



Exxon Valdez Oil Spill Trustee Council
Long-Term Research and Monitoring, Mariculture, Education and Outreach
Annual Project Reporting Form

****For Instructions for each section below, see Reporting Policy, II (B); the Reporting Policy can be found on the website, <https://evostc.state.ak.us/policies-procedures/reporting-procedures/>***

Project Number: 25220301

Project Title: Social, cultural and economic assessment of kelp mariculture opportunities for coastal villages within the EVOS spill zone

Principal Investigator(s):

Aaron Poe, Alaska Conservation Foundation (PI)

Kevin Berry, Department of Economics, University of Alaska Anchorage

Willow Hetrick, Chugach Regional Resources Commission

Jacqueline Keating, Alaska Department of Fish and Game, Division of Subsistence

Dune Lankard, Native Conservancy

Michael Stekoll, University of Alaska Southeast

Thomas F. Thornton, Alaska Coastal Rainforest Center, University of Alaska Southeast

Reporting Period: Quarter 1 February – April, 2025

Submission Date: June 17, 2025.

Project Website: <https://www.kelpvalues.org/>

Please check all the boxes that apply to the current reporting period.

☐ **Project progress is on schedule.**

☒ **Project progress is delayed**

Due to not receiving a signed contract for funding until October of 2022 we remain delayed in some aspects of the project. Further, two significant personnel changes as well as two new opportunities caused the project team to re-evaluate our approach relative to Hypothesis 1 & 2. These changes are documented in the FY23 annual report.



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☐ **Budget reallocation request.**

Nothing additional is requested at this time.

☐ **Personnel changes.**

1. Summary of Work Performed:

Our Kelp Values has made significant progress this quarter, which included field work in four communities, an organized participation at the Alaska Mariculture Conference in Sitka through two presentations and a workshop hosted for mariculture operators and our annual full team meeting. The workshop and annual full team meeting were professionally facilitated, allowing the PI and all project partners to participate in a guided review of our progress to date and consider some different options for how we begin to pull the existing and expected results together at the approximate midpoint of this project. During that session we identified some potential opportunities to engage with the other EVOSTC funded kelp projects that were detailed in Section 3 of our Annual Report. Beyond that session we continue to hold monthly team check-ins for all Kelp Values Partners and this quarter we added Axiom Data Science to those recurring calls given their role in project data stewardship.

H1: Evaluation of historical ecology, distribution and practices of traditional Indigenous mariculture and subsistence harvest activities is necessary for effective site selection of potential future mariculture sites. Key highlights from 2024 include:

- Dr. Thornton and PhD student Karen Grosskreutz (UAS) conducted a series of 11 interviews in the Kodiak Archipelago region in April with individuals identified by Ouzinkie and the Native Village of Tangirnaq. The Tribes, supported by the Kodiak Archipelago Leadership Institute (KALI), identified these knowledge holders as individuals as experts in how communities use kelp and seaweeds. They also worked with KALI to plan engagement efforts in Port Lions and possibly Old Harbor or Larsen Bay in June. Additionally, they organized a consultation with Sitka



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Tribes of Alaska to advise on a methodology for documenting traditional uses of seaweeds in the Spill Zone.

- Dr. Tom Bell (subcontractor for UAS) has begun mapping surface kelps in the Spill Zone based on satellite imagery and he is expected to complete this work in late summer or early fall 2025.

- The Native Conservancy (NC) has contracted David Guilfoyle, an anthropologist who specializes in a community engagement methodology known as Healthy Country Planning and was developed in collaboration with Aboriginal communities in Australia. David and his team have adapted this planning approach to Healthy Land and Sea Plans (HLSP) for Alaska Native communities in the Spill Zone region. This quarter they completed planning sessions with Ouzinkie and Qutekcak communities. They also completed making arrangements with communities for spring and summer sessions in Qutekcak, Nanwalek, Ouzinkie, and Port Lions for late May and June.

- Dr. Stekoll worked with Chugach Regional Resources Commission (CRRC) to share methodology to employ for seaweed collection as part of a 'field school' with one of our partner communities for summer of 2025 to allow youth the opportunity to participate in new specimen collection and potentially expand species distribution records.



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D=delayed, X=planned or not completed, C=completed

H1 Milestones/Tasks	FY 22/23 ¹				FY24				FY25				FY26				FY27			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Identifying which kelp forests have been affected by the EVOS	C	C	C	C	C	C	C	C	C	X	X	X	X							
Anthropological research at focal communities		C	C	C	C	C	C	C	C	X	X	X	X	X	X	X	X	X		
Engage with 21-30 Alaska Native tribes located within the EVOS spill zone-listening tour led by Native Conservancy	C	C	C	C																
Create a story map					C	C	C	C	C	X	X	X								
Develop children's books ²									D	X	X	X								
Cultural GIS mapping		C	C	C	C	C	C	C	C	X	X	X	X	X	X	X	X	X		
Research and document Indigenous place names and their associations with mariculture resources and sites used by communities historically		C	C	C	C	C	C	C	C	X	X	X	X	X	X	X	X	X		
Peer reviewed paper																		X	X	X
Data posted online																		X	X	X

H2: New kelp mariculture activity that is led by Indigenous communities in the spill zone will have additional benefits relative to subsistence harvest and commercial fishing activities at the local scale. Key highlights from 2024 include:

- ADF&G compiled 20+ years of mapped subsistence harvest data for the spill zone into a GIS producing the most complete synthesis possible based on data collected by their agency and worked to feed this information into NOAA's Area of Opportunity Analysis that was launched for Alaska in early 2024.

¹ A delay in funding set our project back several months such that significant work did not begin until the latter few months of FY22, with the majority of effort focused in FY 2023.

² The project team is now questioning if this deliverable is appropriate and necessary and will consult with the CORal Team in 2025 to discuss more impactful and appropriate communication products.



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-Christian Woodard from ADF&G has completed life history data collection efforts for Port Graham and Nanwalek and is proceeding with data digitization that will be completed by June of 2025.

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H2 Milestones/Tasks	FY22/23 ³				FY24				FY25				FY26				FY27			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Confirm interest maintain relationships with Indigenous leadership from up to 10 partner communities who will participate in a five-year study			C	C	C	C	C	C	C	X	X	X	X							
Conduct incentivized household surveys	C	C	C	C	C	C	C	C	C	X	X									
Conduct targeted focus groups in partner communities to understand broader community interests												X	X	X	X	X	X	X		
Conduct post-farm household surveys										X	X	X	X	X	X	X	X	X		
Community Survey Reports									C											

H3: Kelp mariculture led by Indigenous communities presents a viable economic activity that can help attenuate continued impacts on commercial fishing in the spill zone. This research area was slated to begin in Year 2 (so functionally 2024 with the late start of the project) and some highlights from this past year include:

- Rachel Lekanoff and Aaron Poe with ACF completed a companion workshop to one held at the Alaska Marine Science Symposium in late January centered on identifying research questions that mariculture farms could help address. This second workshop was organized as part of the Alaska Mariculture Conference in Sitka and drew an audience of over 50 mariculture operators, managers, and scientists. Several case studies highlighted successful collaborations, including Indigenous-led monitoring programs, partnerships with NOAA for habitat research, and farms working with universities and businesses on experimental kelp cultivation and carbon credit initiatives. Participants also shared challenges, such as research timelines that don't align with farming operations, unclear expectations, and the financial burden of unpaid research tasks.

³ A delay in funding set our project back several months such that significant work did not begin until the latter few months of FY22 with the majority of effort focused in FY 2023.



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H3 Milestones/Tasks	FY22/23 ⁴				FY24				FY25				FY26				FY27			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Conduct a national willingness-to-pay survey to identify valuation perspectives									C	X	X	X	X							
Develop several Pilot projects														X	X	X				
Conduct a willingness-to-pay analysis for environmental monitoring data								C	C	X	X	X	X							
Survey and Interviews (B2B)					C	C	C	C	C											
Identify processing strategies			C	C	C	C	C	C	C	X	X	X	X	X						
Existing market channels			C	C	C	C	C	C	C	X	X	X	X	X						
Examine supply chain of products			C	C	C	C	C	C	C	X	X	X	X	X						

2. Products:

Peer-reviewed publications:

NA

Reports:

NA

Popular articles:

NA

Conferences and workshops:

⁴ A delay in funding set our project back several months such that significant work did not begin until the latter few months of FY22 with the majority of effort focused in FY 2023.



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The Kelp Values team held one workshop and offered two presentations at the Alaska Mariculture Conference of Alaska in Sitka, in February of 2025.

Public presentations:

NA

Data and/or information products developed during the reporting period:

NA

Data sets and associated metadata:

NA

Additional Products not listed above:

NA

3. Coordination and Collaboration:

The Alaska SeaLife Center or Prince William Sound Science Center

NA

EVOSTC Long-Term Research and Monitoring Projects

NA

EVOSTC Mariculture Projects

We continue to work very closely with CRRC on many aspects of the Kelp Values given they are a key member of our team. Melissa Good remains a vital contact for our team to the Mar



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ReCon (project 24220302) team. She is invited to all our team's monthly meetings to keep lines of communications open across all 3 EVOSTC projects.

EVOSTC Education and Outreach Projects

Melissa Good also remains our best contact with the CORaL (project 24220400) team primarily through our monthly Kelp Values team check-in meetings.

Trustee or Management Agencies

The GIS layer depicting cumulative subsistence harvest activities across the spill zone that ADF&G Division of Subsistence produced in 2023 for the Kelp Values project was shared with NOAA in February to help support their statewide Area of Opportunity Analysis for Mariculture sites.

Native and Local Communities

The Native Conservancy, ADF&G, and UAS all led efforts this quarter to collaborate on data collection and planning efforts with communities in the region including: Nanwalek, Ouzinkie, Port Graham, Port Lions, The Native Village of Tangirnaq (Kodiak), and the Qutekcak Tribe (Seward). They were helped greatly in these efforts by project partners from CRRC and KALI who have been essential liaisons for the Kelp Values project as a whole.



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5. Budget:

Budget Category:	Proposed FY 22	Proposed FY 23	Proposed FY 24	Proposed FY 25	Proposed FY 26	5-YR TOTAL PROPOSED	QUARTERLY EXPENDITURES	ACTUAL CUMULATIVE
Personnel	\$49,625	\$27,338	\$103,783	\$134,183	\$128,232	\$443,161	\$19,068	\$115,319
Travel	\$0	\$5,876	\$11,288	\$14,884	\$8,650	\$40,698	\$331	\$11,163
Contractual	\$316,428	\$475,556	\$567,276	\$543,349	\$495,684	\$2,398,292	\$103,824	\$743,253
Commodities	\$0	\$0	\$750	\$799	\$972	\$2,521	\$1,614	\$5,354
Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Indirect Costs (report rate here)	\$64,059	\$89,035	\$110,777	\$111,890	\$104,546	\$480,307	\$21,846	\$153,141
SUBTOTAL	\$430,112	\$597,804	\$793,874	\$805,105	\$738,083	\$3,364,978	\$146,683	\$1,028,230
General Administration (9% of subtotal)	\$38,710	\$53,802	\$71,449	\$72,459	\$66,427	\$302,848	N/A	N/A
PROJECT TOTAL	\$468,822	\$651,607	\$865,323	\$877,564	\$804,511	\$3,667,826		
Other Resources (In-Kind Funds)	125,000.00	-	-	-	-	\$125,000		