



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 (retired, under professional services contract)

Reporting Period: Quarter 1 May 2026 – July 2026

Submission Date: September 1st, 2026

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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Please note that we are awaiting confirmation of an appropriate time to a request for a No Cost Extension (NCE) to carry the project work through to completion in January of 2028.

☒ **Budget reallocation request (include any no-cost extension requests in Q4 report).**

We plan to complete a budget projection in conjunction with the NCE originally requested in Q1 mentioned above. This has been driven in part by an inquiry about the availability of \$48K in additional funds from ADF&G Division of Subsistence to expand upon their community sampling and analysis and a request for additional time from our partners at Native Conservancy to complete their Healthy Land and Sea Planning work.

☐ **Personnel changes.**

1. Summary of Work Performed:

Our Kelp Values team made significant progress this quarter including new efforts engaging with the other EVOSTC-funded mariculture research projects to set up engagements sharing the collective results with regulatory and policy-making federal and state agencies. ADF&G Subsistence has completed a draft of their final report for the project. Healthy Land and Sea Planning (HLSP) is complete for Ouzinkie and continues for Nanwalek, Port Graham, and Qutekcak, and has begun with the Salamatof Tribe who is exploring a joint plan with the Kenaitze Indian Tribe. Analysis has begun on transcripts from 60 kelp and seaweed knowledge holders with the target of a draft report fall of 2026. This quarter also saw wide uptake by 1000+ views of an ArcGIS Story Map offering a visually driven update on the status of the Kelp Values project. We've begun to analyze survey results from an effort aiming to identify opportunities and barriers to mutually beneficial research with mariculture operations that has received 53 responses to date. Finally, seaweed mapping efforts have been bolstered by the finding of a new dataset collected via dive surveys across Prince William Sound and a contract is in place with Dr. Tom Bell to begin satellite mapping of surface kelps in the spill region.

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 include:



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- Dr. Tom Thornton and Karen Grosskruetz have begun analyzing 60 interviews that they new believe will be their complete pool of respondents. Staff changes at the Eyak Tribe resulted in less support than they originally anticipated and thus they were not able to expand to conduct more interviews in Cordova. They expect a draft report to be completed by fall of 2026 and are looking for venues to share their methodology at research convenings and avenues to share results with communities in the region.

- ACF has signed a contract with Dr. Tom Bell (originally planned to be a subcontractor for UAS) to map surface kelps in the Spill Zone based on satellite imagery. This effort is expected to be completed by fall of 2026. Dr. Bell is currently changing his university affiliation, prompting a direct professional services contract. Dr. Stekoll obtained permission from Alaska Pacific University to incorporate an extensive seaweed data set into his interactive map portal. This dataset was derived from dive surveys conducted in 2024 across 42 sites in Prince William Sound.

- Native Conservancy and David Guilfoyle (AAI) continue to work with the Salamatof Tribe to establish the final HLSP effort. Additional conversations are underway with the Kenaitze Tribe to potentially join this HLSP. NC/AAI have completed work with Ouzinkie and work continues with Qutekcak (Seward), Port Graham, and Nanwalek on their HLSPs. Additional field work is scheduled for fall 2026.

- Chugach Regional Resources Commission (CRRC), who is in the final stages of completing their EVOSTC-funded project (project 300), is connecting with the Kelp Values team for initial outreach with permitting and regulatory agencies. The two project teams continue to explore ways their results could help inform 'post-farm' perceptions about positive and negative impacts of farms.

- ACF has completed development of an ArcGIS Story Map to update relevant stakeholders on the project's progress. The work of each of the project's five teams has been summarized in an interactive and visually focused format to explain the purpose and status of the work. The story map is available at KelpValues.org and has been visited over 3,900 times. The Kelp Values team continues to share the map with project participants and contributors to date as well as through our partner networks including Tribes, mariculture operators, scientists, and managers



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in the South Coast region. The aim is to offer an update on our work to date and invite broader perspectives as we begin to synthesize results of the five teams.

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	C	D	D	D	C	X	X				
Anthropological research at focal communities		C	C	C	C	C	C	C	C	C	C	C	C	C	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	C	C	C	C							
Develop children's books ²									D	D	D	D								
Cultural GIS mapping		C	C	C	C	C	C	C	C	C	C	C	C	C	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	C	C	C	C	C	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 include:

- The ADF&G Subsistence Division has completed a full draft of a Special Publication summarizing the life history harvest data collection and analysis for Port Graham and Nanwalek. They have shared this with key members of the Kelp Values team so they can incorporate perspectives collected into their own efforts. They have also completed a series of

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 2026 to discuss more impactful and appropriate communication products.



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map layers that integrate Shorezone datasets with total subsistence use (an early deliverable from the Kelp Values project) and the life history harvest mapping from two communities last year. They have drafted a proposal for \$48,000 in additional funding to expand data collection efforts. The additional funding would allow them to add questions about kelp mariculture into upcoming household survey efforts to help collect more perspectives from subsistence communities about implications of the activity. ACF is currently considering a budget modification request to incorporate this into the current EVOSTC funding given its important alignment with project objectives.

ACF has secured a 90-minute listening session during the 11th annual Confluence gathering of the Alaska Outdoor Alliance (outdoor recreation industry leaders) to be held in Cordova on September 23rd. This facilitated session will help us make progress on learning about the perspectives around mariculture development of this important user group. Similarly, we have received potential interest from the Prince William Sound Stewardship Foundation (an organization serving outfitters and guides) in hosting a similar conversation at their annual gathering in Whittier in May of 2027.

Efforts to conduct community surveys following the establishment of farms have been limited by the number of communities with newly established active farms. The new work being proposed by ADF&G Subsistence Division may help address this challenge question in the coming quarters. Similarly, there may be an opportunity to work with CRRC following their efforts to host farms, though we expect delays to persist into 2026.

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

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	C	C	C	C	C						

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 efforts focused in FY 2023.



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Conduct incentivized household surveys	C	C	C	C	C	C	C	C	C	C	C	C	C			X ₄	X	X				
Conduct targeted focus groups in partner communities to understand broader community interests												D	C	C		X	X	X	X			
Conduct post-farm household surveys										C	C	D	D	D		X	X	X	X			
Community Survey Reports									C	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. Highlights include:

- Dr. Kevin Bell at UAA has completed a consumer willingness to pay data collection effort from over 1,000 households in Washington, Oregon, and California. He is in the process of compiling results with the aim of producing an article on the work in fall 2026. Efforts to engage with kelp/seaweed buyers have continued. There have been additional long form interviews with companies across different industries like food products, biomaterials, and agricultural supplements. Furthermore, ACF has begun to analyze results from a survey of 53 mariculture operators, scientists, and managers about barriers to research/monitoring collaborations and how to overcome them with financially incentivized equitable partnerships.

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

H3 Milestones/Tasks	FY22/23 ⁵				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	D	D	C	C	C	X					
Develop several Pilot projects															X	X	X			
Conduct a willingness-to-pay analysis for environmental monitoring data								C	C	C	C	C	C							
Survey and Interviews (B2B)					C	C	C	C	C	C	C	C	C	C						
Identify processing strategies			C	C	C	C	C	C	C	C	C	C	C	C						

⁴ New surveys leveraging funding secured by the ADF&G Subsistence Division will be implemented in Fall of 2026 and will help inform the work of the Kelp Values project.

⁵ 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 most of the effort focused in FY 2023.



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Existing market channels			C	C	C	C	C	C	C	C	C	C	C	C					
Examine supply chain of products			C	C	C	C	C	C	C	C	C	C	C	C					

2. Products:

Peer-reviewed publications:

NA

Reports:

NA

Data sets and associated metadata:

Total subsistence harvest datasets from the Alaska South Coast (spill zone) were completed by ADF&G Subsistence Division and were integrated into NOAA's Aquaculture Opportunity Analysis.

Additional Products not listed above:

ACF has released a final version of our ArcGIS Story Map describing the focus of the project and the status of the work to date. Supporting metadata has been transmitted to Axiom Data Science and the story map is available at: KelpValues.org

3. Coordination and Collaboration:

The Alaska SeaLife Center or Prince William Sound Science Center

See below (EVOSTC Mariculture Projects)

EVOSTC Long-Term Research and Monitoring Projects

NA

EVOSTC Mariculture Projects

The Kelp Values, Mar Recon and CRRC's 'Test Sites' project (EVOSTC 300) leads were invited to speak with the interagency team of federal and state agencies who helped guide NOAA's Aquaculture Opportunity Analysis in Alaska. This meeting in August resulted in interest in



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further dialogues with the three EVOSTC funded efforts. We are collectively organizing two, half-day discussions with managers for Juneau October 28th and Anchorage October 29th. The focus of these informal gatherings will be for representatives from the three projects to have an opportunity to formulate our results in ways that can specifically help with information gaps that state and federal managers may have. The hope is for our teams to gain some final perspectives on the best ways to summarize our results to have maximum utility to regulators and policy makers.

EVOSTC Education and Outreach Projects

This fall, the Kelp Values team is expanding our efforts to work with the CORaL team (project 400) by exploring ‘field school’ curriculum to train teachers from the spill zone to collect seaweed samples. This will occur in Seward in October 2026. The aim is to engage communities in collaborative research, improve upon what’s known about the distribution of kelp and seaweeds, and to bolster mapping efforts being implemented by Dr. Stekoll.

Trustee or Management Agencies

We have worked through our agency partner networks that include ADF&G, U.S. Fish and Wildlife Service, NOAA, USGS, and the National Park Service to share our ArcGIS Story Map as well as our research collaboration survey which has been completed by 20 managers and researchers from agencies to date. We are also currently organizing two, half-day dialogues with the focus of improving how we summarize our results for maximum utility by federal and state agencies.

Native and Local Communities

Our project continues to center the perspectives of Alaska Native Tribes and communities in the South Coast. During this quarter, we continued to work with four of them very closely through our HLSP and have expanded that effort to two additional Tribes. Our ethnography efforts defining traditional and contemporary values around kelp and seaweed have conducted formal outreach to 17 Tribes in total and have completed 60 interviews with knowledge holders from 9 tribal communities.



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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	\$15,154	\$180,987
Travel	\$0	\$5,876	\$11,288	\$14,884	\$8,650	\$40,698	\$1,276	\$17,009
Contractual	\$316,428	\$475,556	\$567,276	\$543,349	\$495,684	\$2,398,292	\$45,009	\$1,293,177
Commodities	\$0	\$0	\$750	\$799	\$972	\$2,521	\$0	\$6,155
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	\$10,752	\$262,033
SUBTOTAL	\$430,112	\$597,804	\$793,874	\$805,105	\$738,083	\$3,364,978	\$72,190	\$1,759,361
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		