

Joint Innovation Project - 2024/25

Development of a mobile kelp processor and harvesting platform to provide on-water support for Alaska's commercial kelp farmers

Lead Entity: Mothers of Millions

Category: Kelp cultivation
Project Location: Seward, AK
Project Start Date: September 2024
Expected End Date: September 2025
Award Amount: \$150,000

PROJECT OVERVIEW

Please provide an updated description of your project here using the following guidelines:

- **Problem to be solved:** Commercial kelp farmers in Southcentral Alaska face significant logistical and economic barriers to harvesting, stabilizing, and transporting large volumes of kelp from remote aquatic farms to processing centers.
- **Proposed solution:** Mothers of Millions LLC (MOM) is developing a mobile, organic-certified seaweed harvester and processor to support rural seaweed farmers by providing on-water stabilization and processing services. This facility will meet farmers at their farm sites, reducing transportation costs and bridging the gap between harvest and market.
- **What you have accomplished/learned to date including challenges, successes, and any changes to your original proposal:**

MOM has completed the harvesting, processing, and stabilization of commercial kelp farm harvest throughout Prince William Sound and was able to expand to work with an additional farm in Southeast Alaska to purchase a portion of their harvest. Due to the rapidly changing market for commercial, Alaskan kelp, MOM ultimately moved away from harvesting and freezing kelp, the process it anticipated having a market for in the original proposal, to stabilizing kelp with a solution to support a growing agricultural market need. This change in operations was made to support kelp farmers in developing a strong relationship with a new potential buyer of Alaskan kelp, with a view to building a relationship with a buyer that might be able to support the development of an economically viable kelp farming industry beyond the Build Back Better grant. This aspect of the project was a huge success, as MOM was able to harvest more kelp in a smaller window of time than first anticipated in the original proposal for this project. Morphological differences in kelp harvest from year to year and even from farm to farm within Prince William Sound required MOM to change the anticipated processing and harvesting flow of operations on the water during the Spring 2025 harvest, but ultimately provided a good learning experience for both MOM and commercial farmers as to possible variations in kelp growth, holdfast strength, and the difficulty in anticipating kelp harvest yields leading up to harvest.

 - To date, MOM has worked with kelp farmers across Prince William Sound to initiate the organic certification process. All entities have submitted their required paperwork and participated in in-person inspections of their farming operations;

the organic-certifying entity is in the final processes of reviewing paperwork prior to releasing farmers' organic certificates for their operations.

- **Next/final steps:**

MOM is in the process of putting together a final report for this project, describing lessons learned during the harvesting and processing period, some of which have been outlined above, in greater detail, and anticipated changes to improve the mobile processor and harvester for future seasons in order to increase the platform's use and utility to support farmers throughout other regions of Alaska for the Spring 2026 harvest.

ADDITIONAL INFORMATION

- **Do you anticipate any challenges in completing your current scope of work by your planned end date?**

No: harvesting and processing via a mobile kelp processing platform from commercial kelp farms throughout Alaska was completed in spring 2025, in coordination with farmers' planned harvest dates. To date, all organic-certification documents have been submitted by farmers to the organic certifying entity; one farmer has received their organic certification paperwork and other farmers are next in queue for organic-certification review, with certificates anticipated to be provided by September 2025.

- **Do you anticipate spending all of your awarded funds?**

Yes. All awarded funds will be spent by the projects completion date of September 2025.

- **Do you have anything additional that you would like to share?**

We are encouraged by the enthusiasm and collaboration from our farming partners and regional stakeholders. This project has underscored the urgent need for accessible, scalable processing solutions in Alaska's mariculture sector.

PHOTOS

Please upload 2-4 photos of the project here, or as attachments.



Shredding and stabilizing harvested kelp aboard the vessel



Harvesting kelp via support vessel recruited by MOM



On deck storage and stabilization of processed kelp