

# Cook Inlet Regional Citizens Advisory Council



Annual Report  
2022

## A Message from the Executive Director and President:

We are pleased to report another successful year for the Cook Inlet Regional Citizens Advisory Council. In 2022, we resumed in-person meetings and other events after more than two years of operational protocols designed to protect the health and safety of CIRCAC Directors, staff and other partners. We held in-person meetings in Seldovia and Anchorage in September and December, respectively. Our Directors and staff look forward to visiting the communities we represent to maintain and build new relationships that support the work we do on their behalf.

In 2022, we updated our strategic plan to reflect our priorities and goals in the near term. Our strategic plan is organized around programs that help us meet our mandates as defined in OPA 90, and updates to that plan reflect new and changing priorities and opportunities. For example, physical oceanography data collections to produce more accurate circulation models, improve access to historical contaminates data, and advance long-term goals as new funding sources and partnerships develop and are incorporated into our plan.

We were also happy to resume field work in 2022, most notably, updating ShoreZone surveys along the outer Kenai Peninsula coastline in June. CIRCAC started the Alaska program in 2001, and helped build the Alaska ShoreZone partnership that now includes the state and federal agencies that have environmental responsibilities in coastal Alaska. Currently, about 98 percent of Alaska's coast has been imaged and mapped with efforts underway to resurvey the areas that have the lowest-resolution imagery. ShoreZone is just one example of how the partnerships we develop through the Council's work can provide valuable tools for oil spill prevention and response in Cook Inlet and far beyond.

The past several years were extraordinarily challenging, but we also took away many lessons. The spill response community showed that operations can be managed remotely, providing flexible, timely, and effective incident response. We've learned that hybrid meetings provide better access to training opportunities and can potentially connect new stakeholders and increase community involvement.

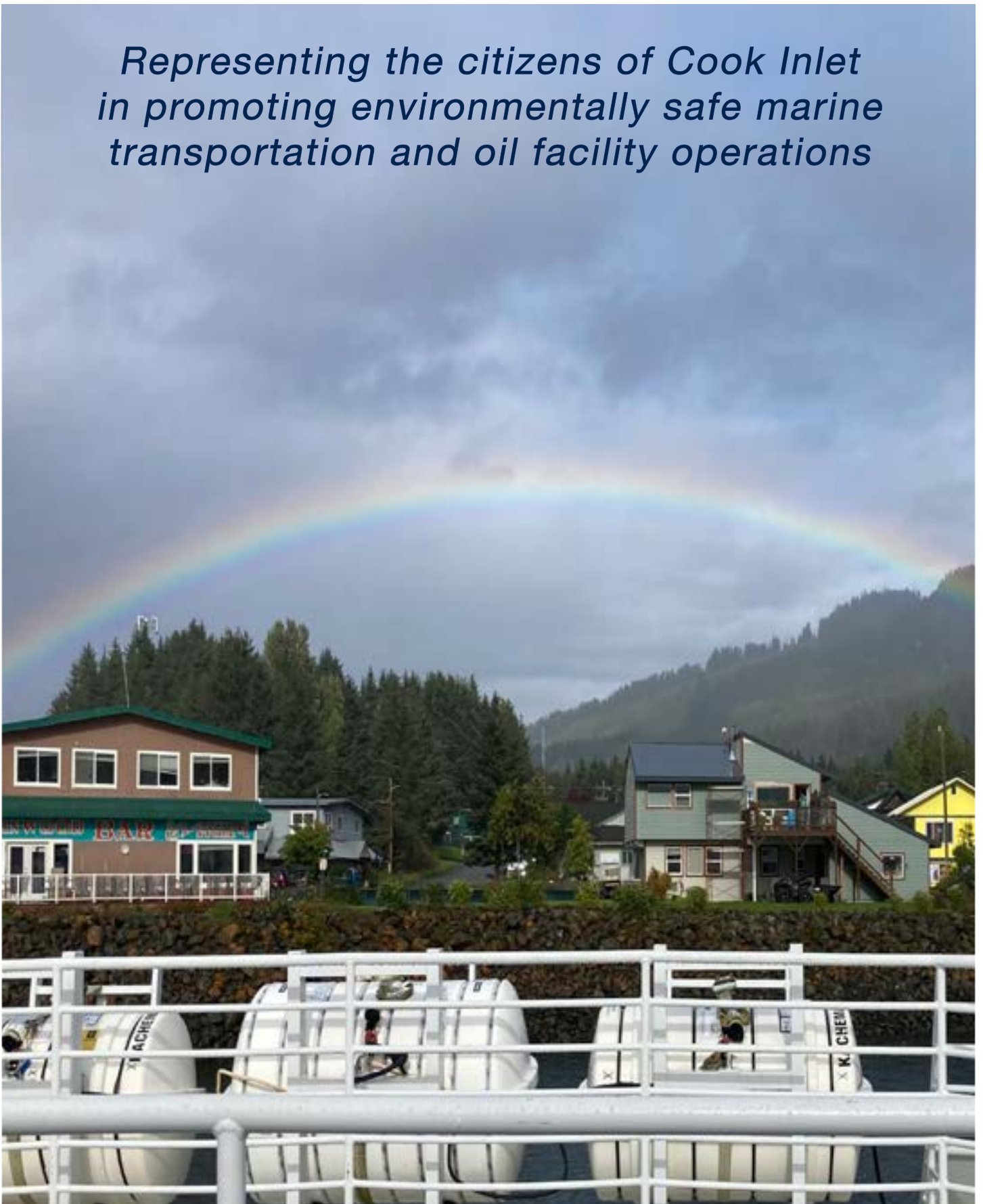


CIRCAC Executive Director  
Mike Munger



CIRCAC Board President  
Gary Fandrei

*Representing the citizens of Cook Inlet  
in promoting environmentally safe marine  
transportation and oil facility operations*



*Cover page: The tug Bob Franco docked in Homer. Above: A rainbow over Seldovia Harbor, following our Board meeting in September 2022. Photo: Shaylon Cochran.*



From left: John Williams, Deric Marcorelle, Gary Fandrei and Mike Munger watch a presentation during the December Board meeting in Anchorage. Photo: Shaylon Cochran

## Council Members

|                                |                    |
|--------------------------------|--------------------|
| City of Kenai.....             | John Williams      |
| City of Homer.....             | Carla Stanley      |
| City of Seldovia.....          | Walt Sonen         |
| City of Kodiak.....            | Rob Lindsey        |
| Municipality of Anchorage..... | Hans Rodvik        |
| Kenai Peninsula Borough.....   | Grace Merkes       |
| Kodiak Island Borough.....     | Scott Arndt        |
| Alaska Native Groups.....      | Michael Opheim     |
| Environmental Groups.....      | Deric Marcorelle   |
| Recreation Groups.....         | Bob Flint          |
| Tourism Groups.....            | Robert Peterkin II |
| Commercial Fishing Groups..... | Paul Shadura       |
| Aquaculture Associations.....  | Gary Fandrei       |

## Ex-Officios

|   |                     |
|---|---------------------|
| United States Coast Guard.....                                | Capt. Leanne Lusk   |
| Environmental Protection Agency.....                          | Robert Whittier     |
| Bureau of Ocean Energy Management.....                        | Dr. Heather Crowley |
| Alaska Department of Environmental Conservation.....          | Jason Brune         |
| Alaska Department of Natural Resources.....                   | Jonathan Schick     |
| National Oceanic and Atmospheric Administration.....          | Catherine Berg      |
| Department of Homeland Security and Emergency Management..... | Kevin Reeve         |
| Alaska Department of Fish and Game.....                       | Brian Blossom       |
| State Pipeline Coordinator's Office.....                      | Anthony Strupulis   |
| United States Forest Service.....                             | David Fitz-Enz      |



*Outer Kenai Peninsula ShoreZone imagery was updated in 2022. Photo: Ragged Island/Alaska ShoreZone.*



## Environmental Monitoring Committee members

### *Board Members*

Deric Marcorelle - Chair  
Paul Shadura  
Gary Fandrei  
Michael Opheim  
Carla Stanley  
Grace Merkes

### *Public Members*

Molly McCammon- Vice Chair  
Richard Prentki  
Dr. Erik Klein  
Rick Frederic  
A. Bruce Magyar  
John Morton  
Dan Urban  
Robert Reges, Jr.



## Coastal Habitat and Mapping Program

Our long-awaited ShoreZone survey of the outer Kenai Peninsula finally took place in June 2022 after being delayed two years due to Covid travel restrictions for us, our agency partners, and our Canadian contractors at Coastal and Ocean Resources, Inc. (CORI). The delay allowed us to coordinate with the National Park Service, and their additional funding and logistical support ensured that the survey encompassed the entire Kenai Fjords National Park coastline.

The first ShoreZone survey in the area was in 2002, using much lower resolution imaging technology. The new higher-resolution imagery will provide a better match to the higher resolution Continually Updated Shoreline Product (CUSP) data products by NOAA. Helicopter imaging flights during a 6-day window of minus tides took place between Windy Bay in the west and Cape Resurrection in the east, and included East Chugach, Perl, and Nuka Islands, the Ragged and Rugged Island groups, and dozens of smaller islands and tiny islets. During the survey we documented the spread of *Macrocystis* (Giant) kelp in the region.



Flight tracks for the June 13-18, 2022. ShoreZone imaging survey conducted along the outer Kenai Peninsula Coast (left). Survey team members with the Egli Air Bell 206 Helicopter (right). Photo: CIRCAC

## Macrocystis Kelp

During our outer Kenai Peninsula ShoreZone survey in June, we documented two new *Macrocystis* (Giant kelp) beds; one not far from the original small bed documented in Morning Cove in 2002, and one in Port Dick near Gore Point. In September, we also received photos of a small, newly established bed inside of Kachemak Bay, which was confirmed by UAF divers from the Kasitsna Bay Laboratory. *Macrocystis* kelp beds are nearshore and often extremely dense and nearly impenetrable, potentially impacting oil spill risk and retention, with implications for prevention and response.

*Macrocystis* is common along west coast states and in British Columbia and southeast Alaska. We first documented its spread into the western Gulf of Alaska in 2002 and conducted dive surveys in 2006 and 2009 to map the beds and document associated species. Since those surveys of Kodiak, Afognak, and Shuyak Island *Macrocystis* beds, we've received other reports of the kelp's expansion in the western Gulf of Alaska, including in the Shumagin Islands, a new western range extension.

We are looking for additional partnerships to identify spreading patterns and develop a prediction model based on preferred habitat and environmental conditions. Though our main interest is knowing habitats for better environmental risk assessments and oil spill planning and response, this field represents an opportunity for partnerships as climate-driven changes to *Macrocystis* habitat can have effects beyond oil spill response planning, such as the mariculture industry.





# Oil Fate and Effects Program

The results from a collaborative study to characterize particle flux through the water column in Kachemak Bay/ Lower Cook Inlet were published in 2022 in the manuscript:

Ross, J., N. Kinner, S. Saupe, J. Schloemer, and K. Ziervogel. 2022. Particle Sedimentation in a Subarctic Estuary: a Sediment Trap Study over Two Productivity Seasons. *Estuaries and Coasts* 45, 2362–2372 (2022). <https://doi.org/10.1007/s12237-022-01069-7>

The results demonstrated that terrestrial runoff in the Cook Inlet region is highly variable and drives vertical particle fluxes through the water column with consequences for benthic food supply and potential oil sedimentation in the event of a spill.

## Contaminants

We continued work on our BOEM-funded project, “Synthesis of Contaminants Data for Cook Inlet: Evaluation of Existing Data as “Baseline Conditions” and Recommendations for Further Monitoring,” that includes historical data gathering, evaluation, and compilation towards development of on-line data access and visualization tools. We’ve sought input from agencies and stakeholders to ensure the compiled database is as comprehensive as possible and to identify user needs for the web-based tools.

CIRCAC is managing the project that includes a team of contaminant and database development experts from Payne Environmental Inc. (PEI), Kinnetic Environmental, Inc. (KEI), and Axiom Data Science (Axiom). The team brings a combined two centuries of experience in Cook Inlet, contaminant studies, or database development. Ultimately, the team will identify data gaps and provide BOEM with recommendations for future contaminant sampling in areas potentially impacted by activities in the Cook Inlet Outer Continental Shelf (OCS) lease sale area.

*Previous page (left): Seaweed expert Mandy Lindeberg holds *Macrocystis kelp* frond first observed on outer Kenai Peninsula in 2002 (photo Mary Morris). Afognak Island *Macrocystis kelp* bed in 2009. (Photo: CIRCAC)*

*Right: *Macrocystis kelp* bed observed during aerial survey in 2022 on outer Kenai Peninsula. (Photo: Alaska Shore-Zone).*



# Physical Oceanography

For more than 25 years, EMC has supported physical oceanographic research to better understand Cook Inlet's complex circulation to improve the accuracy of oil spill trajectory model forecasts. One of the Council's top priorities is to develop a high-resolution, 3-D, and online accessible oil spill trajectory model. It is essential for the underlying circulation model to be tested against ocean observational data.

CIRCAC is currently working with partners at the National Oceanographic Atmospheric Administration (NOAA), Alaska Ocean Observing System (AOOS), University of Alaska Fairbanks (UAF), and the Oil Spill Recovery Institute (OSRI) to submit proposals and combine resources to carry out several projects. These include conducting a 20-year model "hindcast" to validate NOAA's Cook Inlet Ocean Forecast Model circulation model, identifying model weaknesses and data gaps, collecting additional observational data, and developing a particle trajectory model as the basis of an online, user-accessible oil spill trajectory tool for Cook Inlet.

CIRCAC is also working with AOOS and UAF to do a long-term deployment of a paired High Frequency (HF) Radar system in Cook Inlet. The team worked with Hilcorp to identify potential sites for year-round deployment and will seek additional partners and support to expand HF Radar coverage into the lower Inlet.

*Below left: Towed acoustic doppler current profiler (Photo: CIRCAC) Right - equipment deployment for Cook Inlet hydrographic survey. (Photo: CIRCAC)*

*Opposite page photo: Outer Kenai Peninsula, rocky platform, intertidal habitat (2022) Alaska ShoreZone*





# Prevention, Response, Operations, and Safety

## PROPS Committee Members

### *Board Members*

Bob Flint - Chair  
Rob Lindsey  
Michael Opheim  
Walt Sonen  
Carla Stanley  
Deric Marcorelle

### *Public Members*

James McHale - Vice Chair  
Ted Moore  
Scott Hamann  
Jan Hansen  
John Bauer  
Steve Lufkin  
Capt. Bob Pawlowski  
Robert Reges, Jr.  
Cathy Foerster  
Kyle Crow  
Wendell Tuisaula

# Drills and Exercises

CIRCAC staff are often invited to participate in industry-sponsored drills and exercises in an advisory capacity. We appreciate our industry partners continued interest in the unique perspective our organization can bring to these exercises.

## Hilcorp Functional Exercise

CIRCAC staff participated in Hilcorp's functional exercise as an observer of the Wildlife Branch. This was reportedly Hilcorp's largest exercise to date that focused on the rupture of two subsea pipelines caused by a workboat attempting to anchor in inclement weather. According to the scenario, the work boat anchor drags then contacts and breaks open two subsea pipelines (Bruce GPT and CIPL line), releasing 100 barrels (4,200) gallons of crude into Cook Inlet.

This exercise married in-person and virtual attendance to the first exercise hosted at Hilcorp's new command post in Anchorage. While the exercise objectives were met, many valuable lessons were learned regarding the use of a new command post. The Wildlife Branch observed the advantages of virtual meetings using Microsoft Teams compared to phone connections, with the only limitation being internet bandwidth.

## Cook Inlet Energy Virtual Exercise

Staff participated as a virtual observer in this tabletop exercise of the Glacier Oil & Gas Corporation's (GLA) Oil Discharge Prevention and Contingency Plan (ODPCP), Emergency Response Plan (ERP).

The scenario included a 4,000-barrel crude oil storage tank leak at the Kustatan Production Facility to a nearby lake. The drill process included National Preparedness for Response Exercise Program (NPREP) objectives and an additional 11 separate objectives to challenge the Incident Management team. Over half of the objectives were needed to be accomplished to be considered a success; all objectives were achieved.

## Marathon Drill

Staff participated in Marathon's Worst Case Discharge exercise planning meetings and the one-day tabletop exercise that incorporated the initial notifications and the assembly of a Unified Command along with a field deployment of CISPRI's response equipment and personnel. The exercise began in the "reactive phase" of the incident for facility personnel to begin the process of making the appropriate notifications as described in the facility's State of Alaska, Oil Discharge Prevention and Contingency Plan and the federally required Facility Response Plan (FRP). The exercise objectives were chosen from both federal and state programs to test response times of responders to deploy equipment. Once the Unified Command was assembled and the initial Command/Unified Command meeting was held, the exercise concluded.



*From left, Board member Deric Marcorelle, Director of Operations Steve "Vinnie" Catalano and Board President Gary Fandrei operate the tug simulator at AVTEC in Seward. Photo: Shaylon Cochran*

# Protocol Control Committee

*The Protocol Control Committee reviewed and developed comments regarding:*

- The Arctic and Western Alaska Area Contingency Plan for submission to the Area Committee.
- 18 AAC Chapter 75 – Oil and Other Hazardous Substances Pollution Control Proposed Regulation Revisions, dated November 1, 2021
- Collaborative Comments and Background Information Regarding PWSRCAC / CIRCAC's Proposed Resolution to the Kenai Peninsula Borough, City of Kenai, City of Homer, City of Seldovia, City of Anchorage, Kodiak Island Borough, and the City of Kodiak regarding 18AAC 75 reg revision
- Coast Guard Draft Guidance for Nationally Consistent Coastal Zone Area Contingency Plan Architecture

*Oil discharge Prevention and Contingency Plans:*

- Crowley Alaska Tanker, Cook Inlet Oil Discharge Prevention and Contingency Plan, ADEC Plan
- Hilcorp Alaska, LLC Oil Discharge Prevention and Contingency Plan for Cook Inlet Production Facilities, ADEC Plan
- Hilcorp Alaska, LLC Cook Inlet Exploration Oil Discharge Prevention and Contingency Plan
- Cook Inlet Energy, LLC Oil Discharge Prevention and Contingency Plan for Cook Inlet Area Production Operations, ADEC Plan
- Harvest Alaska, LLC Oil Discharge Prevention and Contingency Plan, ADEC Plan
- Andeavor Logistics LP, Kenai Refinery Storage Facility and Truck Terminal, ADEC Plan

*The Protocol Control Committee also provided:*

- A Letter of Support for HEA's Application for Offshore Wind Exploration at Hilcorp's Platforms in Middle Ground Shoal

Protocol Control Committee  
Committee (Board) Members:

Robert Peterkin  
Bob Flint  
Deric Marcorelle  
Paul Shadura  
Rob Lindsey  
Gary Fandrei



# Cook Inlet Harbor Safety Committee

CIRCAC staff have been involved with the Cook Inlet Harbor Safety Committee since its inception in 2015. The work done by this group to enhance marine safety and environmental stewardship through collaboration of the maritime industry and other stakeholders is a great example of the kinds of partnerships CIRCAC seeks in meeting its OPA 90 mandates.

In 2022, the committee reviewed and updated the Marine Firefighting Plan, working with staff from USCG staff from Sector Anchorage. That plan is now part of the overall Harbor Safety Plan.

*Opposite Page: CIRCAC Board President Gary Fandrei (left) and Director of Operations Steve “Vinnie” Catalano at the Pre-Winter meeting hosted by Marathon Petroleum and AVTEC. Photo: Shaylon Cochran*

*Below: Homer Harbor, courtesy ShoreZone*



# Public Outreach



We were happy to return to in-person Board meetings in 2022, returning to Seldovia in September for the first time since 2016 and to Anchorage in December for the first time since 2018. Longtime readers may recall that meeting was interrupted by a magnitude 7.1 earthquake.

In addition to returning to the communities we represent, staff was also able to participate in live drills, training sessions and conferences.

Board members Gary Fandrei and Bob Flint attended the Clean Pacific Conference in Seattle in August with Director of Communications and Public Outreach Shaylon Cochran.

Staff also participated in an advisory capacity in the Marathon drill that focused facility personnel's efforts on the initial reaction phase of an incident. CIRCAC staff were able to work with both local Marathon communications team members and others from Texas and observe the tactics successfully deployed to meet the objectives of the drill in developing an initial incident report.

*Top photo: from left, Board Members Deric Marcorelle, Carla Stanley and Scott Arndt prepare to board the Seldovia Ferry for the trip back to Homer after our Board meeting there in September.*



*Board members John Williams (City of Kenai) and Deric Marcorelle (Environmental Groups) take a break during CIRCAC's annual meeting in Anchorage, Dec. 1-2 2022. Photo: Shaylon Cochran*



# Scholarship Program



Dominic Austin (below), graduate of West Anchorage High, was selected for our \$2,500 James Carter Memorial Scholarship for Environmental Studies. Dominic will pursue a degree in Fisheries/Wildlife Management from Colorado State University. Photo: Dominic Austin

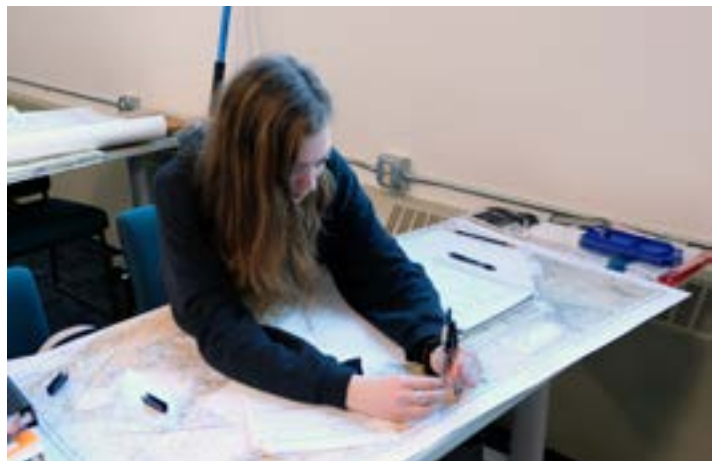


Matfey Reutov (above), graduate of Voznasenka, was selected for our \$2,500 Barry Eldridge Memorial Scholarship for Maritime Studies. Matfey will put the scholarship toward a welding degree from Kenai Peninsula College. Photo: Matfey Reutov

Carly Ness (right) won the \$2,500 Marathon/AVTEC Scholarship.

Ness is studying to earn her 100-ton Captain's license and plans to remain in Seward working in the tourism industry as she has for the last several years. Photo: Shaylon Cochran

2022 Scholarship Committee:  
Carla Stanley  
Capt. Bob Pawlowski  
Rick Frederic





# Staff

|  |                         |
|--|-------------------------|
| Executive Director. . . . .                              | Michael Munger          |
| Director of Science and Research. . . . .                | Susan Saupe             |
| Director of Operations. . . . .                          | Steve “Vinnie” Catalano |
| Director of Administration . . . . .                     | Maddie Jamora           |
| Director of Communications and Public Outreach . . . . . | Shaylon Cochran         |
| Accounting and Grants Manager . . . . .                  | Cassandra Johnson       |
| Administrative Assistant . . . . .                       | Candice Elias           |

*Cook Inlet drilling platform, as seen from the Seabulk Nevada. Photo: CIRCAC*





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