



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: 22220301

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

Elizabeth Hoover¹, Environmental Science, Policy, & Management, University of California, Berkeley

Dune Lankard, Native Conservancy

Bren Smith², GreenWave LCC

Michael Stekoll, University of Alaska Southeast

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

Reporting Period: February 1, 2023 – January 31, 2023

Submission Date (Due March 1 immediately following the reporting period): 3/14/23

Project Website: N/A

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 were delayed in completing subawards to project partners. 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. The milestones/tasks for FY22 as described in our proposal were not

¹ Dr. Hoover has had to significantly decrease her engagement in the project and will no longer be longer be Co-PI on the work.

² Mr. Smith has left the project and will no longer be Co-PI on the work.



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

completed due to delay in funding and significant personnel changes. These changes are documented below and were shared in December 2022 with our program officer from ADF&G and EVOSTC staff in January of 2023.

Budget reallocation request.

We are in the process of revising our budget in collaboration with existing partners and a new collaboration with the ADF&G Division of Subsistence.

- UAS will reduce their total subaward (~\$50K) that was going to cover Dr. Mike Stekoll, and instead his engagement in H1 around kelp and seaweed mapping will be directly covered in a new subaward to UAF where he is now affiliated.
- UC Berkeley will no longer receive a subaward of \$320K as they are no longer able to manage a household subsistence survey effort in the spill region. Instead, their lead, Dr. Hoover will receive a direct contract in order to bring her expertise into specific ethnographic analyses associated with household surveys. The result is ~\$270K to support other efforts in H2 and H1 as detailed below.
- We expect that ADF&G Division of Subsistence will receive funding (possibly as much as \$200K) to help supplement originally intended survey efforts with mapping analyses and help facilitate the inclusion of new ethnographic narrative questions into their community survey efforts that were planned for H2.
- GreenWave will now receive a smaller subaward of \$30K to support Samantha Garwin's engagement in supporting willingness to pay survey efforts under H3. The result is ~\$30K available to support efforts in H3 as detailed below.
- ACF is pursuing additional contracted support to help compensate for the loss of GreenWave and to take advantage of a new opportunity to interview wholesalers of kelp products to producers to develop a clearer picture of the opportunities for kelp products beyond the WTP analysis UAA plans for direct consumers. We plan on putting a contract out for bid for ~\$50K to support H3, and we imagine the additional \$20K required to cover this coming from the savings from the UC Berkeley subaward.
- Pending final results of these budget changes, ACF intends to retain some funding from the UC Berkeley subaward (possibly as much as \$40K) to support annual team meetings for the next 4 years like the very productive one we held in December of 2022 that helped us reorganize our project.

Personnel changes.

-
- Bren Smith from GreenWave has stepped down as a Co-PI due to GreenWave cutting back their overall engagement in the project due to timing and a shift in their focus away



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

from Alaska; Emily Stengel of GreenWave will no longer be engaged as well. GreenWave's key contributions to the project relative to expertise around understanding the economics of processing and markets for kelp products will now come from senior staff person: Samantha Garwin, who will be engaged in supporting UAA's survey design and analysis associated with H3. ACF will pursue a contract to help pick up the additional pieces of survey implementation that would have been originally implemented by GreenWave.

- Elizabeth Hoover is no longer able to manage a household subsistence survey program in the spill region over 5 years with assistance from a student at U.C. Berkely. Via a contract, her expertise on Indigenous food systems will still inform the design of narrative questions around historical ecology and cultural uses of kelp to be implemented by others from the team (Chugach Regional Resources Commission and Native Conservancy) as well as an expected collaboration with ADF&G Division of Subsistence. Dr. Hoover will also assist with an ethnographic analysis of these narrative questions. Because of this change, UC Berkeley will no longer receive a subaward, and Dr. Hoover will not be a co-PI on the project.
 - Dr. Jen Rose, who had originally been identified as a contractor for Native Conservancy to lead their cultural values mapping efforts, is no longer available to serve in this role. These efforts will now be led by Dr. David Guilfoyle, an expert in cultural values mapping and an Indigenous planning procedure known as Healthy Country Planning.
 - Pending the results of our discussions with ADF&G Division of Subsistence, and the ultimate depth of involvement that they choose with the project, we would extend the invitation to one of their senior anthropologists to join as a co-PI.
-

1. Summary of Work Performed:

With the late awarding of funds in October, the departure of some key personnel, and efforts to revise our approaches (particularly in H2), we have limited accomplishments to report at this time. The bulk of our efforts since October have focused on revising our team and approach based on these changes, and working to take advantage a couple of new opportunities that connect well with our project.

Specifically, we are excited about the opportunities that will come from adding ADF&G Division of Subsistence as a project partner to assist with H2. Similarly, we are excited to bring a new method for H1 from Australia that has effectively engaged Indigenous communities in cultural values mapping that can then connect to larger regional efforts with managers and scientists. These opportunities surfaced as part of our full team meeting held in Cordova on December 8th and 9th.

Based on their expertise in marketing GreenWave also brought a new opportunity to the project to connect with wholesalers that are likely to buy processed kelp in large quantities for various



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

purposes. Their connections to these businesses inspired the idea to also include focus groups/interviews with these individuals to supplement the Willingness to Pay surveys planned for direct consumers in west coast states. Including insights from these individuals will help us produce a better picture of the economic opportunities around kelp nationally.

2. Products:

Peer-reviewed publications:

NA

Reports:

NA

Popular articles:

NA

Conferences and workshops:

NA

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



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

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 have corresponded via email about the status of our projects and made an agreement spelling out ways that we will keep in touch with the other two mariculture projects funded in 2022.

EVOSTC Education and Outreach Projects

We have been corresponding with Melissa Good on the CORaL team since the project was awarded and she has a standing invite as of November 2022 to join our monthly meetings. She also joined virtually for portions of our project team meeting in Cordova in December of 2022.

Trustee or Management Agencies

We have been in regular contact with ADF&G Division of Subsistence since November of 2023 about the project and they virtually attended our project team meeting in Cordova in 2022. We have also briefed the US Fish and Wildlife Service's mariculture working group on the project.

Native and Local Communities

Project partners Native Conservancy and Chugach Regional Resources Commission have both made outreach on the project to multiple Tribes within the region.

4. Response to EVOSTC Review, Recommendations and Comments:

NA



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

5. Budget:

| Budget Category: | | Proposed FY 22 | Proposed FY 23 | Proposed FY 24 | Proposed FY 25 | Proposed FY 26 | 5- YR TOTAL PROPOSED | ACTUAL CUMULATIVE |
|---|------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------------|----------------------|
| Personnel | | \$344,577 | \$330,228 | \$362,372 | \$349,477 | \$345,563 | \$1,732,216 | |
| Travel | | \$41,773 | \$47,501 | \$44,873 | \$37,523 | \$34,673 | \$206,343 | |
| Contractual | | \$199,225 | \$140,775 | \$157,287 | \$214,975 | \$137,725 | \$849,987 | |
| Commodities | | \$1,840 | \$3,240 | \$3,240 | \$3,240 | \$3,240 | \$14,800 | |
| Equipment | | \$5,000 | \$0 | \$0 | \$0 | \$0 | \$5,000 | |
| Indirect Costs | Rate = 18% | \$102,797.57 | \$91,305 | \$99,360 | \$105,913 | \$91,210 | \$490,586 | |
| SUBTOTAL | | \$695,212 | \$613,049 | \$667,132 | \$711,127 | \$612,411 | \$3,298,932 | |
| General Administration (9% of subtotal) | | \$62,569 | \$55,174 | \$60,042 | \$64,001 | \$55,117 | \$296,904 | N/A |
| PROJECT TOTAL | | \$757,781 | \$668,224 | \$727,174 | \$775,129 | \$667,528 | \$3,595,836 | |
| Other Resources (In-Kind Funds) | | \$125,000 | \$0 | \$0 | \$0 | \$0 | \$125,000 | |