the norther Kodiak Island archipelago.

2. Shore Station Surveys and Database

Background: Along with the ShoreZone aerial surveys and habitat mapping, we have conducted on-the-ground surveys at hundreds of sites throughout our areas of concern. These shore station surveys provide detailed species-level information and verification of

geomorphology for sites of differing substrates and wave exposures in areas where we conduct the aerial surveys. These sites have been compiled since 2001 and now include hundreds of sites throughout the Gulf of Alaska. With our contractors at Archipelago Marine Research Inc. (ARCHI) and Coastal and Ocean Sciences, Inc. (CORI), CIRCAC worked with NOAA to develop the Shore Station database that is linked on-line on the NOAA ShoreZone website. In 2020, we developed our contract with ARCHI to redesign the data access to the shore station data and coordinated with NOAA to bring in new shore station data and update taxonomic codes and other ShoreZone descriptors to match changes made to the ShoreZone habitat mapping protocols. The existing database, with its update taxonomic tables, has also been moved to the javascript site described above. **March 2021 Update:** Our contractors at ARCHI have been working with NOAA to complete our contract tasks and so far have (1) added a new region and appended the Alaska Peninsula 2016 data to previous tables; (2) added new Bioband codes into the look-up tables and new fields to the species code tables that will allow users to search at various taxonomic levels, morphological codes, and feeding strategies; (3) compiled a new data dictionary, and (4) begun compiling higher taxonomic levels in the master species database table for all taxa listed for all (several hundred) shore stations (note that this has been completed for the Alaska Peninsula sites).

September 2021 Update: Our original contract with ARCHI for updating the Alaska ShoreZone Shore Station Database included tasks a-d:

- a. Web-post the AK Peninsula sites to the new online NOAA Javascript ShoreZone site
- b. Update master species list in ACCESS database
- c. Assemble and check station photos
- d. Conduct a pilot project to integrate ShoreZone shore station data into Alaska Ocean Observing System data portal using Alaska Peninsula data.
- e. Expand database to include historical Gulf of Alaska shore station survey data and photographs and prepare data for serving on Alaska Ocean Observing System data portal.

We've paid for completion of tasks a-c, but adjusted the budget along the way to incorporate additional sub-tasks. We will work with ARCHI to identify goals, timelines, and budgets for tasks d and e (which was originally on hold until completion of tasks a-d), pending approval by EMC.

December 2021 Update: No activities since September.

3. Environmental Sensitivity Index (ESI) Maps:

Background: ESI data and maps provide shoreline habitat and shoreline use data to aid in oil spill planning and response. The data collected for ESI goes hand-in-hand with the imagery and data reported by ShoreZone methods and we have worked hard to integrate the two programs. With budget shifts within NOAA, they are looking to better coordinate ESI with related datasets and how best to focus future data updates and methods of serving the data to the oil spill planning and response community. They hosted a series of four review meetings for NOAA's ESI program in the fall of 2020 where we learned how other coastal states are working to update their ESI data and maps. Based on discussions during the first two of those national meetings, we

had an Alaska-focused meeting on November 13th with CIRCAC, PWSRCAC, the Oil Spill Recovery Institute (OSRI), AOOS, and several agencies to discuss potential ways to integrate ShoreZone and ESI data into AOOS data portals. We will be following-up on some of the ideas brought forward and CIRCAC may lead a Cook Inlet demonstration project. **September 2021 Update:** I participated in a virtual meeting on June 11th with multiple agencies and organizations to discuss priorities for updating ESI information in Alaska, particularly in the Cook Inlet region. It is unlikely that NOAA will get the funding to update maps in the traditional method, but in moving forward we need to ensure that we follow ESI guidelines in a way that makes the data recognizable and integratable with prior ESI mapping efforts; while taking advantage of higher resolution imagery, updated digital shorelines, and new on-line tools. Leading up to the July 2021 OSRI Workplan Committee meeting, the OSRI Science Director and I identified priorities and potential projects for an OSRI-led project. The OSRI Committee (of which I am a member) did list ESI map updates for the Cook Inlet region as a priority project for their FY22 budget and, if approved by the full Board, will integrate with ShoreZone imagery and data to be served by NOAA's Environmental Response Management Application (ERMA), as well as integrated with AOOS data portals.

December 2021 Update: The OSRI full board did approve funds towards two ESI-related projects. One will look at the potential replacement of older ESI shoreline data with the most recent and/or highest resolution shoreline data available for an area when updating ESI maps for oil spill planning and response – using Cook Inlet as a focus area. The other project would update shoreline use data in the Cook Inlet area, and will focus on seasonal bird distributions. The EMC allocated funds to support the “cross-walk” of ShoreZone and ESI data.

Macrocystis Kelp

Background: Since our last survey of the Kodiak, Afognak, and Shuyak Island *Macrocystis* beds, additional reports of *Macrocystis* kelp in the western Gulf of Alaska have been reported, including the east side of Afognak Island and near Sand Point in the Shumagin Islands, which is a western range extension. This kelp grows in thick beds very near shore and has implications for oil spill risk and oil retention, and is likely to respond to changes in sea surface temperature and circulation related to climate change. **March 2021 Update:** Kelp frond samples that we collected in 2009 and preserved are going to be analyzed by a group of researchers through a project of the University of British Columbia, University of Victoria, and the Hakai Institute. They have the samples in-hand and will be analyzing them along with samples I collected opportunistically from southeast Alaska. CIRCAC's *Macrocystis* kelp mapping surveys are currently on-hold and may take place in summer 2021 or spring 2022. **September 2021 Update:** Surveys did not take place in summer 2021 and are being planned for 2022. A full survey to track the expansion of *Macrocystis* in the western Gulf of Alaska was proposed to our Congressional Delegation this spring, along with the expanded ShoreZone surveys.

December 2021 Update: There has been considerable recent interest in natural kelp distributions in the Gulf of Alaska, following the intense interest in kelp mariculture. So far, only two species of seaweed are being cultivated in Alaska—sugar kelp (*Saccharina latissima*)

and ribbon kelp (*Alaria marginata*). There is growing interest, however, in the potential cultivation of giant kelp (*Macrocystis pyrifera*). Due to the growing seaweed mariculture industry in Alaska, there is a need to understand potential impacts to other species and habitats. In October, the EVOS Trustees Council announced their decisions for their FY2022-2031 workplan funding. The plan includes two projects related to mariculture in our areas of concern in the western Gulf of Alaska: “*Social, cultural and economic assessment of kelp mariculture opportunities for coastal villages within the EVOS spill zone*” and “*Sustainable mariculture development for restoration and economic benefit in the EVOS spill area.*” Though our interest is in better shoreline habitat data for environmental risk assessments and oil spill planning and response, we may be able to leverage our funds to map natural *Macrocystis* beds with some of the planned studies associated with those larger projects.

Cook Inlet Response Tool (CIRT)

Background: Since our Cook Inlet Response Tool (CIRT) was migrated along with hundreds of other data sources to AOOS’s Next Generation User Interface, we will continue to use the on-line tool for oil spill planning and response and provide training to potential users. **March 2021 Update:** As mentioned above, we have been discussing the potential to integrate ESI data into the CIRT tool and had our first teleconference in November 2020. We will be working with OSRI to identify potential funding to move forward with a demonstration project. We currently have numerous data sets that we would like to integrate into the CIRT tool, including potentially ESI data, but also the ShoreZone shore station data and our hydrocarbon and water quality data. We plan to integrate with the new project by BOEM to compile Cook Inlet hydrocarbon data in a new partnership to include historical and recent Cook Inlet data. **September 2021 Update:** We had a teleconference with AOOS in June and the proposed OSRI ESI project will look to integrate and serve ShoreZone and other ESI data layers in CIRT and other AOOS data portals.

December 2021 Update: Axiom Data Science, the database and on-line platform developers who support the AOOS program, will be working with CIRCAC to develop on-line data access, mapping, and visualization tools for Cook Inlet contaminant data project with BOEM that began in late September. These data will be accessible through the CIRT portal and/or research workspace.

Physical Oceanography Program

Cook Inlet Ocean Observing

Background: AOOS requested input into their 2022-2027 five-year plan for Alaska ocean observing. Since 1999, EMC has supported or conducted physical oceanographic research to help better understand Cook Inlet’s circulation towards improving future oil spill trajectory model forecasts. We’ve supported satellite drifter buoys, Acoustic Doppler Current Profiler (ADCP) deployments, High Frequency ocean surface current radars, current meter deployments, and hydrographic surveys. Our goal was to partner with agencies and CIRCAC’s PROPS

committee to develop a high resolution three-dimensional on-line accessible circulation model that can be further developed into a particle trajectory/oil spill trajectory model. In 2019, NOAA's Cook Inlet Operational Forecast System (CIOFS) circulation and hydrographic model transitioned from developmental mode to operational mode after a decades-long effort by NOAA that started with deployments of current meters and Acoustic Doppler Current Profilers (ADCPs) throughout the Inlet. The model is currently running in operational mode and every six hours provides forecasts for sea surface height and three-dimensional currents, temperature, and salinity based on inputs of meteorological and hydrological conditions. Its scope includes Cook Inlet and Shelikof Strait. This model can be used operationally by NOAA's Office of Restoration and Response for oil spill modeling in the event of a significant spill. At this time, CIOFS is not available for web-access or public use. As well, verification of the model needs to be conducted and in the paucity of recent oceanographic observations or real-time measurements, a hind-cast analysis against historical data sets will help identify model strengths and weaknesses. **March 2021 Update:** CIRCAC's subaward proposal to AOOS was titled "*Cook Inlet Ocean Observing and Hydrographic Modeling to Support Oil Spill Prevention and Response*" and was submitted to AOOS in December 2020 for subsequent submission to the national IOOS program. Our overall goal of the proposed 5-year plan is, through a multi-agency coordinated effort, to test and improve ocean circulation modeling in support of a sustained, accessible oil spill trajectory model for Cook Inlet maintained and served on an AOOS on-line portal. Specific goals included:

1. Establish a collaborative effort to evaluate the effectiveness of Cook Inlet circulation forecast models (with a focus on NOAA's Cook Inlet Operational Forecast System (CIOFS) and BOEM's Regional Ocean (ROMS) Model), assess critical observing gaps, fill data gaps, and conduct model hindcasts for model validation and improvements.
2. Coordinate with AOOS, UAF, and BOEM to deploy High Frequency (HF) Radar systems in Cook Inlet to provide near real-time measurements of surface flow fields to ensure that both the CIOFS and the ROMS models accurately model Cook Inlet's complex oceanography, especially in the lower and middle Inlet and its boundaries.
3. Collect synoptic CTD data along two cross-Inlet transects, between the Forelands and east of Kalgin Island, with vessel-mounted ADCP, to ensure that models more accurately represent stratification, vertical currents, convergence zones, and north-south salinity gradient.
4. Assemble and deploy a mooring with CTD instruments (bottom and near surface) and upward-looking ADCPs to collect oceanographic data for time scales that capture variability over tidal cycles, seasonally, and inter-annually.

Following that submission, another opportunity arose with AOOS and other partners to develop a proposal to the IOOS Coastal and Ocean Modeling Testbed (COMT) project, to basically address task number 1 above, but in a much more thorough and detailed manner. We developed a project team that included the new AOOS Executive Director, Sheyna Wisdom, Molly and other AOOS staff, programmers from Axiom Data Science who are the developers of all of the AOOS

data portals, several branches of NOAA, including Dr. Kris Holderied of the Kasitsna Bay Laboratory, and CIRCAC.

AOOS submitted our proposal in early March titled “*Coastal and Ocean Modeling Testbed Project: Cook Inlet Ocean Forecast Model (CIOFS): Validation, Enhancement, and Development of Applications (C-VEDA)*.” The overall goal was to improve use and accelerate development of the existing National Oceanic and Atmospheric Administration (NOAA) CIOFS model to meet stakeholder needs. More specifically, our proposed C-VEDA project will C-VEDA will: 1) generate a 20-year three dimensional (3D) hindcast data product from CIOFS and make available an existing hindcast from a second Cook Inlet model; 2) assess model accuracy with detailed model-to-data and model-to-model comparisons; 3) provide recommendations to NOAA for CIOFS improvements based on validation results and stakeholder engagement; 4) develop and test the implementation of CIOFS-based tools and applications to meet stakeholder needs; and 5) implement those applications operationally on the AOOS data system. **September 2021 Update:** The 5-year AOOS budget for CIRCAC to conduct a Cook Inlet ocean observing program was not funded by IOOS. However, AOOS does have funds dedicated towards an HF Radar deployment in Cook Inlet and we’ve met with UAF researchers to discuss options for deployments. Additional funds would be required and AOOS and UAF are looking to EMC and BOEM for partnership opportunities to deploy these near real-time surface current sensors. Also, unfortunately, our proposed partnership project “*Coastal and Ocean Modeling Testbed Project: Cook Inlet Ocean Forecast Model (CIOFS): Validation, Enhancement, and Development of Applications (C-VEDA)*” that was submitted by AOOS to the IOOS Coastal and Ocean Modeling Testbed (COMT) in March 2021 was not selected for funding. We received the detailed reviewer comments and all of us on the proposal team thought many of the review comments were misleading or inaccurate and we submitted a rebuttal and asked for the opportunity to discuss it with the IOOS team. The IOOS team was very responsive and said they appreciated the effort we made to clarify details of our proposal y and we will meet with them virtually to discuss the review and potential for future funding opportunities.

December 2021 update: Members of the proposal team are in continued discussions to see which components of the project we can collaboratively move forward while still addressing our individual organizational needs. Ultimately, we hope to combine resources to conduct a 20-year hindcast to validate the CIOFS circulation model, identify model weaknesses and data gaps, work with NOAA to improve the model, and develop a particle trajectory model as the basis of an on-line, user-accessible oil spill trajectory model for Cook Inlet. At this time, we have dedicated funds from OSRI, CIRCAC (EMC & PROPS), NOAA, and AOOS to conduct various components that were identified in the COMT proposal. OSRI just released a Request for Proposals (RFP) last week based on our discussions to conduct a hindcast analysis and we are anxious to see the proposal responses. I had also submitted a study plan idea to BOEM in December 2020 that outlined some data needs for model validation in Cook Inlet. I also forwarded to BOEM’s Alaska Studies Office the CIRCAC subaward proposal to AOOS for Cook Inlet ocean observing and the collaborative COMT proposal that was submitted to IOOS.

In November 2021, BOEM released their revised FY2022 Alaska Studies Plan that included a study titled “*Cook Inlet Physical Oceanography: Synthesis and Modeling*” based in part on our study plan submission. We will be submitting additional study plan ideas for BOEM’s 2023 plan, but in the meantime will be approaching them with our collaborative group that is already taking steps that overlap with the BOEM Alaska Studies Plan in the hopes of further collaboration and support from BOEM towards this larger effort.

Oil Fate and Effects Programs

Marine Oil Snow in Cook Inlet

Background: We supported research on natural marine snow sedimentation in Kachemak Bay in 2018 and 2019. The research also included studies on the formation of marine snow aggregates and laboratory created marine oil snow. At the Gulf of Mexico Oil Spill Ecosystem Science (GOMOSSES) conference in February 2020, I met with Dr. Nancy Kinner of CRRC and other scientists conducting research on Marine Oil Snow to discuss potential thesis tasks for a new graduate student for the summer of 2020 and to plan proposals and manuscripts. In early 2020, we submitted a Study Plan idea to BOEM through NOAA’s Office of Response and Restoration. Unfortunately, it was not selected for funding.

For summer 2020 fieldwork, we outlined some tasks for a new graduate student that could be done with the graduate student staying at University of New Hampshire (UNH) and not traveling to Alaska due to COVID. These included: (1) compiling data on areas in Alaska’s marine environment where the environmental drivers for the formation of oil-related marine snow potentially exist (e.g. oil spill risk, high primary production, and link to benthic habitat) and (2) having me send carboys of seawater throughout the spring and summer (beginning in April) via Fedex for oil, sediment, and dispersant roller-bottle experiments at UNH. These plans were modified when UNH closed down their university to research through the summer. **March 2021 Update:** With support from CIRCAC, graduate student Quinn Wilkens spent the fall and early winter constructing a large-scale roller table to culture phytoplankton and developing plans with CIRCAC and researchers from CRRC, UNH, and Bigelow Laboratories for experiments where he can vary levels of oil and sediment to observe aggregate sinking velocities in different environmental conditions. To maintain applicability to coastal Alaska, Quinn will use a cold water phytoplankton species seasonally abundant in Alaska, sediment sourced from Cook Inlet, and Alaska North Slope (ANS) crude oil. Settling velocities will be measured using specialized cameras, with the ability to track individual aggregates over time. These experiments will then be paired with resuspension measurements in UNH’s oil flume to determine current velocities required to re-suspend aggregates from the ocean floor after initial settling. Ultimately, this research explores potential pathways in which oil may impact the benthic environment, and aid in informed decision-making during an event. **September 2021 Update:** Quinn has been working on the marine snow settling experiments using a flume tank. I supplied him with Cook Inlet silt samples from the bottom of Kachemak Bay that were archived (frozen) from our earlier Integrated Cook Inlet Environmental Monitoring and Assessment Program (ICIEMAP). His treatments include seawater only, seawater + oil, seawater + sediment, and seawater + oil +

sediment. He will look at settling rates and resuspension in currents with marine snow that includes a phytoplankton species common in coastal Alaska bloom conditions.

December 2021 Update: Quinn worked on building sufficient biomass in his phytoplankton cultures for a series of experiments and is recruiting undergraduates to help with the project. I asked for an update on his fall experiments and he emailed me this:

“The experiments have been going very well, and I have recently completed the last trial for the settling tests. I have conducted 5 official trials (on top of ~15 preliminary trials), gaining lots of settling data, filtration results, and microscopy work. Now that I have run all the trials, I am in the process of analyzing all the settling videos using Image-J particle tracking analysis. The results will include data from 40 different bottles, and I hope to have all the videos analyzed within the next two weeks. After I have completed the video analysis, we will have concrete settling rates for the 4 treatments used (natural marine snow, snow + sediment, snow + oil, and snow + sediment + oil). I have started writing some of my thesis, however I have been waiting for these results to write it completely. Once I complete the video analysis/run some statistics, I would love to have a meeting with you to review our findings.”

Technical Review Program

APDES Permits

1. Background (Cook Inlet General Permit):

We are still awaiting ADEC’s final decision regarding the Cook Inlet general oil and gas discharge permit and I will update you when the final permit is announced. As you know, in 2019, ADEC opened the draft Alaska Pollutant Discharge Elimination System (APDES) **General Permit** to Discharge to Waters of the United States - Oil and Gas Exploration, Development and Production in State Waters in Cook Inlet. We reviewed the permit and associated fact sheet, mixing zone model results, and other associated documents. The Permit would replace the expired 2007 general permit AKG315000 for discharges to state waters. The draft Permit also included mixing zones for discharges from a previously zero-discharge platform. **March 2021 Update:** ADEC has not yet released the final permit. **September 2021 Update:** ADEC has not yet released the final permit.

December 2021 Update: On October 6, 2021, ADEC announced that “APDES GENERAL PERMIT AKG315200 – Oil and Gas Exploration, Development, and Production in State Waters in Cook Inlet has been issued,” effective January 1st, 2022.

2. Background (Osprey Platform Individual Permit):

We are also awaiting a decision by ADEC regarding an Individual Permit that we reviewed in 2019. As a reminder: On April 24th, ADEC announced that they had prepared an Alaska Pollutant Discharge Elimination System (APDES) Draft Permit AK0053309 available for a 30-day public review. This was a proposed **Individual Permit (IP)** for Cook Inlet Energy, LLC, Osprey Platform. This platform was originally developed as a zero-discharge platform for

produced water and has been operating as such since its inception. The General Permit (GP) above also included produced water discharges from the Osprey Platform in the proposed permit, so Cook Inlet Energy likely applied for an IP in case the GP was challenged in court. Comments were originally due on May 27th, just 5 days after the comments on the GP were due. They extended that deadline after receiving numerous requests from CIRCAC and others, though by only 5 days. The review period ended May 31st and CIRCAC comments were presented to the Protocol Committee for review, revision, and approval. **March 2021 Update:** ADEC has not yet released the final permit. **September 2021 Update:** ADEC has not yet released the final permit. December 2021 Update: In their issuance of “APDES GENERAL PERMIT AKG315200 – Oil and Gas Exploration, Development, and Production in State Waters in Cook Inlet,” ADEC intends to include Osprey Platform under the General Permit.

3. Background (KLU Julius R. Platform Individual Permit):

On March 4, 2019, ADEC received an application from Furie Operating Alaska LLC for the reissuance of APDES Individual Permit AK0053686 – KLU Julius R. Platform. Furie subsequently submitted an amendment to the application in November 2019 to include an additional, new discharge of produced water. **March 2021 Update:** ADEC released a draft permit for review in February. CIRCAC submitted a comment letter. ADEC announced that they had approved the final draft permit but it has not yet been posted.

September 2021 Update: The final permit has been posted and available at <https://dec.alaska.gov/Applications/Water/WaterPermitSearch/Detail.aspx?id=20497&v=1>

Additional Activities

1. On September 8th, I gave a tutorial on the use of NOAA and AOOS Alaska ShoreZone data portals and a presentation on their potential use in classrooms. This is for the Chugiak School District and was originally scheduled to be in-person at the Center for Alaska Coastal Studies in Peterson Bay, but it has been revised to a virtual meeting.
2. Participated as an Advisory Board Member of the Oil Spill Recovery Institute (OSRI) during the September 14th Board meeting where we approved the Draft workplan developed by the Workplan Committee (I’m a member) in July.
3. Developed a draft proposed FY2022 workplan and budget for review and discussion by the EMC Meeting on October 1st. The workplan and budget were approved by the committee.
4. Participated as a board member of the Alaska Research Consortium (ARC); I helped draft the 2023-2024 Draft Strategic Plan in early October, which was approved by the full ARC Board on November 19th.
5. Attended virtual ExxonMobil Oil Spill Response Knowledge Transfer Webinar (scheduled for the first Tuesdays of every month). The October webinar was by Steven Lehman titled “*Vulcans versus Humans: Oil Spills and human Perception, Case Studies, Mistakes and Successes.*” The November webinar was by Dr. Ed Owens on “*What we really do on an oiled shoreline response.*”

6. Participated on a webinar for the October 18th Fall Meeting of the Kachemak Bay/Lower Cook Inlet Marine Ecosystems Workgroup where I provided a brief summary of our planned activities in Cook Inlet.
7. Attended (virtually) sessions of the Coastal & Estuarine Research Federation (CERF) and the Western Society of Naturalists (WSN) in early and mid-November, respectively.
8. Attended the (virtual) November 17th Annual Meeting of the British Columbia/Pacific States Task Force.
9. Attended the “You don’t know what you don’t know” NOAA webinar series presentation by Dr. Uta Passow on November 18th where she summarized her research on Oiled Marine Snow during (and following) the DeepWater Horizon oil spill, when marine snow was found to be a transport vehicle for oil allowing the oil to be deposited onto the deep seafloor. Dr. Passow currently focuses on the interactions between oil, dispersants, exopolymers and particles as part of the Multi-Partner Research Initiative under Canada's Ocean Protection Plan. Her earlier research informed almost all oiled marine snow research that has followed, including the research we sponsored in Cook Inlet.
10. Attended the virtual BOEM Public Hearing for Lease Sale 258 on November 18th. I am currently reviewing the Draft Environmental Impact Statement (DEIS) for the Cook Inlet OCS Planning Area Lease Sale 258.

PROPS Staff Report

Ice Monitoring Cameras

As previously reported we have made some changes within the Ice Monitoring Camera Network to improve the systems performance and economy. The ASRC camera had provided fair images of the Inlet near the KPL dock, however that camera and site was no longer available for use and had to be replaced. It has now been replaced with a new (style) camera at the Marathon LNG facility dock. We have also upgraded the ACS circuitry used to transmit the data signal. That changed from a dedicated BXB circuit to a FiWi (Fiber/Wireless) circuit that provides faster speeds and saves on monthly fees. Along with the monthly savings, the new camera location provides a better field of view that includes the Marathon KPL dock face.

Staff worked with Hilcorp to have the offshore camera lenses cleaned to provide clear images as we approached the ice season.

Geographic Response Strategy (GRS)

Staff attended the Arctic and Western Alaska-Area Committee GRS Subcommittee meeting to review subcommittee work. Staff heard an evaluation and summary of the Kodiak GRS field deployment and a project update to the GRS to GIS project. Finally, staff presented the highway/stream crossing GRS data for inclusion in the state's GRS catalog. The 25 stream crossing GRS site visits are tier II GRS sites. The three Tier system used to rank GRS sites begin with the identification and assessment of a site based on location and sensitivities of the location. Tier I sites are generally sites chosen because of their location and one or more of the sensitivity (Environmental, Cultural, Economic, Domestic Water Intake) criterion. Tier II sites are sites that have been visited by response experts (e.g. Agency and OSRSO personnel) to determine if the Tier I tactics are viable and effective. Based on their observations site specifics and tactics are adjusted to meet the GRS sensitivity protection level intended. Tier III sites are sites that have been deployed in a spill response or spill drill or training exercise. Staff is continuing to meet with Agency personnel to determine how CIRCAC can support the GRS program to transfer and verify data to the new GIS format and to improve the current process for vetting updated information for tier one to tier two sites and for tier two to tier three sites.

Geographic Resource Inventory Database (GRID)

Staff has continued to work with our primary contractor and the programming contractor to ensure GRID and its host program, the Cook Inlet Response Tool (CIRT), are up-to-date in both function and data.

Staff began preliminary discussions and provided basic operating instruction to Kenai Peninsula Office of Emergency Management (KPB OEM) personnel to evaluate the GRID for use during Kenai Peninsula emergencies. That trial use revealed some inconsistencies within the program, which our contractors have now addressed and repaired. Since the initial exposure to GRID, the KPB OEM has expressed great interest in using it. Staff will work with the KPB OEM for a more formal introduction and training opportunity for KPB personnel to become familiar with GRID for use in their day-to-day operations.

Marine Mammal Management in Oil Spill Response Workshop

Staff recently attended part of this workshop where we heard about the various stages of marine mammal response for an oil spill and new wildlife regulations adopted in Washington State. The workshop focused on whales, sea otters, seals, and sea lions. Discussion on oil toxicity, wildlife monitoring, deterrence, capture, rehabilitation, and the permits and networks in place were on the agenda. However, the 21st Century Maritime Challenges in the U.S. Arctic webinar was due to overlap and required staff to leave this meeting and sign into the next.

Meeting 21st Century Maritime Challenges in the U.S. Arctic

Staff attended this webinar to hear about the challenges of operating and regulating in the Arctic coupled with the emerging opportunities and increasing presence of other arctic nations. The webinar participants pointed out that the Arctic is truly the world's ultimate frontier, citing the convergence of multipolar governance, unique and harsh climate, and unprecedented challenges. As the U.S. Arctic continues to become both more accessible and more traversed, it is critical that stakeholders have a holistic understanding of the region and the issues surrounding it. While some U.S. operators and many foreign flag operators choose to take advantage of opening Arctic passage; one marine operator in attendance reported that they did not choose to utilize the new Arctic route. The reasoning was based on unreliable navigation charts and routing, dynamic ice conditions and most importantly the lack of response assets. The lack of response assets and other support resources throughout the region played heavily in the discussions. One aspect of response resources that the discussions centered on was the lack of U.S. icebreakers compared to Russian icebreaker availability. Icebreakers provide not only research platforms but also the ability to keep navigational routes open, rescue ice-stranded vessels, and act as command and control platforms during spill events.

Pacific States/British Columbia Oil Spill Task Force

Staff attended a Pacific States/British Columbia Oil Spill Task Force hosted webinar on lessons learned from virtual drills and conducting virtual inspections during the COVID-19 pandemic.

The Task Force, Federal partners and Industry shared their experiences and reported the successes and challenges faced while navigating virtual drills and facility inspections. On day one of the meeting, we heard the industry and agency perspective on virtual drills during the pandemic followed by a panel discussion. The group discussed how the future may look, the state of virtual drills beyond Covid, and how or will virtual drills be incorporated into normal activities. Day two contained discussions of industry and agency perspectives on regulatory requirements, the innovations and technology used to reach compliance in the virtual inspection setting.

Alaska Regional Response Team (ARRT)

As is customary, staff attended the ARRT meeting, hosted virtually. ARRT members presented their various committee reports, which included an EPA update for the National Contingency Plan Sub-part J. Subpart J governs the use of dispersants and any other chemical or biological agent to respond to oil discharges. Noting that the last major revisions were in 1994 (post OPA 90) and that the April 2010 Deepwater Horizon oil spill prompted changes. The January 2015 EPA proposed revisions received over 81,000 total comments, which included CIRCAC's comments. Beginning in the spring of 2020 the EPA began work on a three-pronged approach to final Subpart J rulemaking. This work included a new requirement for monitoring how subsurface or prolonged application of dispersants shall be monitored. Other reports included

Wildlife Protection, Cultural Resources, and Statewide Planning committees, followed by Area Committee updates. The Arctic & Western Alaska Area Committee report included details of an Unmanned Aerial Systems GRS validation exercise scheduled to take place in Kodiak, AK. Following the GRS validation the report discussed GRS transition to GIS and closed with the Case Summary/Enforcement that discussed continued safety measures for operations with COVID-19 restrictions. The Coast Guard's Marine Safety Task Forces' use of an Army National Guard C-12 as part of its statewide operations; and the F/V Saint Patrick response operations in Kodiak's Womens Bay were included in the closing report.

The Geographic Response Strategies (GRS) Sub-committee reported on the work the ADEC has done to convert the GRS catalog to a Geographic Information System (GIS) format. The transition included over 700 GRS pdf files that were digitized into the GIS format. The GIS format will allow updates to be validated and synced to the database, enable the administrator to track updates and QA/QC them. The GIS format allows integration into the Arctic Environmental Response Management Application (ERMA).

Annual Pre-Winter Meeting

Marathon hosted a pre-winter meeting for the maritime community operating in Cook Inlet. At the meeting, each member in attendance present an operational update highlighting improvements or areas requiring improvement for discussion by the group. This process has provided a forum to discuss and improve maritime operations each year. This year staff presented a project update on the Ice Monitoring System. Feedback received from the Southwest Alaska Pilots Association (SWAPA) regarding access to the ice monitoring system that CIRCAC had provided to SWAPA was very positive. Other attendees asked about access to the system. Staff will be meeting with them to discuss the possibility of providing access.

2021 PROPS committee and Staff Accomplishments

The following information is a cumulative summary of staff and committee activities throughout 2021. It is not presented in a linear timeline of occurrences; it is presented in concurrence with the PROPS work plan.

Geographic Response Strategy (GRS)

Staff worked with our contractors and the agencies within the Artic and Western Alaska Area Committee's GRS workgroup to develop 25 stream crossing GRS. Staff met with each of the GRS workgroup members and the Environmental Protection Agency (EPA), to coordinate these GRSs through the development process for eventual approval and inclusion in the GRS catalog.

The 25 stream crossing GRS sites are tier II GRS sites. The three Tier system used to rank GRS sites begins with the identification and assessment of a site based on location and sensitivities of the location. Tier I sites are generally sites chosen because of its location and one or more of the sensitivity (Environmental, Cultural, Economic, Domestic Water Intake) criterion. Tier II sites are sites that have been visited by response experts (e.g. Agency and OSRSO personnel) to determine if the Tier I tactics are viable and effective. Based on their observations site specifics and tactics are adjusted to meet the GRS sensitivity protection level intended. Tier III sites are sites that have been deployed in a spill response or spill drill or training exercise.

As an at large member of the Area Contingency Plan GRS workgroup, staff attended a meeting of the workgroup to discuss the state of the GRS program, the work the U.S. Coast Guard and the Alaska Department of Environmental Conservation did to convert the GRS data into a GIS format. Staff also formally presented the Highway/ Stream crossing GRSs developed last summer for discussion and approval by the workgroup.

Arctic and Western Alaska Area (AWA) Committee Meeting

Staff attended the June AWA committee virtual meeting and heard status reports from the various sub-committees like the Administration Sub-Committee, the GRS sub-committee, Steering Committee, and a Response & Enforcement Case Study report. The most significant subcommittee report came from the GRS Sub-Committee which revealed the recent update to the GRS catalog system.

Other Pollution Response topics presented were Risk Assessment Tools provided by the USCG/NOAA Scientific Support Coordinator (SSC), Katherine Berg, and the Marine Safety Task Force headed up by the U.S.C.G., additional reports on a upcoming GRS validation exercise (held in Kodiak).

One very interesting response to reports came from the Mayor of Brevig Mission (located approximately 70 miles north of Nome on Port Clarence Bay) who reported frequent sightings of drones dropping items into the local waters. The Mayor had asked if these were related to the risk assessment tools or the work of the Marine Safety Task Force or the GRS Validation exercise reported earlier. Likewise, there was another report by an individual from another Bering Strait area community, of a biogenic oil release that was linked to a bird kill. The oil had washed up on the beach followed by a number of dead birds. Samples were sent out for analysis and came back as being biogenic oil, related to fish processing, not petroleum. The birds' death was determined to be caused by the oil. The individual reported that following that incident a large amount of marine debris containing hazardous material washed ashore at the same location. The nature and markings on some of the marine debris indicated possible Russian, Korean, and Japanese sources. The community had hind cast modeling performed and determined the debris and biogenic oil originated from the same approximate location. This area of the Bering Strait is a transboundary area, meaning it shares territorial sea boundaries between Russia and the United States. The Coast Guard is following up with the communities affected to help determine the

origin of the drones, biogenic oil, and marine debris as they may relate to transboundary issues and marine environmental pollution.

Subsequent Arctic and Western Alaska-Area Committee, GRS Subcommittee meetings attended by staff contained an evaluation and summary of the Kodiak GRS field deployment and a project update to the GRS to GIS project. It was at this meeting staff presented the highway/stream crossing GRS data for inclusion in the state's GRS catalog. Staff is continuing to meet with Agency personnel to determine how CIRCAC can support the GRS program to transfer and verify data to the new GIS format and to improve the current process for vetting updated information for tier one to tier two sites and for tier two to tier three sites.

Drill Planning and Exercises

Staff participated in Hilcorp's annual spill/drill exercise planning leading up to the live exercise and field deployment. This exercise had been conducted through a series of virtual workshop segments that culminated in a live tabletop (hosted at CISPRI's command Center) and live field deployment at Hilcorp's Swanson River Field (SRF) facility.

Leading up to the tabletop and field deployment, Hilcorp conducted multiple workshops to address the various Incident Command System sections such as Planning, Operations, and Logistics. The exercise tabletop centered on the SRF operations; a sinkhole impact to the Swanson River Oil Pipeline (SROP) and a flowline (that is regulated by the Alaska Department of Environmental Conservation). Oil back flowed into the rupture area and most of the line fill is released into the environment resulting in a sinkhole. Personnel safety, wildlife safety, and public information and liaison activities were the focus for the tabletop portion of this exercise.

Staff worked with Hilcorp to participate by providing GRID training at the workshop segments for the Planning and Logistics sections and then assisting those sections (virtually) to use the GRID during the drill segment.

Geographic Resource Inventory Database (GRID)

Staff and our primary contractor introduced GRID to the Hilcorp drill planning committee. The GRID was exercised at the Hilcorp Tabletop drill exercise segment. Staff provided GRID training prior to the drill exercise.

Data collection for upper Cook Inlet and Kodiak has begun. Once the upper Inlet data is collected, we will collect data for Kodiak to complete the dataset for CIRCAC's area of responsibility and area of concern. GRID is now available on the Cook Inlet Response Tool (CIRT) for use during emergencies.

Staff, along with our primary contractor has been working with the programming contractor and the Alaska Ocean Observing System (AOOS) to ensure GRID and its host program, the Cook Inlet Response Tool (CIRT), are up-to-date in both function and data. Staff worked closely with Hilcorp and Axiom Data Science, the main programmer for the AOOS platform, CIRT, and GRID to ensure issues encountered during drill exercise workshops were identified and resolved. Repeatable and reliable functionality for end users is paramount to ensure acceptance and use of these tools.

Staff began preliminary discussions and provided basic operating instruction to Kenai Peninsula Office of Emergency Management (KPB OEM) personnel to evaluate the GRID for use during Kenai Peninsula emergencies. Since the initial exposure to GRID, the KPB OEM has expressed great interest in using it. Staff will work with the KPB OEM for a more formal introduction and training opportunities for KPB personnel to become familiar with and use GRID in their day-to-day operations.

Harbor Safety Committee Workgroups

Staff attended virtual meetings for the Harbor Safety Committee (HSC), Workgroup Chair(s), the Harbor Safety Plan (HSP) workgroup, and the Navigation Safety (Nav Safety) workgroup.

Staff acts as the Chair for the HSP workgroup that developed a Harbor Safety Plan, circulated the plan for public and HSC member comments, reviewed, vetted, and approved the results of the information collected. That information included additional information for the Port of Alaska, Port MacKenzie and additional useful phone numbers. The revised/amended plan was forwarded for HSC approval and was published for use by the marine community. The HSP workgroup is now working to repeat the public, and HSC plan review to ensure the plan remains up-to-date.

The most recent Workgroup Chair meeting (held virtually) introduced the new HSC Chair, Mr. Paul Mehler (USCG Capt. Ret., and current Marathon Oil, Port Captain). At that meeting, the workgroup chairs resolved to identify projects that could be readily completed with defined deadlines and to more effectively market the HSP to the marine community.

Vessel Traffic Study

PROPS authorized a vessel traffic study update. This update of vessel traffic in Cook Inlet builds on the previous analyses of vessel traffic in Cook Inlet, with the intent of capturing information over 10 years using Automatic Identification System (AIS) data. Since the last major study of Cook Inlet traffic, which focused on 2010 data, AIS coverage and data quality have improved substantially. While there will always be limitations to this or any other source of information about vessel movements, AIS provides a readily available source of information that can be replicated for periodic updates in the future. This study is currently in draft form and will be reviewed by the Harbor Safety Committee prior to submission to the Council for final approval.

Ice Monitoring Cameras

Staff and our contractors have been working to ensure each of the cameras within the Ice Monitoring Camera Network is functioning. Marathon agreed to allow the installation of a camera on their Nikiski LNG dock. This camera replaced the camera previously located at the ASRC facility. The ASRC camera provided fair images of the Inlet near the KPL dock, however that camera was one of the first camera styles purchased for this project and did not produce the best field of view.

Upon the indefinite shut down at the Osprey Platform staff worked with Cook Inlet Energy personnel and our electrical contractor to remove the camera and data carrier equipment from the Osprey platform. Since the platform had been shut down and at the time no immediate plans to restart, there was no power available to operate the camera. We made the decision to retrieve the equipment to refurbish and reuse as possible. The new camera location provides a better field of view that includes the Marathon KPL dock face and areas west and north of the LNG dock.

Staff has continued to add and delete cameras within the Ice Monitoring Camera Network to improve the system's performance and economy. In that system improvement process, another part of the new camera installation included an upgrade of the ACS circuitry used to transmit the data signal. That change required cancelling the dedicated BXB circuit to a FiWi (Fiber/Wireless) circuit that provides faster upload and download speeds and saves on monthly fees. We are evaluating all of the demobilized equipment to determine if it can be refurbished and reused. Staff is working with ACS to determine if any of the remaining BXB circuits can be upgraded to faster, less expensive circuits for future upgrades.

Our work to include access to the camera system by the Southwest Alaska Pilots Association (SWAPA) marine pilots has been accomplished and is being used frequently. We have also

provided access to view the Ice Monitoring System to the Coast Guard Command Center and to the Marathon Marine Superintendent and view only access to the Port McKenzie camera for the U.S. Airforce to monitor visibility at their approach path. All are very happy to have this great tool for use in their operations. We continue to monitor camera use by NOAA, the U.S. Coast Guard, Southwest Alaska Pilots, and the U.S. Airforce to ensure they are getting the best service the Camera Network can provide.

Streamlined Oil Discharge Prevention and Contingency Plan Regulations

Staff participated in a webinar hosted by the Regulations and Guidance Group of the Alaska Department of Environmental Conservation's (ADEC) Prevention, Preparedness, and Response Program in early December. The goal of the webinar was to familiarize interested stakeholders with amendments to the Oil Discharge Prevention and Contingency Plan (ODPCP) regulations under 18 AAC 75. Streamlined ODPCP regulations for Non-tank vessels have been around for some time. However, this amendment allows Non-crude oil tank vessels and barges with a total storage capacity of **less than** 500 barrels (21,000 gallons) to apply for a streamlined plan. The key here is the incorporation for tank vessels and barges of less than 500 barrels capacity. This will help bring into regulatory oversight smaller vessels transporting refined oil products. This streamlining effort **was not** part of the publicized of the Proposed Regulation Revisions to 18 AAC 75 Article 4 - Oil Discharge Prevention and Contingency Plans.

Alaska Regional Response Team Meeting

As has been customary for staff to attend the Alaska Regional Response Team (ARRT) meeting. With the advent of COVID-19, staff has attended the ARRT meetings virtually which occur on a triennial basis. The ARRT is Tri-Chaired by the USCG, EPA, and the State Of Alaska. At each meeting, the ARRT's member agencies and sub-committees provide presentations of their activity over the previous quarter and forecasted activities for the upcoming quarter and year. The Alaska Region and each of the Area Committees also provide reports for the four Area Contingency Plan Committees (Prince William Sound, Southeast Alaska, Alaska Inland, Artic and Western Alaska Area).

Additional presentations regarding various topics are presented by Industry and Agencies. Some of those topics included dispersant capabilities for Alaska, Alaska Oil and Gas Association updates, and an operational update from Hilcorp.

Concerning dispersant capabilities, the Marine Spill Response Corporation (MSRC) reviewed their current and future dispersant capabilities that include the addition of Boeing 707 jets to their current Hercules C-130 air platforms that will decrease response times and increase response range for aerial dispersant applications. The EPA provided an update of the National Contingency Plan Sub-part J, which governs the use of dispersants and any other chemical or biological agent to respond to oil discharges. Noting that the last major revisions occurred in 1994 (post OPA 90) and that the April 2010 Deepwater Horizon oil spill prompted changes. The January 2015 EPA proposed revisions received over 81,000 total comments, which included CIRCAC's comments. Beginning in the spring of 2020 the EPA began work on a three-pronged approach to finalize Subpart J rulemaking. This work included a new requirement for monitoring how subsurface or prolonged application of dispersants shall be monitored.

Other reports included Wildlife Protection, Cultural Resources, and a detailed report by the Arctic & Western Alaska Area Committee of an Unmanned Aerial Systems GRS validation exercise scheduled to take place in Kodiak, AK and GRS transition to GIS, followed by Case Summary/Enforcement that discussed continued safety measures for operations with COVID-19 restrictions; the Coast Guard's Marine Safety Task Forces' use of an Army National Guard C-12 as part of its statewide operations; and the F/V Saint Patrick response operations in Kodiak's Womens Bay.

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Pacific States/British Columbia Oil Spill Task Force

Staff also regularly attends the Pacific States/British Columbia Oil Spill Task Force meetings. At the November 2021 meeting, along with Jurisdictional Updates, Work Plan Updates, Case Studies, and a Panel Discussion on Climate Change. Staff also had the honor to see our Director of Science and Research, Susan Saupe, receive a prestigious Legacy Award. Every two years, nominations are solicited for candidates (individuals, teams, and entities) that have carried out exemplary work in the field of oil spill prevention, preparedness and response. This award serves as the Task Force's recognition for outstanding work and accomplishments to foster best practices, to support and protect communities, and to protect the environment.

Earlier in the year, staff attended a Pacific States/British Columbia Oil Spill Task Force hosted webinar on lessons learned from virtual drills and conducting virtual inspections during the COVID-19 pandemic.

The Task Force, Federal partners and Industry shared their experiences and reported the successes and challenges faced while navigating virtual drills and facility inspections. On day one of the meeting, we heard the industry and agency perspective on virtual drills during the pandemic followed by a panel discussion. The group discussed how the future may look, the state of virtual drills beyond COVID, and how or will virtual drills be incorporated into normal activities. Day two contained discussions of industry and agency perspectives on regulatory requirements, the innovations and technology used to reach compliance in the virtual inspection setting.

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Meeting 21st Century Maritime Challenges in the U.S. Arctic

Staff attended this webinar to hear about the challenges of operating and regulating in the Arctic coupled with the emerging opportunities and increasing presence of other arctic nations. The webinar participants pointed out that the Arctic is truly the world's ultimate frontier, citing the convergence of multipolar governance, unique and harsh climate, and unprecedented challenges. As the U.S. Arctic continues to become both more accessible and more traversed, it is critical that stakeholders have a holistic understanding of the region and the issues surrounding it. While some U.S. operators and many foreign flag operators choose to take advantage of the opening Arctic passage; one marine operator in attendance reported that they did not choose to utilize the new Arctic route. Their reasoning was based on unreliable navigation charts and routing, dynamic ice conditions and most importantly the lack of response assets. The lack of response assets and other support resources throughout the region played heavily in the discussions. One aspect of response resources that the discussions centered on was the lack of

U.S. icebreakers compared to Russian icebreaker availability. Icebreakers provide not only research platforms but also the ability to keep navigational routes open, rescue ice-stranded vessels, and act as command and control platforms during spill events.

Alaska Oil Spill Technology Symposium (AOSTS)

Staff is a member of the AOSTS organizing committee and has met throughout the past year to discuss ways to present the symposium. However, due to COVID-19 we were forced to postpone the Symposium.

Since the organizing committee values in-person, face-to-face interactions and the field demonstration components as key features of the AOSTS, we are now looking towards when the next AOSTS can be held.

The committee agreed that the agenda originally planned for the 2020 Symposium needed to be updated for a future audience, to reflect the research that has continued to move forward while working in unprecedented ways.

Staff will remain a member of the organizing committee. Going forward it is important for CIRCAC to remain a sponsor of this very important event, to ensure the Alaska response community can highlight the work being done in-state and to bring national and international attention to new technology and research; for responders to meet, collaborate, and share experiences and new technologies.

Annual Pre-Winter Meeting

Staff attended the Marathon hosted annual pre-winter meeting. CIRCAC played a role in establishing this valuable and much needed annual event. The meeting allows each attendee to present an operational update, for their particular sector of operation, highlighting improvements and/or areas requiring improvement for discussion by the group. This process has provided a forum to discuss and improve maritime operations in Cook Inlet each year. This year staff presented a project update for the Ice Monitoring System. Feedback received from the Southwest Alaska Pilots Association (SWAPA) regarding the access we have provided to SWAPA was very positive. Other attendees asked about access to the system. Staff will be meeting with them to discuss the possibility of providing access.

PROPS internal activities:

PROPS seated one new public member, Mr. Kyle Crow, replacing Mr. Steve Lufkin and re-seated Mr. Bob Pawlowski and Mr. Jan Hansen.

PROPS re-seated the Committee Chair, Mr. Bob Flint and Vice Chair, Mr. James McHale.

Approved the creation of the Captain Barry Eldridge Memorial Scholarship Award- as a budget line item on the PROPS workplan to clarify and simplify budget spending.

PROPS added updated Goals and Strategies to the GRS and Risk Assessment Programs within the Strategic Plan. These updates will be presented to the Council at the next Strategic Plan Update.

Presentations by Industry and Agencies:

Hilcorp Operational and Pipeline Overview- Diane Dunham- Sr. Emergency Response Specialist, Alaska Safety, Hilcorp Alaska, LLC

Cook Inlet Spill Prevention and Response Inc.- Todd Paxton- CISPRI General Manager

Port of Alaska Modernization Program- Anna Kohl- CEP Environmental Project Manager,
Associate Vice President

Alaska Oil Spill Drill Program- Jade Gamble- Alaska Department of Environmental
Conservation, Cook Inlet and Kodiak Unit Manager Prevention, Preparedness and Response
Program and Anna Carey- Department of Environmental Conservation, Central Region Manager
Spill Prevention and Response, PPRP

Incidents and Items of Interest PROPS Reported On

Tug Courageous and the T/V Polar Endeavor

The *Tug Courageous* allided with the *T/V Endeavor* at the Valdez Marine Terminal resulting in hull damage to the tanker and minimal damage to the tug with one crewmember injured on the tug.

Trading Bay Slop Oil Spill

19 barrel oil slop release at the Hilcorp operated Trading Bay Production Facility (TBPF). Crude oil slop was discharged from a 4" pipeline beneath secondary containment at the Trading Bay Production Facility on the west side of Cook Inlet. Pipeline section repaired and contaminated soils remediated.

Carlile Tanker Truck Crude Oil Spill at BlueCrest Terminal

During loading operations at the Tank Truck Loading Area (TTLA) on the BlueCrest Energy facility at Anchor Point, a dry lock valve malfunctioned causing 30-40 gallons of crude oil to leak into the containment area of the TTLA. The transfer was shut down immediately, all the leaked oil remained within the TTLA containment.

Gas Leak in Cook Inlet

This gas leak incident was at a location in Cook Inlet between the Hilcorp owned Platform A and the Nikiski shore facility. On April 1, 2021, a helicopter pilot identified bubbles on the surface of the water during a supply delivery. Hilcorp reported the gas leak from the fuel gas line supplying Platforms A and C. Hilcorp immediately shut-in Platforms A and C and began reducing pressure in the natural gas line. This was the same 8 inch subsea pipeline (at a depth of 80 feet) that experienced a leak in 2017. As a result of the leak the platforms were forced to shut in.

Tug Bob Franco Loss of Propulsion

While assisting the Tank Vessel (T/V) Alyarmouk depart its berth at the KPL dock in Nikiski, the Tug Bob Franco fouled the port propeller with one of the T/V's mooring lines. The fouling caused the tug to lose power on the port engine. The Alyarmouk was in the process of departing the dock when one of the bow mooring lines (also known as a headline) had been released and was drawn into the tug's propeller. The departure was immediately aborted, the T/V and tug (under power from the starboard engine) remained at the dock. The T/V reestablished the head line and remained safely moored without incident. The T/V and dock personnel also went about the task of evaluating their respective platforms with no damage observed on the dock or the T/V. No pollution or other incident or damage was associated with the partial loss of propulsion on the tug Bob Franco.

M/V St. Patrick

On August 5, 2021, reports of a sheen in Womens Bay from a local resident was reported. The Alaska Department of Fish and Game (ADFG) conducted an overflight on August 5, 2021 and observed a large sheen in the bay. The cause of the spill was determined to be a leak from a sunken fishing vessel, the F/V *St. Patrick*. The vessel had been moored in Womens Bay from

1981 to 1989, eventually sinking on its mooring. Response crews began removing petroleum products and water from the hull on August 16. By August 29, 9730 gallons of oily water had been recovered. It is estimated that 4290 gallons of that amount is made up of various petroleum products. The response team is conducting penetration dives, entering the wreck to determine the internal layout of the ship, assess structural integrity and determining access to the starboard fuel tanks. Previously, operations had been focused on the exposed port side of the vessel. It is unknown what volume of material remains trapped in internal spaces.

F/V Laura

The Fishing Vessel (*F/V*) *LAURA* had run aground at Black Point on Kodiak (Sitkalidak Island in SE Kodiak) and was taking on water. The vessel's crew abandoned ship and was subsequently rescued. The *F/V*'s master reported that there is approximately 3000 gallons of diesel on board and that some sheening was observed. Coast Guard Marine Safety Detachment (MSD) Kodiak conducted a casualty investigation and worked with marine surveyors to evaluate the vessel's condition and to assist salvors. The vessel eventually broke up on the rocks. The community of Old Harbor traveled to the beach adjacent to the site of the vessel grounding to conduct cleanup of debris released from the vessel when it broke up. Several 5-gallon buckets containing oil were recovered during this beach cleanup.

Mobile Oil Drilling Unit (MODU) Randolph Yost

After more than a year docked at OSK Dock in Nikiski, the MODU (also known as a jack-up rig) Randolph Yost departed Cook Inlet in October. The heavy lift vessel *M/V FALCON* moved the Randolph Yost out of Kachemak Bay October 25th, more than six years after Furie Operating Alaska moved it into Cook Inlet. The rig was used primarily in the Kitchen Lights Unit.

The Randolph Yost arrived from Singapore and raised concerns about the potential for invasive species to become established in Kachemak Bay. However, the species that did arrive with the rig were not well suited for survival in Alaska's colder waters. When Hex LLC acquired Furie's assets in a 2020 bankruptcy proceeding, Hex CEO John Hendrix declined to continue the company's contract to use the Randolph Yost, prompting its sale to Shelf Drilling. The departure of the Randolph Yost leaves the Spartan-151 as the lone jack-up rig operating in Cook Inlet.

Protocol

Since the September Board meeting we provided comments regarding a second round Request For Additional Information to contingency plan review and the Committee approved for submission to the Council the FY 2022 Protocol Budget:

The second round Furie Operations Alaska, LLC (Furie) Request For Additional Information (RFAI) response.

We expressed our disappointment with the Department's oversight of how the application process was allowed to proceed. We referenced numerous concerns indicated in our initial plan review in April 2021; we reasserted that the plan application should not have been considered sufficient for review. The results of the RFAI further reinforced this notion. Of the ninety-eight¹ actionable RFAI items, eighty-three of them (84% of the total) resulted in the plan holder adding to, deleting, moving, removing, revising, or updating parts of the plan. Therefore, those agencies and organizations who reviewed the plan essentially completed plan updates for the plan holder.

While there were many necessary updates to the plan, we strongly objected to the deletion of whole sections rather than making improvements in response to the RFAI.

¹ While there were seventy-four RFAIs, some included multiple parts which resulted in ninety-eight potentially actionable RFAIs.

2021 Protocol Accomplishments

Comments Regarding BlueCrest Alaska Operating LLC Hansen Production Facility Oil Discharge Prevention and Contingency Plan

This plan's previous version referred heavily to oil well drilling, associated drilling operations and organization. Because BlueCrest has decided not to conduct drilling activities and to cold stack the drilling rig this plan had undergone extensive revision including the deletion of large amounts of information in almost every section. In many instances, the information deleted provided good guidance and insight regarding spill response, response planning and safety. There were several areas within each scenario in Section 1 that warrant clarification and other areas within Section 2 that pertained to their substance abuse policy, security program, and training program that should also be revisited and clarified.

Comments regarding the second round response to the Request for Additional Information (RFAI)

Our comment cited numerous instance of unwillingness on BCOA's part to respond to the RFAI by agencies and CIRCAC.

Comments Regarding Furie Operating Alaska, LLC Oil Discharge Prevention and Contingency Plan, for Cook Inlet Exploration Program

While 18 AAC 75.420(c) allows a plan holder to submit a new plan "*if no change will be made in the plan,*" however, we found it wholly unacceptable that this plan application was approved as is and allowed to move to the review stage. The transmittal letter accompanying the plan on March 23, 2021 acknowledged that there would be updates made during the RFAI process. The updates should have been made *before* the plan application was deemed sufficient for review and circulated for comment, even if those changes were minor.

We had an additional level of concern regarding this particular plan given the ownership change that occurred in 2020. While the March 23 transmittal letter identifies known updates as "area plan references and changes to website links," it seems likely that many more changes should have been made before the public review began. First and foremost, it appears that many critical aspects of the plan require updates, including:

- The operations covered in the plan did not mention the *Julius R* platform at all but described two jack-up rigs used previously for exploration activities. This calls into question the validity of the response scenarios as well as prevention elements.
- No plan update was submitted associated with the ownership change as required by regulation. Furthermore, the plan itself indicated ownership change as a trigger for updating the plan.
- Related to the ownership change, it was not clear that personnel identified in the plan still work for the company. This relates to those identified for notification or IMT roles as well as those whose signatures still reside in the plan.
- It appeared that the signatory Furie representative in the included Primary Response Action Contractor contract (with CISPRI) dated January 3, 2012 is no longer a Furie employee nor represents Furie, it would appear that the contract shown is invalid or at the least out of date.

Comments regarding the second round response to the RFAI

We expressed our disappointment with the Department's oversight of how the application process was allowed to proceed. We referenced numerous concerns indicated in our initial plan review in April 2021; we reasserted that the plan application should not have been considered

sufficient for review. The results of the RFAI further reinforced this notion. Of the ninety-eight¹ actionable RFAI items, eighty-three of them (84% of the total) resulted in the plan holder adding to, deleting, moving, removing, revising, or updating parts of the plan. Therefore, those agencies and organizations who reviewed the plan essentially completed plan updates for the plan holder.

While there were many necessary updates to the plan, we strongly objected to the deletion of whole sections rather than making improvements in response to the RFAI. Removing rather than improving the glossary (RFAI #5) and the Equipment and Services Directory (RFAI #10) leaves a plan user searching for important definitions in regulation or for equipment and services online during an incident. While these kinds of resources can be important, this approach does not constitute prudent planning nor does it deliver a plan that meets the regulatory purpose of providing a usable document in the event of an oil spill.

Comments Regarding Hilcorp Alaska LLC Cook Inlet Exploration Oil Discharge Prevention and Contingency Plan

This plan amendment consisted of the addition of the K-pad location on the west side of Cook Inlet within the Beluga River Unit.

Comments Regarding Alaska Regional Contingency Plan; Version 2

We provided suggestions to enhance the clarity of the document for planners and response decision makers. Some of the suggested areas of improvement were:

- The RCP should clearly define the content changes that warrant public review.
- Our objection to the use of Multi-Agency Coordinator group versus the Regional Stakeholder Committee
- Future reviews should be cognizant of seasonal activities that would interfere with the public's participation in public comment periods

Election of Chair and Vice Chair - re-elected Mr. Robert Peterkin and Mr. Bob Flint.

¹ While there were seventy-four RFAIs, some included multiple parts which resulted in ninety-eight potentially actionable RFAIs.

Administration Staff Report

Cook Inlet RCAC Board of Directors Meeting – December 3, 2021

Below you will find a brief update on the primary administrative tasks performed – or assistance provided – by your Administrative staff since the September 2021 Board of Directors meeting:

CIRCAC Office – Corporate office remains closed to the general public at this time; staff continues to operate remotely and at the office as necessary; Executive Officers have coordinated office access for essential administrative tasks.

Elections and Appointments – The incumbent board members and relevant stakeholder groups will be formally notified on or before December 8th (120 days before the Annual Meeting, as per policy). That triggers the clock for stakeholder outreach; the nomination process, ballots and elections; and the appointment process for municipal seats. Preliminary work is underway. The parallel process for the 2022 Public Member seats on PROPS and EMC will formally begin in early January, although preliminary work is also underway.

Recertification, 2022/2023 Application – Staff will hold a preliminary meeting with the assigned United States Coast Guard reviewer in late January to determine their preferred timeline for receipt of the application, initiation of review and expected completion date, anticipation of a call for public hearing, as well as any particular operational aspect they may wish to focus on. Development of the 2022/2023 application begins in January. Delivery to the Coast Guard is expected in June.

Scholarships – Staff participated in the virtual Kodiak Scholarship Fair, held on November 19th, to promote our 2022 scholarship offerings. Preliminary work is underway for school and organizational contacts, with a target email going out mid-December. The formal outreach begins the second week of January, with various ensuing steps leading up to a due date of March 23rd for applications. Selected finalists will be interviewed by the Scholarship Committee - and selections made - in early April.

Financial Audit and Tax Return – Lambe, Tuter & Associates is conducting the FY2020 audit. Having been postponed till this fall, that process is underway and nearly complete. Staff continues to provide the requested documents and financial reports. The Executive and Audit Committees will meet to review the audit report and findings once completed. Our tax return, also prepared by Lambe, Tuter & Associates, has been completed and e-filed. Following CIRCAC's 3-year contracted auditor cycle, staff has sent Requests for Proposals to local auditing firms for audit and tax preparation service bids for the fiscal years of 2021, 2022, and 2023.

Accounts Payable – Staff continues to implement the largely online process for payables. We have maintained a review and written approval procedure of all accounts - by the Executive Director, staff, and Officers.

Budgets – Development of the 2022 draft operating and program budgets began this fall. The Executive Committee reviewed the proposed budget on November 24th. The EMC, PROPS, and Protocol Committees have met to review and recommend adoption of their program budgets as well.

Grants – CIRCAC was awarded Bureau of Ocean Energy Management (BOEM) grant funding for *Synthesis of Contaminants Data for Cook Inlet: Evaluation of Existing Data as “Baseline Conditions” and Recommendations for Further Monitoring* under the EMC. Staff attended teleconferences and webinars to discuss the project and distribution of funding for the grant.

Corporate Funding – Funding calculations for 2022 were received in November, and invoices will be distributed to the funding companies in December.

Insurance and Employee Benefits – Several of CIRCAC’s corporate insurance policies have renewed. At the time of this writing, staff facilitates the renewal period for employees’ health and life insurance coverages, as well as the open enrollment period for the SIMPLE IRAs.

Organizational Support – Administrative staff participates with the Cook Inlet Harbor Safety Committee.

Staff and Training – We welcome Candice Elias as CIRCAC’s new Administrative Assistant.

Support – Administrative staff supports directors, public members, staff and guests in logistics for virtual committee meetings and conferences. Such events include EMC, Executive, PROPS, and Protocol Committee meetings; Staff continues to make virtual meetings by teleconference, videoconference, and webinar both effective and comfortable for participants, utilizing various online platforms.

Other – CIRCAC has entered an agreement with Peninsula Reporting for transcribing services.