Board of Directors & Membership Meeting

WHEN: Tuesday, November 15, 2022
1:00pm - 5:00pm (Pacific Time)

WHERE: American Seafoods Conference room
2025 First Avenue, Suite 900, Seattle, Washington
Hybrid ZOOM video-conference
Via computer *https://us02web.zoom.us/j/84182980966*
Via phone: 1-669-900-6833
Meeting ID: 841 8298 0966

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Board of Directors & Membership Meeting

Alaska Fisheries Development Foundation, Inc.

WHEN: Tuesday, November 15, 2022
1:00pm - 5:00pm, Pacific Time

WHERE: American Seafoods Conference room
2025 First Avenue, Suite 900, Seattle, Washington
Hybrid ZOOM video-conference
Via computer *https://us02web.zoom.us/j/84182980966*
Via phone: 1-669-900-6833
Meeting ID: 841 8298 0966

AGENDA

1) Call membership & Board meeting to order
2) Roll call; establish quorum and proxies on file
3) Conflicts of interest declared (none anticipated)
4) Recognize AFDF members/staff/guests present
5) Review & approve agenda
6) Review and approve minutes (2022-10-07)
7) Review and approve new membership applications (if any) & paid memberships

Elections (20 mins):

8) **Board members up for re-election**:
   a. Matt Alward, Harvester, Region III
   b. Mike Cusack, Harvester, Region IV
   c. Keith Singleton, Harvester, At-large
   d. Chris Mierzejek, Processor, At-larger
   e. John Sund, Service Sector, At-large
   f. Tommy Sheridan, Service Sector, At-large
   g. Vacant, Service Sector, At-large (one nomination - Tomi Marsh, F/V Savage)

9) **Election of officers**:
   a. President (Mark Scheer)
   b. Vice President (Chris Mierzejek)
   c. Secretary (Tommy Sheridan)
   d. Treasurer (Trevor Sande)

Guest presentations (15 mins):

10) Dr. Nichole Price (time certain - 1:45pm PST)
    Exploring the potential of seaweed as a solution for legacy & current fish waste

11) **Staff reports** (60 mins):
    a. Julie Decker, Executive Director, Org Overview
    b. Ekatrina Ratzlaff, Finance Director
    c. Julie Cisco, Executive Administrator, Membership & Symphony
    d. Hannah Wilson, Development Director, Sustainability Certification & Mariculture
    e. Tommy Sheridan, Technical Facilitator, RFM & MSC salmon certifications
    f. Ben Americus, Science Policy Coordinator, Synthesis & contextualization of AHRP
    g. Robin McKnight, Mariculture Development Coordinator
    h. Garrett Evridge, Director, AFDF Startup Accelerator

Old Business:

12) DISCUSS/NO ACTION - PSPA request/offer to co-host UFA Legislative Reception/Symphony Awards Ceremony in Feb
13) DISCUSS/RECOMMEND: structure of Industry Advisory Committee (see draft attached)
14) DISCUSS/RECOMMEND: EDA BBB Phase 2 - Research & Development Component - Joint Innovation Projects

New Business:

15) ACTION: Approve FY22 Actual Budget
16) ACTION: Approve FY23 Projected Budget
17) DISCUSS/RECOMMEND: potential of seaweed as a solution for fish waste

18) Set date for next Board meeting – Thursday, Feb. 23 @ 9am-noon; or Friday, Feb. 24 @ 9am-noon.
19) UFA Legislative Reception & Symphony Awards Ceremony - **Thurs., Feb. 23 @ 5-8pm**
20) Executive Session for purposes of discussing issues relating to staff
21) Adjourn

Annual Membership & Board Meeting

Alaska Fisheries Development Foundation, Inc.

WHEN: Friday, October 7, 2022
5-7pm (Alaska Standard Time)

WHERE: Anchorage Hilton, Top of the World Room
Hybrid ZOOM video-conference
Via computer: https://us02web.zoom.us/j/82267871510
Via phone: 1-669-900-6833
Meeting ID: 822 6787 1510
Passcode: None

AGENDA – Annual Membership & Board

1) Call annual membership & Board meeting to order
2) Roll call; establish quorum (no proxies)
3) Conflicts of interest declared (none anticipated)
4) Recognize AFDF members/staff/guests present
5) Review & approve agenda
6) Review and approve minutes (2022-09-15)
7) Review and approve new membership applications (if any) & paid memberships

8) Staff reports (30 mins):
    a. Julie Decker, Executive Director, Org Overview & Finances
    b. Julie Cisco, Executive Administrator, Membership & Symphony
    c. Hannah Wilson, Development Director, Sustainability Certification & Mariculture
    d. Tommy Sheridan, Technical Facilitator, RFM & MSC salmon certifications
    e. Ben Americus, Science Policy Coordinator, Synthesis & contextualization of AHRP
    f. Robin McKnight, Mariculture Development Coordinator
    g. Garrett Evridge, Director, AFDF Startup Accelerator

9) Board elections (15 mins):
    a. Matt Alward, Harvester, Region III
    b. Mike Cusack, Harvester, Region IV
    c. Keith Singleton, Harvester, At-large
    d. Chris Mierzejek, Processor, At-larger
    e. John Sund, Service Sector, At-large
    f. Tommy Sheridan, Service Sector, At-large
    g. Vacant, Service Sector, At-large

10) History of AFDF work & projects - Decker
11) Member input on future industry priorities – for discussion (30 mins)

12) Board of Directors' Business (30 mins):
    a. Election of officers:
        i. President (Mark Scheer)
        ii. Vice President (Chris Mierzejek)
        iii. Secretary (Tommy Sheridan)
        iv. Treasurer (Trevor Sande)

    b. Discussion & possible action – RFM Halibut & Sablefish Client Group (guest speaker – Jeff Regnart, CSC Ex. Director)

        <u>Recommended motion:</u> Approve AFDF becoming Client for RFM certification of halibut & sablefish, including additional capacity for technical assistance

13) Set date for next Board meeting – ***Tuesday, Nov. 15 – 1-5pm PST (noon-4pm AST)***
14) Adjourn

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Attachments:

1) AFDF Membership List
2) Minutes 2022-09-15 – DRAFT
3) AFDF Board of Directors – Seats & Terms
4) Letter of Interest for Board - Marsh
5) Letter of Interest for Board - Cusack
6) ASMI FY23 RFM/CSC Budget
7) RFM Halibut & Sablefish Client Group List
8) Working Waterfronts Framework

Alaska Fisheries Development Foundation Inc.
2022 Membership Report

Type	Date	Num	Name	Memo	Open Balance	Amount	Balance
4000 · REVENUES							
4300 · Membership Dues							
Invoice	01/18/2022	MBR2022-05	Alaska Groundfish Data Bank, Inc:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membership		0.00	0.00
Invoice	02/08/2022	MBR2022-23	United Fishermen of Alaska (A/R):2022 MBR Voting	2022 AFDF Membership Dues - Individual Membership		0.00	0.00
Invoice	02/08/2022	MBR2022-24	Northwest Fisheries Association:2022 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership		0.00	0.00
Invoice	02/08/2022	MBR2022-32	Alaska Bering Sea Crabbers:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		0.00	0.00
Invoice	02/08/2022	MBR2022-38	Aqua Star (A/R):2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		0.00	0.00
Invoice	02/08/2022	MBR2022-48	Blue Wave Futures:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		0.00	0.00
Invoice	11/09/2021	MBR2022-02N	UAF - Alaska Blue Economy Center:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membership		250.00	250.00
Invoice	02/08/2022	MBR2022-08	City of Whittier, Alaska:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membership		250.00	500.00
Invoice	02/08/2022	MBR2022-09	Alaskan Observers, Inc.:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membership		250.00	750.00
Invoice	02/08/2022	MBR2022-10	Copper River Seafoods, Inc.:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membership		250.00	1,000.00
Invoice	02/08/2022	MBR2022-11	Tom's Wild Alaskan:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membersh	250.00	250.00	1,250.00
Invoice	02/08/2022	MBR2022-12	Native Village of Eyak:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membersh	250.00	250.00	1,500.00
Invoice	02/08/2022	MBR2022-13	Alaska Seafood Company, Inc.:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membership		250.00	1,750.00
Invoice	02/08/2022	MBR2022-14	F/V Raven Bay:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membersh	250.00	250.00	2,000.00
Invoice	02/08/2022	MBR2022-15	E.C. Phillips & Sons:MBR 2022 Individual	2022 AFDF Membership Dues - Individual Membership		250.00	2,250.00
Invoice	02/08/2022	MBR2022-49	Pearl Bay Seafoods, LLC:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membership		250.00	2,500.00
Invoice	02/08/2022	MBR2022-45	Sylvia Kincho:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membersh	250.00	250.00	2,750.00
Invoice	11/02/2021	MBR2022-01N	City of Valdez:2022 Membership	2022 AFDF Membership Dues - Voting Membership		500.00	3,250.00
Invoice	11/09/2021	MBR2022-03N	City of Cordova:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership	500.00	500.00	3,750.00
Invoice	02/08/2022	MBR2022-06	Pacific Seafood Processors Association:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	4,250.00
Invoice	02/08/2022	MBR2022-28	Prince William Sound Aquaculture Corporat:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership	500.00	500.00	4,750.00
Invoice	02/08/2022	MBR2022-29	Sheridan Consulting, LLC:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	5,250.00
Invoice	02/08/2022	MBR2022-30	F/V Savage:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	5,750.00
Invoice	02/08/2022	MBR2022-31	AK Commercial Fishing & Agriculture Bank:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	6,250.00
Invoice	02/08/2022	MBR2022-33	Alaska Longline Fishermen's Association:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	6,750.00
Invoice	02/08/2022	MBR2022-34	Alaska Whitefish Trawlers Association:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	7,250.00
Invoice	02/08/2022	MBR2022-35	Alaskan Leader Seafoods, LLC:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	7,750.00
Invoice	02/08/2022	MBR2022-36	Alward Fisheries, LLC:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	8,250.00
Invoice	02/08/2022	MBR2022-37	APICDA Joint Ventures dba Bering:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	8,750.00
Invoice	02/08/2022	MBR2022-39	At Sea Processors Association:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	9,250.00
Invoice	02/08/2022	MBR2022-40	E & E Foods, Inc.:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	9,750.00
Invoice	02/08/2022	MBR2022-41	F/V McCrea:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	10,250.00
Invoice	02/08/2022	MBR2022-42	Frontier Packaging, LLC:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	10,750.00
Invoice	02/08/2022	MBR2022-43	Magic Fish Co.:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	11,250.00
Invoice	02/08/2022	MBR2022-44	Northwest Farm Credit Services:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	11,750.00
Invoice	02/08/2022	MBR2022-46	Premium Aquatics, LLC:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	12,250.00
Invoice	02/08/2022	MBR2022-47	Stellar North LLC:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	12,750.00
Invoice	01/08/2022	MBR2022-04N	Bornstein Seafoods:2022 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership		1,000.00	13,750.00
Invoice	02/08/2022	MBR2022-07	Marel Inc:2022 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership		1,000.00	14,750.00
Invoice	02/08/2022	MBR2022-18	Aleutian Longline LLC:2022 MBR Voting	2022 AFDF Membership Dues - Sustaining Membership		1,000.00	15,750.00
Invoice	02/08/2022	MBR2022-19	American Seafoods Company:2022 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership		1,000.00	16,750.00
Invoice	02/08/2022	MBR2022-20	Kwikpak Fisheries, LLC:2022 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership		1,000.00	17,750.00
Invoice	02/08/2022	MBR2022-21	Marble Seafoods:2021 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Members	1,000.00	1,000.00	18,750.00
Invoice	02/08/2022	MBR2022-22	Rich Products Corporation:2022 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership		1,000.00	19,750.00
Invoice	02/08/2022	MBR2022-25	OBI Seafoods, LLC:2022 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership		1,000.00	20,750.00

Alaska Fisheries Development Foundation Inc.
2022 Membership Report

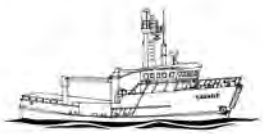
	Type	Date	Num	Name	Memo	Open Balance	Amount	Balance
	Invoice	02/08/2022	MBR2022-26	UniSea Inc.:2022 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership		1,000.00	21,750.00
	Invoice	02/08/2022	MBR2022-27	Kanaway Seafoods dba Alaska General Seafo:2022 MBR Sustaini	2022 AFDF Membership Dues - Sustaining Members	1,000.00	1,000.00	22,750.00
	Invoice	02/08/2022	MBR2022-50	North Pacific Seafoods dba AK Pacific Sea:2022 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership		1,000.00	23,750.00
	Invoice	02/08/2022	MBR2022-16	Silver Bay Seafoods:2022 MBR Partner	2022 AFDF Membership Dues - Partner Membership		2,000.00	25,750.00
	Invoice	02/08/2022	MBR2022-17	Trident Seafoods Corporation:2022 MBR Partner	2022 AFDF Membership Dues - Partner Membership		2,000.00	27,750.00
	Invoice	09/26/2022	MBR2022-51	F/V Lady Simpson:2022 MBR Partner	2022 AFDF Membership Dues - Partner Membership		2,000.00	29,750.00
Total 4300 · Membership Due						4,000.00	29,750.00	29,750.00
Total 4000 · REVENUES						4,000.00	29,750.00	29,750.00
TOTAL						**4,000.00**	**29,750.00**	**29,750.00**

AFDF Board of Directors: Seats and Terms as of February 20, 2022

Seat	Region	Feb. 08	Feb-09	Feb-10	Feb-11	Feb-12	Mar-13	Feb-14	Feb-15	Feb-16	Feb-17	Feb-19	Mar-21	Feb-22	Up for Election	Comments
Harvester	I	Fisk		Decker	vacant	Beaton		x		Sande		Sande	Sande	Trevor Sande	2023	
Harvester	II	Simpson	X		X		X		X		X	Singleton	Laukitis	Buck Laukitis	2023	
Harvester	III	Burch	X		X		X		X		X	Burch	Alward	Matt Alward	2022	
Harvester	IV	Jacobs	X		X		X		X		X	Jacobs	Cusack	Mike Cusack	2022	
Harvester	At large	Chandler		X		X		Sande		Laukitis		Buck Laukitis	Singleton	Keith Singleton	2022	
Processor	At large	Garner	X	Fisk			Tupper			X		Reed	Riggs	Rich Riggs	2023	
Processor	At large	Mullins	X		X		X		X	Enlow		Enlow	Enlow	Tom Enlow	2023	
Processor	At large	Berger		van Am		X		x		Moreland		Moreland	Moreland	Stefanie Moreland	2023	
Processor	At large	Moir	X	Basso	Vacant	Whiddon	Sund		X	Mierzejek		Mierzejek	Mierzejek	Chris Mierzejek	2022	
Processor	At large	Cox	X		X		X		X	vacant	vacant	Sheridan	Scheer	Mark Scheer	2023	
Service	At large	Mitchell	Soriano	X		X		Mierzejek	X	Sund	X	Sund	Sund	John Sund	2022	
Service	At large	Sullivan	Goche	X	Vacant	Smith		X		vacant	X	Denning	Denning	VACANT	2022	resigned Fall, 2021
Service	At large	McCabe	Scheer	X		X		X		X		Scheer	Sheridan	Tommy Sheridan	2022	
Emerits	At-large											Burch		Burch	NA	

Vacant Seat: Service Sector, At large

Nominations Committee = Moreland & Scheer (?)



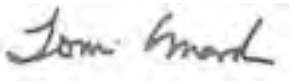
Savage Inc.
2417 Tongass Ave
Suite 111-176
Ketchikan, AK 99901
(206)-972-8217

Alaska Fisheries Development Foundation
PO Box 2138
Wrangell, AK 99929

Dear Ms. Decker,

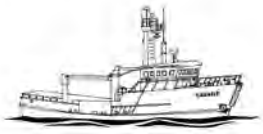
Please accept this letter as a formal application to participate on the AFDF Board if an opening should ever become available. I have been involved with AFDS's projects for many years, including the Fishing Vessel Energy Efficiency Program, Mariculture Project, Social Responsibility on Fishing Vessels, and the Symphony of Seafoods. I have participated in fisheries from the Bering Sea to SE Alaska and I am also involved in the mariculture of seaweed and shellfish. AFDF is an innovative organization that seeks to continue to advance the fisheries, coastal communities, and fishing industry. AFDF brings great value to Alaska's fishing communities, and it would be an honor to serve on the board.

Sincerely,



Tomi Marsh

tomimarsh@mindspring.com



2417 Tongass Ave Suite 111-176
Ketchikan, AK 99901
tmarsh@oceansalaska.org (206)-972-8217

Hitomi J. Marsh

Relevant Professional Experience

- 1989 -present. Owner/operator F/V Savage.
- 2008-present. Southeast Alaska marine pilot, unlimited tonnage.
- 2010-present. President of OceansAlaska, non-profit mariculture education and shellfish/seaweed/invertebrate hatchery/nursery facility and farm.
- 1995-present. Tender and coordinate salmon and dive harvesters for E. C. Phillips.
- 1990-1999: Expedited and in charge of freight and logistics in the Pribilof Islands and Dutch Harbor 1990-1995 crab seasons for the floating processors, City of St. Paul, City of St. George.
- Pilot boat for Alaska Marine pilots facilitate communication and logistics between pilots and foreign freighters in Togiak, Pribilof Islands, Unalaska.

Current Volunteer and Leadership Activities

- 2014-present. Alaska Seafood Marketing Institute (ASMI) board member.
- Certified Seafood Collaborative/Responsible Fisheries Management board.
- President of OceansAlaska marine science facility.
- ASMI Communications and International Committee member.
- Greenwave advisory board member.
- EPSCOR advisory board member.
- Member of the Alaska Fisheries Development Foundation, Alaska Mariculture Alliance, United Fishermen of Alaska, Alaska Trollers Association, Southeast Alaska Fishermen Association, United Fishermen of Alaska, United Southeast Gillnetters, Petersburg Fishing Vessel Owners, and Alaska Marine Safety Education Association.
- Southeast Alaska pilot training program mentor.
- Kelptastic and OceansAlaska seaweed farms manager.
- Co-author of Fishes and Dishes Cookbook.

Education

- Current USCG unlimited SE master; 1600-ton Ocean Master.
- 2020-present. University of Alaska Fairbank Graduate Program, Rural Development.
- Summer 2021 University of Washington Marine Botany class
- 2008-2019 University of Alaska Fairbanks, Rural Development, DANSRD
- 1982-1983, Western Washington University, *Honors History*
- 1981-1982, 1984 University of Washington, *Alcoa Engineering scholarship,* Japanese Studies

AMERICAN SEAFOODS COMPANY

Julie Decker – Executive Director
Alaska Fisheries Development Foundation, Inc.
PO Box 2223
Wrangell, AK 99929-2223

Julie,

I would like to be considered to retain my seat on the Board of Directors Harvester, Region IV seat. AFDF has made great strides in the past 2 years since my initial appointment.

Please find my resume attached. These are exciting times I would like to continue to be a part of with AFDF.

Feel free to reach out with any questions you may have.

Regards,

Mike Cusack
VP Sales North America

American Seafoods Company LLC
Market Place Tower
2025 First Avenue, suite 900
Seattle, WA, 98121
USA

Pho: +1 206 448 0300
Fax: +1 206 448 0505

Web: www.americanseafoods.com

Michael B. Cusack
3908 SW Hanford St Seattle, WA 98116
(206) 915-5530, mike.cusack@americanseafoods.com ;mcusack08@hotmail.com

Objective:

To remain serving on the AFDF Board utilizing my harvesting, combined with sales/marketing experience for Alaska Seafood.

Education:

Oregon State University Corvallis, Or
BS Degree- Economics
Graduation Date: June. 1991

Special Skills:

-Broad-based knowledge of markets for commodity and value-added seafood products in North America, Europe, South America and Japan.
-Knowledge of Sales and Distribution Methods for Fresh and Frozen Seafood Globally
-Knowledge of both Retail and Foodservice Sales and Marketing techniques
-Active involvement in the buying and selling of seafood products internationally
-Extensive knowledge of Seafood Fishing and Processing in Alaska
-Excellent communication skills

Work Experience:

Vice President of Sales/N America – American Seafoods January 2017-Present
-Responsible for sales in N American market including new product development and execution.
-Working with marketing department ensuring successful launch of new items elevating awareness
and increasing net margin.
-Coordinate production with operations to ensure finished goods are processed in coordination with customer demands.
-Lead a new sales direction in the pet food category increasing revenue return on core items. Leading a new sales category includes hiring a team of experts in the category.
-Margin analysis against quarterly/annual performance budgets/goals.

Executive Vice President of Sales & Marketing – Icicle Seafoods May 2013-June 2016
-Responsible for global sales/marketing including logistics/invoicing dept. for all Icicle Seafoods products, including Atlantic Salmon.
-P&L management, optimizing margin with product “mix” changes to achieve targets.
-Financial analysis including cash flow, working capitol needs, inventory "turns" to increase margin return.
-Long term planning in conjunction with operations to plan product diversification including ex vessel raw material pricing.
-Global logistics efficiencies from “remote” Alaska areas to customers worldwide.
-Creating global cold storage efficiencies worldwide.

Vice President of Sales & Marketing- Nissui USA FW Bryce Inc. Division -April 2006-2013
-Hired and trained expanded sales team to increase sales from $40 million to current sales of $125 million after acquisition of FW Bryce.
-Strategic planning for market and quota changes with wild and farmed seafood items.
-Negotiated long term large volume customer supply/sales agreements with national restaurant and food service operators in the US and overseas.
-Work with overseas affiliates with procurement of products not available with “internal” production.
-Developed budgets for commodity seafood sales both in North America as well as working with international Nissui divisions to maximize financial returns.

Senior Business Development Manager- Nissui USA Fishking/UniSea Foods, Inc. divisions.
April 1999-2006.

-Category Manager responsible for restructuring, development, and implementation of Commodity Products, Smoked Products, and Surimi-Based Products Operation and Marketing Strategies
-Coordinating efforts of Regional Managers to effectively implement National Sales Strategies
-Actively involved in worldwide allocation and procurement of Fishking/UniSea's Product mix
-Responsible for National Accounts in North America
-Coordinating efforts of Regional Managers to effectively implement National Sales Strategies
-Responsible for restructuring, development, and implementation of Surimi and Smoked Products
Operations and Marketing strategies
-Responsible for North American Allocation and profitability of over $50 million of commodity Seafood products from Alaska
-Actively involved in worldwide allocation of UniSea's Product mix utilizing Nippon Suisan "Global Links".

Fresh/Frozen Sales- Wards Cove Packing Co. **May 1995-April. 1999**

-Responsible for sales of fresh and frozen Alaskan Seafood products
-Responsible for North American allocation and profitability, working directly with the processing plants and end user customers.
-Actively involved in worldwide allocation of Wards Cove product mix
-Responsible for Quality Control specifications and production scheduling of "Further Processed" Alaskan commodity products

Commercial Fisherman **1983-1995**

-Purse Seining salmon in Southeast Alaska
-Long line fishing for halibut and black cod in the Gulf of Alaska Area
-Operated Bristol Bay drift gillnet vessel/operation

I have been working in the Alaska Seafood industry my entire life. Born and raised in Ketchikan, Alaska, I began my experience at a very young age.

I have found that my career path has given me a unique mix of experience ranging from the actual harvesting of seafood to the final sale at the end user level.

Associations:

Alaska Seafood Marketing Institute (ASMI)- Board of Directors as appointed by the Governor of Alaska 2002-2004.
Alaska Seafood Marketing Institute (ASMI)- While fish and food service committee member 2000- Present.
National Fisheries Institute- Board of Directors 2021 - Present
National Fisheries Institute – Committee member 2001- current.
National Fisheries Institute – Salmon Council executive committee member.

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AFDF
Alaska Fisheries Development Foundation, Inc.

Julie Cisco <jcisco@afdf.org>

November Membership meeting / Board elections

16 messages

Julie Cisco <jcisco@afdf.org> Wed, Nov 2, 2022 at 2:35 PM
To: jtalbott@valdezak.gov, Justin Sternberg <jcsternberg@alaska.edu>, jbonney@gci.net, andrew@bornstein.com, Chris Barrows <chrisb@pspafish.net>, Allison Attaway <allison.attaway@marel.com>, citymanager@whittieralaska.gov, Michael Lake <mlake@alaskanobservers.com>, kpurkerson@crsalaska.com, info@alaskaseafoodcompany.com, paulc@ecphillipsalaska.com, craigc@starboats.com, jan.jacobs@americanseafoods.com, accounting@ydfda.org, Scott Kelley <ufa@ufa-fish.org>, Val Motley <val@northwestfisheries.org>, Mark.Palmer@obiseafoods.com, Tom Enlow <tom.enlow@unisea.com>, Tommy Sheridan <tommysheridan@ymail.com>, Tomi Marsh <tomimarsh@mindspring.com>, Chris Mierzejek <cmierzejek@apicda.com>, Buck Laukitis <buck.magicfish@gmail.com>, Stefanie Moreland <smoreland@tridentseafoods.com>, Lea@cfabalaska.com, alfa.staff@gmail.com, execdir@alaskawhitefishtrawlers.org, Matt Alward <matt@bulletproofnets.com>, smadsen@atsea.org, juliedecker@gci.net, johnm@frontierpackaging.com, brett.cheney@northwestfcs.com, markos@seagrovekelp.com, John Sund <johnlsund@yahoo.com>, carlyott@hbkllc.com, MattMoir@npsi.us, sales@tomswildalaskan.com, John.whissel@eyak-nsn.gov, codfish1408@yahoo.com, Sylviakincho40@gmail.com, mayor@cityofcordova.net, tommy.sheridan@pwsac.com, Keith Singleton <Keith@alaskanleader.com>, jdenning@aquastar.com, kenn@eefoods.com, joea23x@gmail.com, trevorsandae@rmketchikan.com, mwaln@moreys.com, sandy@akgen.com, abby.fredrick@silverbayseafoods.com
Cc: Julie Decker <jdecker@afdf.org>, Ekaterina Ratzlaff <eratzlaff@afdf.org>, Hannah Wilson <hwilson@afdf.org>, Garrett Evridge <garrett@alaskaoceancluster.com>, Robin McKnight <rmcknight@afdf.org>, bamericus@afdf.org

We have a location! American Seafoods has graciously offered the use of their conference room, located at

Market Place Tower, 2025 First Avenue, Suite 900

The next membership meeting will be held Tuesday, November 15, 1:00 - 5:00 PM PST (Noon - 4:00 PM AKST) in Seattle.

We will be holding Board elections. If you cannot attend, please fill out the attached proxy and return to me.

The Board seats that are up are attached. If you have any questions, or will be attending virtually, please let me know.

--
Julie Cisco
Executive Administrator
www.afdf.org
(907) 205-0306

2 attachments

PROXY form - AFDF membership meeting 2022-11-15.docx
21K

Board Seats & Terms 2022-09-15.xlsx
22K

Proxy Form
AFDF Board Meeting

Return by email to jdecker@afdf.org or jcisco@afdf.org

As a Voting Member of the Alaska Fisheries Development Foundation (AFDF), I do hereby appoint Michael Cusack
(name of member and/or organization in attendance) to vote in my absence during the meeting of the AFDF General Membership Meeting, to be held:

Tuesday, November 15, 2022 at 1pm PST
In Seattle or via Zoom conference link (to be distributed)

This proxy will remain in effect for the duration of this membership meeting only.

Keith Singleton

Printed Name & Company Name of AFDF Voting Member

Keith Singleton

Authorized Signature

11/2/2022

Witness Date

TAKEN FROM AFDF BYLAWS:

Section 4.Voting - The delegate of a member entitled to vote may vote in person or by proxy executed in writing by the member or by his attorney-in-fact. A majority of the votes entitled to be cast on a matter to be voted upon by the members present or represented by proxy at a meeting at which a quorum is present is necessary for adoption of the matter.

Section 15. Action Without Meeting - Any action required or permitted to be taken by the Board of Directors may be taken without a meeting, provided that a majority of the Directors shall consent in writing to such action. Such written consent shall be filed with the minutes of proceedings of the Board of Directors. Such action by written consent shall have the same force and effect as a vote of the Board of Directors.

Proxy Form
AFDF Board Meeting

Return by email to jdecker@afdf.org or jcisco@afdf.org

As a Voting Member of the Alaska Fisheries Development Foundation (AFDF), I do hereby appoint Matt Alward
(name of member and/or organization in attendance) to vote in my absence during the meeting of the AFDF General Membership Meeting, to be held:

Tuesday, November 15, 2022 at 1pm PST
In Seattle or via Zoom conference link (to be distributed)

This proxy will remain in effect for the duration of this membership meeting only.

Julie Bonney, Alaska Groundfish Data Bank
Printed Name & Company Name of AFDF Voting Member

Julie A. Bonney
Authorized Signature

Chelsea M Radell 11/9/2022
Witness Date

TAKEN FROM AFDF BYLAWS:

Section 4.Voting - The delegate of a member entitled to vote may vote in person or by proxy executed in writing by the member or by his attorney-in-fact. A majority of the votes entitled to be cast on a matter to be voted upon by the members present or represented by proxy at a meeting at which a quorum is present is necessary for adoption of the matter.

Section 15. Action Without Meeting - Any action required or permitted to be taken by the Board of Directors may be taken without a meeting, provided that a majority of the Directors shall consent in writing to such action. Such written consent shall be filed with the minutes of proceedings of the Board of Directors. Such action by written consent shall have the same force and effect as a vote of the Board of Directors.

Proxy Form
AFDF Board Meeting

Return by email to jdecker@afdf.org or jcisco@afdf.org

As a Voting Member of the Alaska Fisheries Development Foundation (AFDF), I do hereby appoint Mark Sweet (name of member and/or organization in attendance) to vote in my absence during the meeting of the AFDF General Membership Meeting, to be held:

Tuesday, November 15, 2022 at 1pm PST
In Seattle or via Zoom conference link (to be distributed)

This proxy will remain in effect for the duration of this membership meeting only.

Michael B. Laukitis Magic Fish Co
Printed Name & Company Name of AFDF Voting Member

Authorized Signature

Shelly Laukitis 11/9/22
Witness Date

TAKEN FROM AFDF BYLAWS:

Section 4.Voting - The delegate of a member entitled to vote may vote in person or by proxy executed in writing by the member or by his attorney-in-fact. A majority of the votes entitled to be cast on a matter to be voted upon by the members present or represented by proxy at a meeting at which a quorum is present is necessary for adoption of the matter.

Section 15. Action Without Meeting - Any action required or permitted to be taken by the Board of Directors may be taken without a meeting, provided that a majority of the Directors shall consent in writing to such action. Such written consent shall be filed with the minutes of proceedings of the Board of Directors. Such action by written consent shall have the same force and effect as a vote of the Board of Directors.

incumbents & Toni

Proxy Form
AFDF Board Meeting

Return by email to jdecker@afdf.org or jcisco@afdf.org

As a Voting Member of the Alaska Fisheries Development Foundation (AFDF), I do hereby appoint Julie Cisco (name of member and/or organization in attendance) to vote in my absence during the meeting of the AFDF General Membership Meeting, to be held:

Tuesday, November 15, 2022 at 1pm PST

In Seattle or via Zoom conference link (to be distributed)

This proxy will remain in effect for the duration of this membership meeting only.

Lela Klingert AK Commercial Fishing and Agriculture Bank

Printed Name & Company Name of AFDF Voting Member

Lela J. Klingert

Authorized Signature

Witness

11-3-2022

Date

TAKEN FROM AFDF BYLAWS:

Section 4.Voting - The delegate of a member entitled to vote may vote in person or by proxy executed in writing by the member or by his attorney-in-fact. A majority of the votes entitled to be cast on a matter to be voted upon by the members present or represented by proxy at a meeting at which a quorum is present is necessary for adoption of the matter.

Section 15. Action Without Meeting - Any action required or permitted to be taken by the Board of Directors may be taken without a meeting, provided that a majority of the Directors shall consent in writing to such action. Such written consent shall be filed with the minutes of proceedings of the Board of Directors. Such action by written consent shall have the same force and effect as a vote of the Board of Directors.

Staff Reports
To: Board of Directors, AFDF
From: AFDF Staff
Date: November 11, 2022

Alaska Fisheries Development Foundation, Inc.

Julie Decker, Executive Director

Overall financial health: AFDF is continuing to grow revenues and maintain positive net income. We expect a large jump from FY22 to FY23, with an increase of approximately 130%! Katya will explain the details in her financial report.

FY22 actual	Revenues: $1,253,808
	Expenses: $1,379,129
	Net income: $50,000
FY23 projected	Revenues: $2,898,444
	Expenses: $2,654,581
	Net income: $187,000

Staff: The new staff are turning into an excellent Team. Everyone continues to work diligently, producing good work, and always bringing creative solutions to the table. Attitudes are excellent and I think they will help lead AFDF to new and exciting work.

New Website: On Thursday, Nov. 10, AFDF launched its newly revamped website. We still have work to finish on the site (adding photos and content, etc), but we thought it was more important to get it launched than to wait for it to be perfect, considering the condition of the old site. Check it out! www.afdf.org

PME booth #4125: AFDF staff will be at booth #4125 with our industry partner, United Fishermen of Alaska. AFDF staff will also be hosting two different panel sessions: Garrett on Thursday at 12:45pm; Julie Decker on Friday at 11:45am

ASOS: We are fully into another season of Symphony events. This is Val's last year, and Julie Cisco's first year! The Seattle Open House, co-hosted with NWFA, will be Wed., Nov. 16 from 5-8pm at Bell Harbor Convention Center. Glenn Reed has agreed to be the emcee again. We have 15 entries, with one retraction. We continue to make small changes to the event with the goal of improving with each iteration.

PSPA approached AFDF and UFA with an offer/request to co-host the February event. PSPA received approval from its board to sponsor at the $7,500 level, plus help bring additional seafood donations, sponsorships, and staff the event. However, since the UFA EC is split on the topic at this time, PSPA will withdraw the offer for now, and we can continue casual discussions about possibilities for next year. However, PSPA will continue with some additional sponsorship for the event which will give them some additional visibility.

BBRSDA grant / sponsorship for ASOS: See attached update to BBRSDA; conclusion by BBRSDA Board is to extend the contract timeline by 2.5 years (end May, 2025). $50,000 will be invoiced on January 1, 2023, with an additional payments of $25,000 and $25,000 in 2024 and 2025. Additional metrics will be determined by both entities in April, 2023, and included as

Certified Seafood Collaborative (CSC): CSC has seen some recent milestones. The Pacific Whiting fishery was the first fishery outside Alaska to be certified. Holland America cruise lines partnered to source RFM certified seafood onboard cruises in Alaska. CSC is now exploring a new partnership with Global Seafood Alliance (GSA) for mutual benefits. This likely will be a process that takes a year to carefully explore and outline steps, before any decisions are made. However, GSA is a new sponsor of the Symphony; AFDF and GSA are discussing ways they can help us amplify the event and promote the entrants/winners.

RFM certification of Halibut & Sablefish: Two new certificates have been issued showing AFDF as the Client (attached). AFDF has invoiced CSC for $146,250 to support this program over the next 1-2 years. AFDF drafted a contract with AKWA-DC for Matt Robinson's work on this project and cod as technical facilitator. AFDF signed a contract with Global Trust to complete the reassessment for both fisheries for $77,000.

BOF proposal #161: AFDF submitted this proposal in order to address a condition on the RFM and MSC cod certification. AFDF's RFM/MSC Cod Advisory Committee helped craft the proposal, joint letter of support, and verbal testimony in support during the Oct. BOF. The proposal will be deliberated during the March, 2023 BOF meeting. However, ADFG supports it and with the suggested changes, we do not know of any industry entity that does not support it. The BOF seemed impressed with the level of consensus and we do not expect problems getting adoption in March.

Potential ARPA-E project: ARPA-E is interested in exploring using seaweed to biomine REE near Bokan Mountain / UCORE mine on POW. An RFP/FFO will be issued soon looking for proposals for a total pot of $5 million. We are considering participation in a group proposal for approximately $2 million for 1-2 years to sample wild seaweeds near Bokan and in other

strategy locations, plus conduct initial work on the extraction processes. An initial group submitted an Interest Statement (MacroCash) last spring, and the next proposal would likely be similar (see attached).

KelpMEAL - *Product development research to evaluate the potential for existing fishmeal processing equipment to act as a primary stabilization of kelp prior to secondary value-added processing* - Phase 1 - funded by WWF ($50,000): AFDF submitted a proposal to run sugar kelp through a fishmeal facility and analyze the resultant products, as well as cost, production per hour, etc., and produce a final report to the public. WWF has agreed to fund the first phase of the work, and initial discussions with Denali Commission shows potential interest to fund phase 2.

ARPA-E - Phase 2 - The MARINER team working on this project decided to complete a fourth year with a no-cost extension to the grant timeline. AFDF has about $20,000 remaining on this project budget. Our time on the project will be winding down. Robin is working on outreach documents that summarize the results of the project for the public.

EVOS Mariculture ReCon: Project planning meeting - Dec. 3; Project Kick-off meeting - Jan. 13

EDA BBB Phase 2 - AFDF Components - Green Energy; Research & Development: The budgets and project narratives for these two components are attached. The combined total funding that AFDF will manage over the next 4 years is $5.5 million. The section I want to draw the Board's attention to is the "Joint Innovation Projects" for $1.8 million.

Alaska Mariculture Alliance (AMA): AFDF has been less involved in supporting the staffing of AMA, as they now have two full-time staff members working on their behalf. Katya continues to do accounting work for AMA, however, it is very minimal at this time, as they have few expenses to date. This will change, as they begin managing their portions of the EDA BBB grant, a statewide planning grant, and the mariculture matching grant provided by the Alaska Legislature. AMA is continuing to work with ADCCED on development of a mariculture matching grant program structure that will be simple for AMA to administer.

Grant projects closed out:

- ADNR - Alaska Seaweed Products & Market Development
- NOAA SK - Alaska Mariculture Initiative - Phase 2
- USDA - Spawning Mariculture Businesses in Southwest Alaska

Seven new grant applications submitted (Garrett, Hannah, Julie D): KelpMeal, seabirds, startup accelerator (Builders Vision & Schmidt Marine), Saildrone & scouting pollock, marine debris/plastics (2).

Two new grant applications coming soon (Ben, Hannah): MSC Ocean Fund - working on conditions related to seabirds and salmon hatcheries.

Julie Cisco, Executive Administrator

- Working with Val on the Alaska Symphony of Seafood events and signage; Seattle event is November 16th. Researching new sources of sponsorship.
- Working on the new website updating staff, Board and Symphony sections.
- Met with BBRSDA Marketing Committee with Julie D and agreed they would draft a new contract for the BBRSDA / ASOS project covering through the 2025 ASOS events.
- Updating and adding to the Guide to Business Services for Value-Added Product Development.
- Renewed AFDF insurances.
- Assisted with GAPP's annual meeting and continued administrative support for GAPP

Hannah Wilson, Development Director

Seafood Sustainability Certifications:

- **RFM/MSC P cod:** After falling behind on the RFM/MSC P cod client group billing cycle with AFDF staff changes over the last year, we are caught up on invoicing and plan to get back on a regular winter billing cycle early in 2023.
- **RFM Halibut and RFM Sablefish:** Currently no conditions on these fisheries.
- **MSC Salmon:** The AFDF team has been preparing for the annual site visit and audit with the Assessment Team Dec. 12-14th in Anchorage and Sitka. See packet materials for the meeting schedule. Conducting an Ecological Risk Assessment (ERA) of murrelet-gillnet interactions to address a condition on the fishery about this issue. The ERA included a workshop on Oct. 24th with biologists, fishermen, and conservationists to receive stakeholder feedback on preliminary results and get updates on new research. A brief summary of the ERA is the packet. Conducting the ERA and preparing for the site visit have taken up a significant portion of my time since September.
- **RFM Salmon:** The RFM site visit will happen in concurrence with the MSC site visit and each Assessment Team will sit in on all meetings.

Grants:

- **NOAA SK Grant (applied):** *"Using technology to fulfill research needs related to seabird interactions in the Alaska salmon fishery."* We submitted a grant proposal for the NOAA Saltonstall-Kennedy Grant Competition as another approach to addressing the MSC gillnet-murrelet condition. The project partners with SkipperScience, an app that allows fishermen to track murrelet sightings, interactions, and potential bycatch. See application in packet.
- **Bigelow Bull Kelp Grant (active):** In September we received a $100,000 grant from USDA Bigelow Lab to research bull kelp cultivation methods and conduct product development and market research. We are partnering with two farmers, a mariculture research specialist, and Barnacle Foods on this project. Currently farmers have outplanted for the season.
- **Denali Commission Alaska Sea Grant Fellows (active):** Managing reporting for Robin McKnight (Mariculture Devel Coordinator) and Doug Shaftel (AMA) funding.
- **EVOS Mariculture Research Consortium project (active):** Assisting with farmer contracts, sitting in on leadership meetings.
- **BBBRC Alaska Mariculture Cluster (active):** Participating in planning meetings with Southeast Conference staff

Misc Outreach, Learning Opportunities, Other Projects

- Panelist for mariculture discussion at UAS Night at Egan lecture series (October)
- Attended BOF cod meeting (October)
- Attended ASMI All Hands On Deck Conference (November)
- Assisting with drafting and finalizing new website content
- Assisting with AFDF admin, general org tasks as needed (grant reporting, communications, etc.)

Tommy Sheridan, Technical Facilitator

- Successfully facilitated 2021/2022 fishery certification assessments during staff transition, working to support staff and process for 2022/2023
- Has been highly active outside of TF role with AFDF in areas of relevance and importance (i.e., ABRT, NPAFC, et cetera)
- Since hire (April 2021), has engaged extensively with academic/research entities (OSU, UO, UAS, UAF)
- Recently hired on to serve as Associate Director for UAF's Alaska Blue Economy Center (start date November 20'ish), will maintain consulting activities at lesser scale
- Insights on increasing demands of certification processes, desire to contribute going forward

Ben Americus, Science Policy Coordinator, Alaska Sea Grant Fellow

Preparation of Alaska Hatchery Wild Research Project (AHRP) Synthesis Report

- Most of my time working for AFDF has been spent preparing a synthesis document that summarizes and contextualized the AHRP, a 12 year, $16 million research project by the Alaska Department of Fish and Game. The Goal of the AHRP is the understand to the effect of hatchery salmon straying on wild populations
- To learn about the MSC/RFM certification process, I prepared a summary of the December 2021 surveillance audit.
- I have collaborated closely with ADF&G during the preparation of the synthesis report. We have maintained weekly email correspondence and I have met in person with ADF&G staff to discuss the AHRP findings on four occasions: at the Anchorage ADF&G office on July 21st, October 10th,and November 3rd, and in Vancouver, BC at the International Year of Salmon Synthesis Symposium on October 5th.
- The draft synthesis report has received an initial round of review by ADF&G, and will be reviewed again by the department before submission to the MRAG assessment team on November 28th.
- I will attend the MSC/RFM audit on the week of December 12th, 2022 and the AHRP Science Panel meeting on December 14th, 2022.
- Following the December surveillance audit, I will incorporate comments into the synthesis report and work with ADF&G staff to submit it for publication in a scientific journal.

Technical Assistance for Ecological Risk Assessment (ERA) of murrelet-gillnet bycatch

- I assisted Hannah in the ERA by preparing gillnet activity maps. I used ADF&G gillnet harvest data and QGIS to make choropleth maps for Prince William Sound, Yakutat, and Southeast Alaska for each of the three months of summer gillnet activity. This provided relative fishing intensity across time and space, which can be used to assess bycatch potential. These maps were also used to provide total waters for each region, another parameter for assessing risk.

<u>Robin McKnight, Mariculture Development Coordinator, Alaska Sea Grant Fellow</u>

Children's Book Donation to Alaska Libraries:

- With the support of a grant from the World Wildlife Foundation (WWF), AFDF sent over 100 copies of the children's book, ***With a Little Kelp From our Friends*****,** by Mathew Bate to schools and libraries around the state of Alaska.
- An educational outreach program was developed around the book's contents for elementary school children that includes a reading of selected pages, a brief discussion, and an activity (see attached). This program is aligned with the State of Alaska science standards for 4th and 5th graders adopted in 2019.
- This program was first trialed at Main Elementary School in Kodiak, Alaska in November 2022 with a class of 5th graders (see attached photos).
- Currently, this program is being adapted to suit public libraries as well as other grade levels.

Mariculture Outreach and Education Materials:

- Coordinating with the Alaska Mariculture Alliance (AMA) to create outreach materials on public interest topics related to mariculture in Alaska, including a series of infographics (see attached draft examples).
- Feedback has been received on the text for all planned infographics and on the initial design styles of materials from a working group composed of representatives from different stakeholder groups and organizations with vested interest in mariculture.
- Finalized drafts will be circulated to the working group in the next month.
- A portion of this effort is dedicated to the curation of an annotated bibliography on current and relevant shellfish aquaculture literature which will supplement research compiled on seaweed and kelp culture.

Bull Kelp Cultivation Workshops:

- In September 2022, GreenWave and AFDF co-hosted a panel on the cultivation of bull kelp in the Pacific aligned with the interests of the ARPA-E MARINER CAT 1 team as it applied for additional plus-up funding for a study including bull kelp. This panel not only informed the CAT 1 team for their funding proposal but was also designed as a knowledge exchange for kelp farmers.
- GreenWave and AFDF, in collaboration with the AMA, are planning a second workshop around bull kelp cultivation that focuses on informing first-time farmers. It is currently in the planning process, but this workshop is expected to take place in January or February 2023.

ARPA-E Outreach:

- The ARPA-E MARINER team's multi-year project at the farm site near Kodiak Island has produced several key findings related to the cultivation of kelp. Sharing out this information could be helpful for other producers entering the industry.
- AFDF, along with GreenWave, has interest in creating stakeholder outreach materials around this project for this reason. As the mariculture development coordinator, I participated in the CAT-1 team's November 2022 outplanting in Kodiak which provided needed information and direction for outreach efforts that are currently in the planning stages.

<u>Garrett Evridge, Director, AFDF Startup Accelerator</u>

My primary focus has been integration of AOC into AFDF, maintaining grant compliance, supporting startups, standing up the Industry Advisory Committee (IAC - see attached draft IAC overview), and developing future projects.

A significant portion of my time each week is spent working with startups. We conduct bi-weekly, 30 minute meetings with most of our 14 startups. These meetings focus on achieving pre-defined goals for the company, goals we establish early in our collaboration. Activity over the past month has included:

- Supporting an established company spin-out a new business.
- Assisting a company recruit a Chief Operating Officer (**Please contact me if you know of candidates familiar with consumer packaged goods and food manufacturing, preferably located in Puget Sound.**)
- Helping an early-stage company learn about how they can attract capital from traditional banks.
- Helping a company develop a pricing strategy for a consulting proposal.
- Helping a founder decide if they should sell 30% of their company.
- Developing a company's budgeting processes to maintain and improve accounting systems.
- Developing a go-to-market strategy for a company planning to enter the Alaska market.

I've also been having conversations with other startups that may be a good fit for our program:

- Hullbot, builds autonomous robots to clean vessel hulls
- Ladon Robotics, developing wind-powered medium scale shipping vessels
- Fleet Zero, developing battery-powered, large-scale shipping vessel
- Kempy Energetics, our good friend and colleague Chandler Kemp who is developing a electric troll gurneys, among other cool technology

I'm finalizing a report on this summer's pilot project to test bycatch reduction lights aboard CVRF pollock trawlers. A report to the Denali Commission is due by the end of November. This will be a BSFA document, not an AFDF product.

I've been working on several briefing documents on projects AFDF could consider, focused on shifting reprocessing volumes back to the US, the marine collagen market, and rebuilding the North Pacific fleet. I'm also working on a document outlining the process for the newly formed AFDF Industry Advisory Committee.

I'm tracking four pending grant proposals that AFDF may receive. Within the next month we should know if a $1.5 million grant to scout for pollock in the Bering Sea with Saildrone has been successful. We are also being considered for a $200k grant from Builders Vision to fund the Startup Accelerator. Finally, we are sub-awardees on two proposals (for the same NOAA grant) focused on marine plastics and marine debris.

My focus over the next two months is to:

- Complete the EDA transfer between BSFA and AFDF
- Release press release and support select media coverage of the integration
- Schedule and possibly hold the first Industry Advisory Committee meeting
- Improve efficiency and focus of startup support meetings
- Develop startup membership strategy/plan
- Complete Reshoring briefing paper
- Start briefing paper focused on the state of processing automation technology

Here are some questions I'm interested in learning more about.

- What are the top-five most common Workman Compensation claims made in the Alaska seafood industry each year?
- What are the most common seafood processing transformations that take place overseas? E.g., H&G pink salmon filleting, pink salmon fillet pin bone removal, H&G P.cod filleting, etc.
- How will rising interest rates impact our industry? I'm particularly interested in the impact on processors that require working capital.
- Should we be concerned about tender availability as crab vessels are tied up or put on the beach?

Alaska Fisheries Development Foundation

Financial Report

by

Ekaterina Ratzlaff, Finance Director

November 15, 2022

PO Box 2223, Wrangell, AK 99929-2223

(907)276-7315

www.afdf.org

eratzlaff@afdf.org

FY 2022 Financial Report and Adjusted Net Income

As always, AFDF made it through another year. We were current with all our grants and projects.

Below is a FY 2022 Budget that was approved by the Board in our February 2022 meeting and FY 2022 Profit and Loss Statement by program as of September 30, 2022 ("FY 2022 Budget Actual for All Programs (no match) as of 2022-09-30").

According to FY 2022 Budget Projection (see below), we planned to collect $1,886,039 in Revenues and spend $1,832,217 between all the projects, with the Net Income of ***$53,822*** *for all the programs. Net Income is a part of Overhead that we are billing almost to every program that we run, and it helps to grow our Indirect account.*

Our FY 2022 actuals (see below) were $1,253,808 in Revenues and $1,379,129 in Total Expenses*, which brought us to negative* ***($126,317)*** *in Net Income for all programs, but we need to take into consideration that we were invoiced $102,368 in FY 2022 and we will pay it in FY 2023. $19,721 were received in FY 2021 for expenses accrued in FY 2022, and in FY 2023 we received or still need to invoice for expenses accumulated in FY 2022, which is another $55,190. So, it brings us to* ***adjusted Net Income of $50,961****. One of the main reasons why our actual revenues and expenses are lower than budgeted is due to EVOS grant that we started later in a year than we anticipated. As for* ***Indirect Account*** *we were able to keep it almost stable at* ***$64,689*** *(less $10K compared to last fiscal year, but we invested in AFDF's new website). More details for each program are outlined below.*

Personally, I am glad to see this number stable. Hopefully, we will continue this tendency and will grow our Net Income and it will help us to keep our doors open.

For example, in FY 2018 our adjusted net income was $3,119.75 as of September 30, 2018, in FY 2019 it was $13,189.56 as of September 30, 2019.

FY 2022 Budget Projection for All Programs (no match)

Last Revision 2022-02-22

	Indirect	Federal Programs				Non Federal Programs											Total All Programs
		USDOE - ARPA-E II	NOAA - AMI Phase 2	NOAA - Oysters	USDA	ASOS	ADNR	Denali Comission	EDA BBB	EVOS	MSC & RFM P. Cod	MSC Salmon	RFM Salmon	PSFMC - AMI Phase III	PSFMC - Seaweed	SWAMC	WWF	
4000 · REVENUES																		
4100 · Grant & Contractual Revenues		$ 188,715	$ 38,569	$ 215,914	$ 52,416		$ 8,666	$127,726	$ 34,090	$536,256	$ 50,000			$ 61,431	$ 29,049	$ 37,850	$ 47,578	$ 1,428,260
4105 · Miscellaneous Income	$ 1,000					$ 5,000												$ 6,000
4300 · Membership Dues	$ 28,750																	$ 28,750
4310 · Contributions						$119,858					$ 33,141	$ 74,001	$ 84,201					$ 311,201
4500 · Interest	$ 10																	$ 10
Indirect Cost		$ 5,515	$ 2,005	$ 7,772				$ 7,273	$ 3,410	$ 47,726	$ 5,700	$ 10,000	$ 10,000	$ 5,476		$ 3,635	$ 3,306	$ 111,818
Total 4000 · REVENUES	**$ 29,760**	**$ 194,230**	**$ 40,574**	**$ 223,686**	**$ 52,416**	**$124,858**	**$ 8,666**	**$134,999**	**$ 37,500**	**$583,982**	**$ 88,841**	**$ 84,001**	**$ 94,201**	**$ 66,907**	**$ 29,049**	**$ 41,485**	**$ 50,884**	**$ 1,886,039**
5000 · EXPENSES																		
Total 5100 · Payroll Expenses	$ 66,478	$ 32,140	$ 8,719	$ 10,696	$ 1,152	$ 10,000	$ 367	$ 6,657	$ 14,544	$ 37,000	$ 25,141	$ 16,501	$ 16,501	$ 13,628	$ -	$ 4,700	$ 18,276	$ 282,500
5200 · Business Insurance	$ 10,000					$ 2,700												$ 12,700
5250 · Business License	$ -																	$ -
5300 · Property/Space Rents	$ 1,140					$ 13,590												$ 14,730
5400 · Professional Services	$ 6,000	$ 140,642	$ 17,210	$ 138,308	$ 45,321	$ 61,000	$ 7,500	$115,000	$ 15,000	$309,000	$ 52,500	$ 44,500	$ 60,000	$ 23,336	$ 27,000	$ 7,200	$ 15,909	$ 1,085,426
5450 · Advertising and Promotion	$ 3,900		$ 1,436		$ 301	$ 8,000												$ 13,637
5500 · Telephone	$ 4,300																	$ 4,300
5510 · Printing & Copying	$ 500		$ 974		$ 629	$ 725		$ 1,670							$ 469		$ 3,850	$ 8,817
5520 · Shipping & Postage	$ 250			$ 3,025		$ 210												$ 3,485
5530 · Subscriptions & Publication Fee	$ 1,450																	$ 1,450
5560 · Memberships & Contributions	$ 2,300		$ 2,500								$ 3,000	$ 3,000						$ 10,800
5610 · Meetings & Workshops	$ 620					$ 1,700											$ 692	$ 3,012
5700 · Bank Charges	$ 400					$ 90												$ 490
Total 5810 · Travel Expense	$ -	$ 15,933	$ 7,731	$ 15,050	$ 4,513	$ 8,000	$ 799	$ 4,400	$ 3,750	$ 4,200	$ 2,500	$ 10,000	$ 7,700	$ 12,800	$ 1,579	$ 23,500	$ 6,000	$ 128,455
5830 · Project Supplies and Equipment	$ 260			$ 48,835	$ 500	$ 9,000			$ 797	$186,056				$ 11,667		$ 2,450	$ 2,850	$ 262,414
Total 5000 · EXPENSES	**$ 97,598**	**$ 188,715**	**$ 38,570**	**$ 215,914**	**$ 52,416**	**$115,015**	**$ 8,666**	**$127,727**	**$ 34,091**	**$536,256**	**$ 83,141**	**$ 74,001**	**$ 84,201**	**$ 61,431**	**$ 29,049**	**$ 37,850**	**$ 47,577**	**$ 1,832,217**
Net Income	**$(67,838)**	**$ 5,515**	**$ 2,005**	**$ 7,772**	**$ -**	**$ 9,843**	**$ 0**	**$ 7,272**	**$ 3,410**	**$47,726**	**$ 5,700**	**$ 10,000**	**$ 10,000**	**$ 5,476**	**$ (0)**	**$ 3,635**	**$ 3,306**	**$ 53,822**
Projected PR for FY 2022																		$ 282,500
Overhead - helps to cover Indirect expenses	$ -	$ 5,515	$ 2,005	$ 7,772	$ -	$ -	$ -	$ 7,272	$ 3,410	$47,726	$ 5,700	$ 10,000	$ 10,000	$ 5,476	$ -	$ 3,635	$ 3,306	$ 111,817
Indirect Balance as of 02.22.2022																		$ 36,493
Credit Card Liabilities																		$ (8,207)
Open FY 2021 and 2022 Membership Invoices																		$ 20,250
Projected Expenses from Indirect account as of 09.30.2022																		$ (67,838)
Projected Net Indirect as of 9.30.2022																		$ 94,515

FY 2022 Budget Actual for All Programs (no match)

As of 2022-09-30

	Indirect	Federal Programs					Non Federal Programs												TOTAL
		USDOE - ARPA-E II	NOAA - AMI Phase 2	NOAA - Oysters	USDA - Bigelow	USDA	AMA	ASOS	ADNR	Denali Comission	EVOS	EDA BBB - Phase 1	GAPP	MSC & RFM P. Cod	MSC Salmon	RFM Salmon	PSFMC - AMI Phase 3	PSFMC - Seaweed	SWAMC	WWF	
4000 · REVENUES																					
4250 SOS Entry Fees	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,050.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,050.00
4255 SOS Sponsorship Revenues	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 118,845.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 118,845.00
4100 · Grant & Contract Revenues	$ -	$ 265,786.87	$ 24,394.85	$ 144,566.14	$ 389.89	$ -	$ 45,000.00	$ -	$ 8,666.78	$ 86,298.62	$ 9,250.00	$ 22,770.24	$ 9,525.00	$ -	$ 20,575.76	$ -	$ 17,903.51	$ 32,369.20	$ 28,344.05	$ 19,835.07	$ 735,675.98
4105 · Miscellaneous Income	$ 865.25	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,395.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,260.25
4200 · Indirect Cost Recovery		$ 9,542.87	$ 2,005.15	$ 7,772.00	$ 605.99	$ -	$ -			$ 1,212.10	$ 11,931.50	$ 2,277.02	$ -	$ 16,732.02	$ 8,121.62	$ 10,863.67	$ 3,833.28	$ -	$ 3,635.04	$ 4,131.58	$ 82,663.84
4300 · Membership Dues	$ 29,750.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 29,750.00
4310 · Contributions							$ -				$ -			$ 43,893.32	$ 90,497.72	$ 145,165.94	$ -	$ -	$ -	$ -	$ 279,556.98
4500 · Interest	$ 5.94	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 5.94
Total 4000 · REVENUES	$ 30,621.19	$ 275,329.74	$ 26,400.00	$ 152,338.14	$ 995.88	$ -	$ 45,000.00	$ 125,290.00	$ 8,666.78	$ 87,510.72	$ 21,181.50	$ 25,047.26	$ 9,525.00	$ 60,625.34	$ 119,195.10	$ 156,029.61	$ 21,736.79	$ 32,369.20	$ 31,979.09	$ 23,966.65	$ 1,253,807.99
																					$ -
5000 · EXPENSES																					
5100 · Payroll Expenses																					
Total 5100 · Payroll Expenses	$ 25,191.59	$ 37,236.64	$ 12,767.00	$ 16,790.23	$ 995.88	$ 2,752.33		$ 13,932.07	$ 368.26	$ 2,322.24	$ 21,181.50	$ 27,073.97	$ 9,525.00	$ 26,122.33	$ 19,526.32	$ 17,989.81	$ 16,962.59	$ 3,287.50	$ 10,135.35	$ 21,582.00	$ 285,742.61
5200 · Business Insurance	$ 903.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 903.00
5250 · Business License	$ 25.00	$ -				$ -		$ -		$ -		$ -		$ -	$ -		$ -		$ -	$ -	$ 25.00
5300 · Property/Space Rents	$ 1,140.00	$ 1,515.94	$ -	$ -	$ -	$ -	$ -	$ 24,340.38	$ -	$ -	$ -	$ 228.57	$ -	$ 228.58	$ 228.57	$ 228.57	$ 228.57	$ -	$ 500.00	$ 228.57	$ 28,867.75
5400 · Professional Services	$ 28,969.69	$ 91,292.25	$ 6,726.82	$ 93,948.78	$ -	$ 11,770.00	$ 45,000.00	$ 49,217.26	$ 7,498.02	$ 75,000.00	$ -	$ 10,500.00	$ -	$ 98,691.76	$ 103,274.16	$ 153,575.94	$ -	$ 27,000.00	$ 6,511.88	$ -	$ 808,976.56
5450 · Advertising and Promotion	$ 2,028.43	$ -	$ 866.37	$ -	$ -	$ -	$ 957.72	$ 7,406.17	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 537.00	$ -	$ -	$ -	$ 11,795.69
5500 · Telephone	$ 4,925.53	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,925.53
5510 · Printing/Copying Svcs	$ 407.56	$ 502.30	$ 1,145.20	$ -	$ -	$ 437.11	$ -	$ 789.36	$ -	$ 2,419.58	$ -	$ 532.47	$ -	$ -	$ -	$ -	$ 32.47	$ -	$ -	$ 463.48	$ 6,729.53
5520 · Shipping & Postage	$ 506.01	$ -	$ 292.54	$ -	$ -	$ 187.32	$ -	$ 120.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 568.78	$ 1,674.65
5530 · Subscriptions & Publication Fee	$ 2,034.54	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 24.95	$ -	$ -	$ -	$ -	$ -	$ 2,059.49
5540 · Supplies & Materials	$ 77.01	$ 7,042.08	$ -	$ 22,901.95	$ -	$ 748.05	$ -	$ 14,117.88	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,762.50	$ 2,500.00	$ 58,149.47
5550 · Parking	$ -	$ -	$ -	$ -	$ -	$ 44.50	$ -	$ 290.00	$ -	$ -	$ -	$ -	$ -	$ 8.67	$ 4.34	$ 4.34	$ -	$ -	$ -	$ -	$ 351.85
5560 · Memberships & Contributions	$ 1,175.00	$ -	$ -	$ -	$ -	$ -	$ 50.00	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,500.00	$ 1,500.00	$ -	$ -	$ -	$ -	$ 1,000.00	$ 5,225.00
5570 · Labor or Services Donated	$ 2,000.00	$ -	$ -	$ -		$ -		$ -			$ -	$ -		$ -	$ -	$ -	$ -		$ -		$ 2,000.00
5600 · Board Expenses	$ 83.67	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 83.67
5610 · Meetings & Workshops	$ 775.00	$ 7,190.44	$ 295.00	$ -	$ -	$ 2,920.96	$ 2,661.48	$ 3,989.00	$ -	$ 157.50	$ -	$ 545.00	$ -	$ 298.16	$ -	$ -	$ -	$ -	$ 1,800.00	$ 89.32	$ 20,721.86
5700 · Bank Charges	$ 375.97	$ -	$ -	$ -	$ -	$ -	$ -	$ 252.61	$ -	$ -	$ -	$ -	$ -	$ 32.10	$ 104.86	$ 96.30	$ -	$ -	$ -	$ -	$ 861.84
5810 · Travel Expense																					$ -
Total 5810 · Travel Expense	$ 2,598.45	$ 8,858.85	$ 13,828.45	$ 10,283.44	$ -	$ 6,917.33	$ -	$ 9,877.45	$ 800.50	$ 4,080.36	$ -	$ 6,465.21	$ -	$ 9,380.97	$ 12,164.80	$ 7,933.38	$ 9,420.93	$ -	$ 2,269.36	$ 7,733.98	$ 112,613.46
5840 · Project Equipment	$ -	$ 20,004.55	$ -	$ 8,413.74	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 28,418.29
Total 5000 · EXPENSES	$ 73,216.45	$ 173,643.05	$ 35,921.38	$ 152,338.14	$ 995.88	$ 25,777.60	$ 48,669.20	$ 124,332.18	$ 8,666.78	$ 83,979.68	$ 21,181.50	$ 45,345.22	$ 9,525.00	$ 136,262.57	$ 136,828.00	$ 179,828.34	$ 27,181.56	$ 30,287.50	$ 31,979.09	$ 34,166.13	$ 1,380,125.25
	$ 73,216.45	$ 173,643.05	$ 35,921.38	$ 152,338.14		$ 25,777.60	$ 48,669.20	$ 124,332.18	$ 8,666.78	$ 83,979.68	$ 21,181.50	$ 45,345.22	$ 9,525.00	$ 136,262.57	$ 136,828.00	$ 179,828.34	$ 27,181.56	$ 30,287.50	$ 31,979.09	$ 34,166.13	$ 1,379,129.37
Net Income	$ (42,595.26)	$ 101,686.69	$ (9,521.38)	$ -	$ -	$ (25,777.60)	$ (3,669.20)	$ 957.82	$ -	$ 3,531.04	$ -	$ (20,297.96)	$ -	$ (75,637.23)	$ (17,632.90)	$ (23,798.73)	$ (5,444.77)	$ 2,081.70	$ -	$ (10,199.48)	$ (126,317.26)
Unpaid payables (invoiced in FY 2022, will pay in FY 2023)						$ 20,464.26								$ 20,475.87		$ 61,427.62					$ 102,367.75
Funds Received in FY 2021			$ (9,521.38)	$ -	$ -	$ -	$ -	$ -	$ -		$ -	$ -	$ -	$ -	$ -		$ -	$ -	$ -	$ (10,199.48)	$ (19,720.86)
Funds Received in FY 2023	$ -	$ -	$ -	$ -	$ -	$ (25,777.60)	$ (3,669.20)	$ -	$ -	$ -	$ -	$ (20,297.96)	$ -	$ -	$ -	$ -	$ (5,444.77)	$ -	$ -	$ -	$ (55,189.53)
Adjusted Net Income as of 9.30.2022	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		$ -	$ -	$ 50,960.88

Closed Grants in FY 2022:

Federal Grants: NOAA SK – AMI Phase 2:

Alaska Fisheries Development Foundation
Alaska Mariculture Initiative - Phase 2
Budget 2018-11-03

Expense	# of Units	Unit Cost	Total	Request from NOAA	In-Kind Match	Project Total	NOAA funds Actual Spent as of 5.31.2022	NOAA Balance Left as of 5.31.2022
Personnel								
AFDF PI (months)	6.0	$ 6,200	$ 37,200	$ 37,200	$ -	**$ 37,200**	$ 37,700	$ (500)
AFDF Operations Manager (months)	6.0	$ 4,400	$ 26,400	$ 26,400	$ -	**$ 26,400**	$ 27,200	$ (800)
AFDF Development Director (months)	6.0	$ 3,910	$ 23,460	$ 23,460	$ -	**$ 23,460**	$ 23,861	$ (401)
Subtotal Personnel			**$ 87,060**	**$ 87,060**	**$ -**	**$ 87,060**	**$ 88,761**	**$ (1,701)**
Fringe benefits							$ -	
Fringe - AFDF PI		19.85%	$ 7,384	$ 7,384	$ -	**$ 7,384**	$ 7,483	$ (99)
Fringe - AFDF Operations Manager		20.18%	$ 5,328	$ 5,328	$ -	**$ 5,327**	$ 5,489	$ (162)
Fringe - AFDF Dev. Director		20.66%	$ 4,847	$ 4,847	$ -	**$ 4,846**	$ 4,929	$ (83)
Subtotal Fringe Benefits			**$ 17,559**	**$ 17,559**	**$ -**	**$ 17,558**	**$ 17,902**	**$ (344)**
Travel							$ -	
Travel - in-state round trips	30.0	$ 1,000	$ 30,000	$ 30,000	$ -	**$ 30,000**	$ 25,701	$ 4,299
Travel - AK to Lower 48 rd trip	2.0	$ 1,700	$ 3,400	$ 3,400	$ -	**$ 3,400**	$ 5,619	$ (2,219)
Subtotal Travel			**$ 33,400**	**$ 33,400**	**$ -**	**$ 33,400**	**$ 31,320**	**$ 2,080**
Supplies							$ -	
Commercial printing - hard copies	2000	$ 1.50	$ 3,000	$ 3,000	$ -	**$ 3,000**	$ 6,978	$ (3,978)
Workshop materials	0	$ -	$ -	$ -	$ -	**$ -**	$ 5,660	$ (5,660)
Flash drives	500	$ 5	$ 2,500	$ 2,500	$ -	**$ 2,500**	$ 2,510	$ (10)
Subtotal Supplies			**$ 5,500**	**$ 5,500**	**$ -**	**$ 5,500**	**$ 15,148**	**$ (9,648)**
Contractual							$ -	
GreenWave	1	$ 48,100	$ 48,100	$ 48,100	$ -	**$ 48,100**	$ 42,370	$ 5,730
OceansAlaska	1	$ 20,000	$ 20,000	$ 20,000	$ -	**$ 20,000**	$ 19,956	$ 44
ALFA	1	$ 20,000	$ 20,000	$ 20,000	$ -	**$ 20,000**	$ 8,564	$ 11,436
Blue Evolution	1	$ 20,000	$ 20,000	$ 20,000	$ -	**$ 20,000**	$ 20,000	$ -
Subtotal Contracual			**$ 108,100**	**$ 108,100**	**$ -**	**$ 108,100**	**$ 95,490**	**$ 12,610**
Other							$ -	
Advertising	20	$ 250	$ 5,000	$ 5,000	$ -	**$ 5,000**	$ 4,256	$ 744
ASGA Conference Sponsorship	2	$ 2,500	$ 5,000	$ 5,000	$ -	**$ 5,000**	$ 6,285	$ (1,285)
Graphic design work	1	$ 2,000	$ 2,000	$ 2,000	$ -	**$ 2,000**	$ 4,457	$ (2,457)
Subtotal Other			**$ 12,000**	**$ 12,000**	**$ -**	**$ 12,000**	**$ 14,998**	**$ (2,998)**
Total Direct Charges			**$ 263,619**	**$ 263,619**	**$ -**	**$ 263,619**	**$ 263,618**	**$ 0**
Indirect Charges (10% of NOAA request)	**1.0**	**10%**	**$ 24,062**	**$ 24,061.86**	**$ -**	**$ 24,062**	**$ 24,061.84**	**$ 0**
Total Budget			**$ 287,680**	**$ 287,680**	**$ -**	**$ 287,680**	**$ 287,680**	**$ 0**

Non-Federal Grants*:* <u>State of Alaska – ADNR:</u>

Alaska Fisheries Development Foundation
Alaska Seaweed Product Development & Market Assessment

Expense	# of Units	Unit Cost	Total	Request from ADNR	Cummulative Expenditures as of 12.31.2021
Personnel					
AFDF PI/ED (hrs)	60.0	$ 39	$ 2,325	$ 2,325	$ 2,325.25
AFDF Operations Manager (hrs)	55.0	$ 28	$ 1,513	$ 1,513	$ 1,512.75
AFDF Development Director (hrs)	160.0	$ 25	$ 4,000	$ 4,000	$ 4,000.00
Subtotal Personnel			**$ 7,838**	**$ 7,838**	**$ 7,838.00**
Fringe benefits				$ -	$ -
Fringe - AFDF PI		19.85%	$ 462	$ 462	$ 461.44
Fringe - AFDF Operations Manager		20.18%	$ 305	$ 305	$ 305.15
Fringe - AFDF Dev. Director		20.66%	$ 826	$ 826	$ 826.40
Subtotal Fringe Benefits			**$ 1,593**	**$ 1,593**	**$ 1,592.98**
Travel				$ -	$ -
Travel - 1 person AK to Seattle RT	1.0	$ 902	$ 902	$ 902	$ 3,668.49
$500 airfare+2($125) hotel+2($76) per diem					$ -
Subtotal Travel			**$ 902**	**$ 902**	**$ 3,668.49**
Equipment				$ -	$ -
None	0	$ -	$ -	$ -	$ -
Subtotal Equipment			**$ -**	**$ -**	**$ -**
Supplies				$ -	$ -
none	0	$ -	$ -	$ -	$ -
Subtotal Supplies			**$ -**	**$ -**	**$ -**
Contractual				$ -	$ -
Alaska Sea Grant - Chris Sannito	1	$ 15,000	$ 15,000	$ 15,000	$ 12,233.53
McDowell Group	1	$ 5,000	$ 5,000	$ 5,000	$ 5,000.00
Subtotal Contracual			**$ 20,000**	**$ 20,000**	**$ 17,233.53**
Total Direct Charges			**$ 30,333**	**$ 30,333**	**$ 30,333.00**
Indirect Charges (5% of Direct Charges)	**0.0**	**0%**	**$ -**	**$ -**	**$ -**
Total Budget			**$ 30,333**	**$ 30,333**	**$ 30,333.00**
Program Income	0	$ -	$ -	$ -	

Denali Commission:

Alaska Fisheries Development Foundation
Market Assessment for Manufacturing and Sales of Alaska Seaweed
Budget 2020-07-05

July 15, 2020 - December 31, 2021

Expense	# of Units	Unit Cost	Total	Request from Denali	In-Kind Match	Project Total	Cumulative Requested to Date	Balance Left
Personnel								
AFDF PI (months)	0.50	$ 6,474	$ 3,237	$ 3,237	$ -	**$ 3,237**	**$ 3,236.80**	**$ -**
AFDF Operations Manager (months)	0.50	$ 4,578	$ 2,289	$ 2,289	$ -	**$ 2,289**	**$ 2,289.49**	**$ (1)**
Subtotal Personnel			**$ 5,526**	**$ 5,526**	**$ -**	**$ 5,526**	**$ 5,526.29**	**$ (1)**
Fringe benefits							**$ -**	**$ -**
Fringe - AFDF PI		20.39%	$ 660	$ 660	$ -	**$ 660**	**$ 659.98**	**$ 0**
Fringe - AFDF Operations Manager		20.58%	$ 471	$ 471	$ -	**$ 471**	**$ 471.03**	**$ 0**
Subtotal Fringe Benefits			**$ 1,131**	**$ 1,131**	**$ -**	**$ 1,131**	**$ 1,131.01**	**$ 0**
Travel							**$ -**	**$ -**
Travel - In-state Round Trips	2.0	$ 1,200	$ 2,400	$ 2,400	$ -	**$ 2,400**	**$ 2,323.59**	**$ 76**
Travel Out-of-State Round Trips	1.0	$ 2,000	$ 2,000	$ 2,000	$ -	**$ 2,000**	**$ 1,914.27**	**$ 86**
Subtotal Travel			**$ 4,400**	**$ 4,400**	**$ -**	**$ 4,400**	**$ 4,237.86**	**$ 162**
Supplies							**$ -**	**$ -**
Printing/Publication	167	$ 10	$ 1,670	$ 1,670	$ -	**$ 1,670**	**$ 2,419.58**	**$ (750)**
Subtotal Supplies			**$ 1,670**	**$ 1,670**	**$ -**	**$ 1,670**	**$ 2,419.58**	**$ (750)**
Contractual							**$ -**	**$ -**
Alaska Sea Grant (Tasks 5 & 6)	1.0	$ 55,000	$ 55,000	$ 55,000	$ -	**$ 55,000**	**$ 54,412.57**	**$ 587**
McDowell Group/McKinley Research Group (Task 4)	1.0	$ 10,000	$ 10,000	$ 10,000	$ -	**$ 10,000**	**$ 15,000.00**	**$ (5,000)**
Contractor (Task 7)	1.0	$ 50,000	$ 50,000	$ 50,000	$ -	**$ 50,000**	**$ 45,000.00**	**$ 5,000**
Subtotal Contractual			**$ 115,000**	**$ 115,000**	**$ -**	**$115,000**	**$104,412.57**	**$ 10,587**
Other						**$ -**	**$ -**	**$ -**
Subtotal Other			**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total Direct Charges			**$ 127,727**	**$ 127,727**	**$ -**	**$127,727**	**$127,727.31**	**$ (1)**
Indirect Charges - de minimus 10% of MTDC	**1.0**	**10%**	**$ 7,273**	**$ 7,273**	**$ -**	**$ 7,273**	**$ 7,272.67**	**$ (0)**
Total Budget			**$ 135,000**	**$ 135,000**	**$ -**	**$135,000**	**$135,000.00**	**$ 0**

PSMFC – Seaweed:

Alaska Fisheries Development Foundation
Connecting Alaska Seaweed with New Markets
Budget 2019-12-26

July 1, 2020 - June 30, 2021								
Expense	**# of Units**	**Unit Cost**	**Total**	**Request from PSMFC**	**In-Kind Match**	**Project Total**	**Requested as of 3.31.2022**	**Remaining Balance 3.31.2022**
Personnel								
AFDF PI (months)	0.5	$ 6,474	$ 3,237	$ 3,237	$ -	**$ 3,237**	$ 3,236.80	$ (0.00)
AFDF Finance Director (months)	1.0	$ 4,578	$ 4,578	$ 4,578	$ -	**$ 4,578**	$ 4,577.60	$ -
AFDF Deputy Director (months)	1.0	$ 4,200	$ 4,200	$ 4,200	$ -	**$ 4,200**	$ 4,200.00	$ -
Subtotal Personnel			**$ 12,014**	**$ 12,014**	**$ -**	**$ 12,014**	**$ 12,014.40**	**$ (0.00)**
Fringe benefits							$ -	$ -
Fringe - AFDF PI		20.39%	$ 660	$ 660	$ -	**$ 660**	$ 659.98	$ (0.00)
Fringe - AFDF Operations Manager		20.58%	$ 942	$ 942	$ -	**$ 942**	$ 942.08	$ (0.00)
Fringe - AFDF Dev. Director		22.10%	$ 928	$ 928	$ -	**$ 928**	$ 928.20	$ -
Subtotal Fringe Benefits			**$ 2,530**	**$ 2,530**	**$ -**	**$ 2,530**	**$ 2,530.26**	**$ (0.01)**
Travel							$ -	$ -
Travel - In-state Round Trips	2.0	$ 1,200	$ 2,400	$ 2,400	$ -	**$ 2,400**	$ 2,869.20	$ (469.20)
Subtotal Travel			**$ 2,400**	**$ 2,400**	**$ -**	**$ 2,400**	**$ 2,869.20**	**$ (469.20)**
Supplies							$ -	$ -
Printing/Publication	500.0	$ 6	$ 3,000	$ 3,000	$ -	**$ 3,000**	$ 2,530.79	$ 469.21
Subtotal Supplies			**$ 3,000**	**$ 3,000**	**$ -**	**$ 3,000**	**$ 2,530.79**	**$ 469.21**
Contractual							$ -	$ -
McDowell Group (McKinley Research)	1.0	$67,000	$ 67,000	$ 67,000	$ -	**$ 67,000**	$ 67,000.00	$ -
Barnacle Foods	1.0	$ 5,000	$ 5,000	$ 5,000	$ -	**$ 5,000**	$ 5,000.00	$ -
Rising Tide Communications	1.0	$22,000	$ 22,000	$ 22,000	$ -	**$ 22,000**	$ 22,000.00	$ -
Subtotal Contractual			**$ 94,000**	**$ 94,000**	**$ -**	**$ 94,000**	**$ 94,000.00**	**$ -**
Other						**$ -**	$ -	$ -
Subtotal Other			**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total Direct Charges			**$113,945**	**$113,945**	**$ -**	**$113,945**	**$ 113,944.65**	**$ 0.00**
Indirect Charges - de minimus 10% of MTDC	**1.0**	**10%**	**$ 7,194**	**$ 7,194**	**$ -**	**$ 7,194**	**$ 7,194.46**	**$ 0.00**
Total Budget			**$121,139**	**$121,139**	**$ -**	**$121,139**	**$ 121,139.12**	**$ 0.00**

SWAMC – Seaweed:

Alaska Fisheries Development Foundation
Timeline: October 1, 2021 - September 30, 2022

Expense	# of Units	Unit Cost	Request from SWAMC	In-Kind Match	Project Total	Cumulative Expenditures to date	Balance Left
Personnel							
AFDF Executive Director (months)	0.20	$ 6,392	$ 1,278	$ -	$ 1,278	$ 1,278.40	$ -
AFDF Finance Director (months)	0.25	$ 4,760	$ 1,190	$ -	$ 1,190	$ 1,190.00	$ -
AFDF Deputy Director (months)	0.25	$ 4,800	$ 1,200	$ -	$ 1,200	$ 1,200.00	$ -
Subtotal Personnel			**$ 3,668**	**$ -**	**$ 3,668**	**$ 3,668.40**	**$ -**
Fringe benefits							$ -
Fringe - AFDF Executive Director		28.29%	$ 362	$ -	$ 362	$ 361.66	$ -
Fringe - Finance Director		28.49%	$ 339	$ -	$ 339	$ 339.03	$ -
Fringe - AFDF Deputy Director		27.61%	$ 331	$ -	$ 331	$ 331.32	$ -
Subtotal Fringe Benefits			**$ 1,032**	**$ -**	**$ 1,032**	**$ 1,032.01**	**$ -**
Travel							$ -
Travel - in-state rd trips (project team)	1.0	$ 1,500	$ -	$ 1,500	$ 1,500	$ -	$ -
Travel - in-state rd trips (trainees)	10.0	$ 2,200	$ 22,000	$ -	$ 22,000	$ 5,869.26	$16,130.74
Subtotal Travel			**$ 22,000**	**$ 1,500**	**$ 23,500**	**$ 5,869.26**	**$16,130.74**
Equipment							
		$ -	$ -	$ -	$ -	$ -	$ -
Subtotal Equipment			**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Supplies						$ -	$ -
Seaweed supply (lbs)	1000	$ 2	$ 2,000		$ 2,000	$ 2,000.00	$ -
Commercial printing (hard copies)	450	$ 1	$ 450	$ -	$ 450	$ 8,762.50	$ (8,312.50)
Subtotal Supplies			**$ 2,450**	**$ -**	**$ 2,450**	**$ 10,762.50**	**$ (8,312.50)**
Other							$ -
Kodiak Wildsource labor (hrs)	40.0	$ 30	$ 1,200	$ -	$ 1,200	$ 1,200.00	$ -
Kodiak Wildsource utilities	1.0	$ 500	$ 500	$ -	$ 500	$ 500.00	$ -
Alaska Sea Grant labor	100	$ 50	$ 5,500	$ -	$ 5,500	$ 5,311.88	$ 188.12
Subtotal Other			**$ 7,200**	**$ -**	**$ 7,200**	**$ 7,011.88**	**$ 188.12**
Total Direct Charges			**$ 36,350**	**$ 1,500**	**$ 37,850**	**$ 28,344.05**	**$ 8,006.36**
AFDF Overhead (10%)		**10%**	**$ 3,635**	**$ -**	**$ 3,635**	**$ 3,635.04**	**$ -**
Total Budget			**$ 39,985**	**$ 1,500**	**$ 41,485**	**$ 31,979.09**	**$ 8,006.36**

Other programs: <u>2022 Membership</u> - *We still have an open balance of $4,000 for AFDF 2022 Membership dues. Reminders were sent.*

AFDF 2023 Membership invoices will be sent in the middle of January 2023 to our current members below:

11:33 PM
11/10/22
Accrual Basis

Alaska Fisheries Development Foundation Inc.
2022 Membership Report

	Date	Num	Name	Memo	Open Balance	Amount	Balance
4000 · REVENUES							
4300 · Membership Dues							
	01/18/2022	MBR2022-05	Alaska Groundfish Data Bank, Inc:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membership		0.00	0.00
	02/08/2022	MBR2022-23	United Fishermen of Alaska (A/R):2022 MBR Voting	2022 AFDF Membership Dues - Individual Membership		0.00	0.00
	02/08/2022	MBR2022-24	Northwest Fisheries Association:2022 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership		0.00	0.00
	02/08/2022	MBR2022-32	Alaska Bering Sea Crabbers:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		0.00	0.00
	02/08/2022	MBR2022-38	Aqua Star (A/R):2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		0.00	0.00
	02/08/2022	MBR2022-48	Blue Wave Futures:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		0.00	0.00
	11/09/2021	MBR2022-02N	UAF - Alaska Blue EconomyCenter:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membership		250.00	250.00
	02/08/2022	MBR2022-08	City of Whittier, Alaska:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membership		250.00	500.00
	02/08/2022	MBR2022-09	Alaskan Observers, Inc.:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membership		250.00	750.00
	02/08/2022	MBR2022-10	Copper River Seafoods, Inc.:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membership		250.00	1,000.00
	02/08/2022	MBR2022-11	Tom's Wild Alaskan:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membership	250.00	250.00	1,250.00
	02/08/2022	MBR2022-12	Native Village of Eyak:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membership	250.00	250.00	1,500.00
	02/08/2022	MBR2022-13	Alaska Seafood Company, Inc.:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membership		250.00	1,750.00
	02/08/2022	MBR2022-14	F/V Raven Bay:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membership	250.00	250.00	2,000.00
	02/08/2022	MBR2022-15	E.C. Phillips & Sons:MBR 2022 Individual	2022 AFDF Membership Dues - Individual Membership		250.00	2,250.00
	02/08/2022	MBR2022-49	Pearl Bay Seafoods, LLC:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membership		250.00	2,500.00
	02/08/2022	MBR2022-45	Sylvia Kincho:2022 MBR Individual	2022 AFDF Membership Dues - Individual Membership	250.00	250.00	2,750.00
	11/02/2021	MBR2022-01N	City of Valdez:2022 Membership	2022 AFDF Membership Dues - Voting Membership		500.00	3,250.00
	11/09/2021	MBR2022-03N	City of Cordova:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership	500.00	500.00	3,750.00
	02/08/2022	MBR2022-06	Pacific Seafood Processors Association:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	4,250.00
	02/08/2022	MBR2022-28	Prince William Sound Aquaculture Corporat:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership	500.00	500.00	4,750.00
	02/08/2022	MBR2022-29	Sheridan Consulting, LLC:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	5,250.00
	02/08/2022	MBR2022-30	F/V Savage:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	5,750.00
	02/08/2022	MBR2022-31	AK Commercial Fishing & Agriculture Bank:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	6,250.00
	02/08/2022	MBR2022-33	Alaska Longline Fishermen's Association:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	6,750.00
	02/08/2022	MBR2022-34	Alaska Whitefish Trawlers Association:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	7,250.00
	02/08/2022	MBR2022-35	Alaskan Leader Seafoods, LLC:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	7,750.00
	02/08/2022	MBR2022-36	Alward Fisheries, LLC:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	8,250.00
	02/08/2022	MBR2022-37	APICDA Joint Ventures dba Bering:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	8,750.00
	02/08/2022	MBR2022-39	At Sea Processors Association:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	9,250.00
	02/08/2022	MBR2022-40	E & E Foods, Inc.:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	9,750.00
	02/08/2022	MBR2022-41	F/V McCrea:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	10,250.00
	02/08/2022	MBR2022-42	Frontier Packaging, LLC:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	10,750.00
	02/08/2022	MBR2022-43	Magic Fish Co.:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	11,250.00
	02/08/2022	MBR2022-44	Northwest Farm Credit Services:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	11,750.00
	02/08/2022	MBR2022-46	Premium Aquatics, LLC:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	12,250.00
	02/08/2022	MBR2022-47	Stellar North LLC:2022 MBR Voting	2022 AFDF Membership Dues - Voting Membership		500.00	12,750.00
	01/08/2022	MBR2022-04N	Bornstein Seafoods:2022 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership		1,000.00	13,750.00
	02/08/2022	MBR2022-07	Marel Inc:2022 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership		1,000.00	14,750.00
	02/08/2022	MBR2022-18	Aleutian Longline LLC:2022 MBR Voting	2022 AFDF Membership Dues - Sustaining Membership		1,000.00	15,750.00
	02/08/2022	MBR2022-19	American Seafoods Company:2022 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership		1,000.00	16,750.00
	02/08/2022	MBR2022-20	Kwikpak Fisheries, LLC:2022 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership		1,000.00	17,750.00
	02/08/2022	MBR2022-21	Marble Seafoods:2021 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership	1,000.00	1,000.00	18,750.00
	02/08/2022	MBR2022-22	Rich Products Corporation:2022 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership		1,000.00	19,750.00
	02/08/2022	MBR2022-25	OBI Seafoods, LLC:2022 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership		1,000.00	20,750.00
	02/08/2022	MBR2022-26	UniSea Inc.:2022 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership		1,000.00	21,750.00
	02/08/2022	MBR2022-27	Kanaway Seafoods dba Alaska General Seafo:2022 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership	1,000.00	1,000.00	22,750.00
	02/08/2022	MBR2022-50	North Pacific Seafoods dba AK Pacific Sea:2022 MBR Sustaining	2022 AFDF Membership Dues - Sustaining Membership		1,000.00	23,750.00
	02/08/2022	MBR2022-16	Silver Bay Seafoods:2022 MBR Partner	2022 AFDF Membership Dues - Partner Membership		2,000.00	25,750.00
	02/08/2022	MBR2022-17	Trident Seafoods Corporation:2022 MBR Partner	2022 AFDF Membership Dues - Partner Membership		2,000.00	27,750.00
	09/26/2022	MBR2022-51	F/V Lady Simpson:2022 MBR Partner	2022 AFDF Membership Dues - Partner Membership		2,000.00	29,750.00
Total 4300 · Membership Dues					4,000.00	29,750.00	29,750.00
Total 4000 · REVENUES					4,000.00	29,750.00	29,750.00
TOTAL					4,000.00	29,750.00	29,750.00

ASOS 2022:

	ASOS 2022
Ordinary Income/Expense	
Income	
4000 · REVENUES	
4250 SOS Entry Fees	1,050.00
4255 SOS Sponsorship Revenues	117,345.00
4105 · Miscellaneous Income	5,395.00
4200 · Indirect Cost Recovery	0.00
4310 · Contributions	0.00
4500 · Interest	0.00
Total 4000 · REVENUES	123,790.00
Total Income	123,790.00
Gross Profit	123,790.00
Expense	
5000 · EXPENSES	
5100 · Payroll Expenses	
Total 5100 · Payroll Expenses	10,511.72
5200 · Business Insurance	0.00
5300 · Property/Space Rents	17,977.44
5400 · Professional Services	42,820.67
5450 · Advertising and Promotion	13,188.75
5500 · Telephone	0.00
5510 · Printing/Copying Svcs	789.36
5520 · Shipping & Postage	120.00
5530 · Subscriptions & Publication Fee	0.00
5540 · Supplies & Materials	14,117.88
5550 · Parking	290.00
5560 · Memberships & Contributions	0.00
5610 · Meetings & Workshops	3,539.00
5700 · Bank Charges	278.61
5810 · Travel Expense	
5811 · Per Diem	897.94
5810 · Travel Expense - Other	6,053.97
Total 5810 · Travel Expense	6,951.91
5830 · Project Supplies	0.00
5840 · Project Equipment	0.00
Total 5000 · EXPENSES	110,585.34
Total Expense	110,585.34
Net Ordinary Income	13,204.66
Net Income	13,204.66

ARPA-E: Cat 1 University of Alaska Fairbanks Team

Expense	REVISED Total ARPA-E Request	REVISED Total In-Kind Match	Cumulative Expenditures to Date as of 9.30.2022		Remaining Balance as of 9.30.2022	
			ARPA_E II	Cost Share	Remaining Balance	Remaining Balance on Cost Share
Personnel +$8,654						
AFDF - ED (months)	$ 25,236	$ -	$ 25,236.06	$ -	$ (0)	$ -
AFDF - DD (months)	$ 8,654		$ 8,653.68	$ -	$ -	$ -
AFDF - FD (months)	$ 20,199	$ -	$ 20,198.64	$ -	$ -	$ -
Subtotal Personnel	**$ 54,088**	**$ -**	**$ 54,088.38**	**$ -**	**$ (0)**	**$ -**
Fringe benefits +$1,909				$ -	$ -	$ -
AFDF - ED (months)	$ 5,146	$ -	$ 5,145.63	$ -	$ (0)	$ -
AFDF - DD (months)	$ 1,909		$ 1,909.00	$ -	$ 0	$ -
AFDF - FD (months)	$ 4,157	$ -	$ 4,156.88	$ -	$ (0)	$ -
Subtotal Fringe Benefits	**$ 11,212**	**$ -**	**$ 11,211.52**	**$ -**	**$ (0)**	**$ -**
Travel				$ -	$ -	$ -
In-state, round-trip, per person (airfare, hotel, per diem)	$ -	$ -		$ -	$ -	$ -
Subtotal Travel	**$ -**	**$ -**		**$ -**	**$ -**	**$ -**
Equipment -$10,000				0		
Vessel #1 package (large) - equipment, installation, modification, shipping			$ -	$ -		$ -
Modification and installation	$ 22,000	$ -	$ 27,500.00	$ -	$ (5,500)	$ -
Harvest block/seaweed stripper (manufactured & installed)	$ 25,000	$ -	$ 48,806.26	$ -	$ (23,806)	$ -
shipping of vessel equipment to Kodiak	$ 4,500	$ -	$ 2,579.84	$ -	$ 1,920	$ -
Subtotal - Vessel #1 package (Kodiak)	**$ 51,500**	**$ -**	**$ 78,886.10**	**$ -**	**$ (27,386)**	**$ -**
Vessel #2 package (small) - equipment, installation, modification, shipping				$ -	$ -	$ -
Equipment	$ 55,000	$ -	$ 40,132.15	$ -	$ 14,868	$ -
Modification/installation	$ 66,000	$ -	$ 84,796.24	$ -	$ (18,796)	$ -
shipping of vessel equipment to Kodiak	$ 4,500	$ -	$ 794.99	$ -	$ 3,705	$ -
Subtotal - Vessel #2 package (Kodiak)	**$ 125,500**	**$ -**	**$ 125,723.38**	**$ -**	**$ (223)**	**$ -**
SilkStream fish pump - lease (Kodiak)	$ 10,000	$ -	$ 3,870.90	$ -	$ 6,129	$ -
Storage of vessel/farm equipment (Kodiak)	$ -	$ 3,000	$ -	$ -	$ -	$ 3,000
Farm equipment	$ 67,344	$ -	$ 81,440.35	$ -	$ (14,096)	$ -
Subtotal Equipment	**$ 254,344**	**$ 3,000**	**$ 289,920.73**	**$ -**	**$ (35,577)**	**$ 3,000**
Supplies +$117+1525+1120+845=$3,607				$ -		$ -
Misc farm supplies (Kodiak)	$ 8,462	$ -	$ 7,269.73	$ -	$ 1,192	$ -
Misc vessel harvesting supplies (small & large)	$ 15,145	$ -	$ 8,205.14	$ -	$ 6,940	$ -
Subtotal Supplies	**$ 23,607**	**$ -**	**$ 15,474.87**	**$ -**	**$ 8,132**	**$ -**
Contractual						
Alf Pryor -$7,040						
1-Site assessment	$ 640	$ -	$ 640.00	$ -	$ -	$ -
2-Design & construct	$ 6,320	$ -	$ 6,320.00	$ -	$ -	$ -
3-Farm deployment	$ 9,200	$ -	$ 9,200.00	$ -	$ -	$ -
5-Develop Harvest & Transport Tech	$ 8,800	$ -	$ 8,800.00	$ -	$ -	$ -
6-Harvest	$ 11,520	$ -	$ 8,640.00	$ -	$ 2,880	$ -
8-Monitoring	$ 37,600	$ -	$ 31,660.00	$ -	$ 5,940	$ -
10-Project Management	$ 2,560	$ -	$ 2,880.00	$ -	$ (320)	$ -
Subtotal - Alf Pryor	**$ 76,640**	**$ -**	**$ 68,140.00**	**$ -**	**$ 8,500**	**$ -**
Nick Mangini +$7,040+$4,800=+11,840						
1-Site assessment	$ 640	$ -	$ 720.00	$ -	$ (80)	$ -
2-Design & construct	$ 6,320	$ -	$ 6,240.00	$ -	$ 80	$ -
3-Farm deployment	$ 9,200	$ -	$ 10,801.25	$ -	$ (1,601)	$ -
5-Develop Harvest & Transport Tech	$ 8,800	$ -	$ 8,800.00	$ -	$ -	$ -
6-Harvest	$ 11,520	$ -	$ 5,520.00	$ -	$ 6,000	$ -
8-Monitoring	$ 40,800	$ -	$ 38,400.00	$ -	$ 2,400	$ -
10-Project Management	$ 7,680	$ -	$ 7,232.00	$ -	$ 448	$ -
Value of Farm Lease, plus misc costs of farm	$ -	$ 107,625	$ -	$ 83,708	$ -	$ 23,917
Subtotal - Nick Mangini	**$ 84,960**	**$ 107,625**	**$ 77,713.25**	**$ 83,708**	**$ 7,247**	**$ 23,917**
Vessel Time - Large Vessel +$12,000+$12,000 (in-kind)						
Seasonal install & removal of equipment (vessel #1 days)	$ 25,200	$ 25,200	$ 26,799.00	$ 17,881	$ (1,599)	$ 7,319
Harvest 2 sites in Kodiak (vessel #1 days)	$ 48,000	$ 48,000	$ 21,600.00	$ 28,800	$ 26,400	$ 19,200
Subtotal - Lester - F/V Enterprise	**$ 73,200**	**$ 73,200**	**$ 48,399.00**	**$ 46,681**	**$ 24,801**	**$ 26,519**
Vessel Time - Small Vessel +$11,400 + $11,400 (in-kind)				$ -	$ -	$ -
Seasonal install, removal & monitoring of equipment (vessel #2 days)	$ 24,000	$ 24,000	$ 24,000.00	$ 24,000	$ -	$ -
Harvest 2 sites in Kodiak (vessel #2 days)	$ 36,000	$ 36,000	$ 36,500.00	$ 36,500	$ (500)	$ (500)
Subtotal - skiff owner/operator	**$ 60,000**	**$ 60,000**	**$ 60,500.00**	**$ 60,500**	**$ (500)**	**$ (500)**
Other Subcontracts -$3,925-$3,925(in-kind)						
Farmers (5) participation in planning & operational meetings (hours)	$ 18,575	$ 18,575	$ 10,275.00	$ 10,275	$ 8,300	$ 8,300
University of Alaska Foundation - Graduate Student Fellowship	$ -	$ -	$ -	$ -	$ -	$ -
Maine Marine Composites/Kelson Marine Co.	$ 69,997	$ -	$ 69,994.20	$ -	$ 2	$ -
Subtotal Contractual	**$ 383,372**	**$ 259,400**	**$ 335,021.45**	**$ 230,391**	**$ 48,350**	**$ 29,009**
Other - TTO & T2M +$554+651=$1,729						
Management & reporting of TTO & T2M activities - AFDF (months)	$ 24,120	$ -	$ 24,120.11	$ -	$ (0)	$ -
Outreach presentations (in-state travel-trips)	$ 8,345	$ -	$ 8,638.22	$ -	$ (293)	$ -
ARPA-E annual reporting meetings (travel)	$ 15,000	$ -	$ 15,468.03	$ -	$ (468)	$ -
Creation of Quality Handling Guidelines (Alaska Sea Grant & processors)	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal Other	**$ 47,465**	**$ -**	**$ 48,226.36**	**$ -**	**$ (762)**	**$ -**
Total Direct Charges	**$ 774,087**	**$ 262,400**	**$ 753,943.31**	**$ 230,391**	**$ 20,144**	**$ 32,009**
AFDF Indirect Charges (10% of MTDC) $56,284-$27,995=$28,289	**$ 27,995**	**$ -**	**$ 27,994.67**	**$ -**	**$ (0)**	**$ -**
Total Budget	**$ 802,082**	**$ 262,400**	**$ 781,937.97**	**$ 230,391**	**$ 20,144**	**$ 32,009**

Current Grants: **Federal Grants: <u>USDOE – ARPA_E Phase II (extended)</u>** – *total grant amount: $802,082 (for 3 years), invoiced $230,674.23 for Year 1 and $275,934.01 for Year 2. Collected $275,329.74 for Year 3 ($101,686.69 at the beginning of FY 2022, but it's for August-September 2022 expenses). The remaining balance to be collected in FY 2023 is $20,144.*

NOAA – Oysters – *total grant amount: $298,927 (for 2 years), invoiced $68,473.34 for Year 1 and $136,569.19 for Year 2. Remaining balance to collect is $77,204.*

Alaska Fisheries Development Foundation
October 1, 2020 - September 30, 2022

Expense	# of Units	Unit Cost	Total	Request from NOAA	In-Kind Match	Project Total	Q8 Oct - Dec 2022	Total	Total Actual	Balance Remaining
Personnel										
AFDF PI (months)	1.2	$ 6,200	$ 7,440	$ 7,440	$ -	**$ 7,440**	$ 930.00	**$ 7,440**	**$ 7,440**	**$ -**
AFDF Operations Manager (months)	1.2	$ 4,400	$ 5,280	$ 5,280	$ -	**$ 5,280**	$ 660.00	**$ 5,280**	**$ 5,280**	**$ -**
AFDF Development Director (months)	1.3	$ 3,910	$ 5,083	$ 5,083	$ -	**$ 5,083**	$ 635.38	**$ 5,083**	**$ 4,446**	**$ 637**
Subtotal Personnel			**$ 17,803**	**$ 17,803**	**$ -**	**$ 17,803**	**$ 2,225.38**	**$ 17,803**	**$ 17,166**	**$ 637**
Fringe benefits								**$ -**	**$ -**	**$ -**
Fringe - AFDF PI		19.85%	$ 1,477	$ 1,477	$ -	**$ 1,477**	$ 184.61	**$ 1,477**	**$ 1,479**	**$ (2)**
Fringe - AFDF Operations Manager		20.18%	$ 1,066	$ 1,066	$ -	**$ 1,066**	$ 133.19	**$ 1,066**	**$ 1,064**	**$ 1**
Fringe - AFDF Dev. Director		20.66%	$ 1,050	$ 1,050	$ -	**$ 1,050**	$ 131.27	**$ 1,050**	**$ 918**	**$ 133**
Subtotal Fringe Benefits			**$ 3,592**	**$ 3,592**	**$ -**	**$ 3,592**	**$ 449.06**	**$ 3,592**	**$ 3,461**	**$ 131**
Travel								**$ -**	**$ -**	**$ -**
Travel - in-state round trips (applicant)	2	$ 1,500	$ 3,000	$ 3,000	$ -	**$ 3,000**	$ -	**$ 3,000**	**$ -**	**$ 3,000**
Subtotal Travel			**$ 3,000**	**$ 3,000**	**$ -**	**$ 3,000**	**$ -**	**$ 3,000**	**$ -**	**$ 3,000**
Equipment								**$ -**	**$ -**	**$ -**
Pure Biomass Algae System	1	$ 24,644	$ 24,644	$ 24,644	$ -	**$ 24,644**	$ -	**$ 24,644**	**$ 31,254**	**$ (6,610)**
Heat pump	2	$ 16,162	$ 32,324	$ 32,324	$ -	**$ 32,324**	$ -	**$ 32,324**	**$ 25,830**	**$ 6,494**
Subtotal Equipment			**$ 56,968**	**$ 56,968**	**$ -**	**$ 56,968**	**$ -**	**$ 56,968**	**$ 57,084**	**$ (117)**
Supplies								**$ -**	**$ -**	**$ -**
Diploid Oyster Seed	1000	$ 15	$ 15,400	$ 15,400	$ -	**$ 15,400**	$ -	**$ 15,400**	**$ 4,913**	**$ 10,487**
Triploid Oyster Seed	1000	$ 20	$ 19,500	$ 19,500	$ -	**$ 19,500**	$ -	**$ 19,500**	**$ 13,381**	**$ 6,119**
Misc Lab Supplies	2	$ 2,557	$ 5,114	$ 5,114	$ -	**$ 5,114**	$ 269.98	**$ 5,114**	**$ 13,793**	**$ (8,678)**
Subtotal Supplies			**$ 40,014**	**$ 40,014**	**$ -**	**$ 40,014**	**$ 269.98**	**$ 40,014**	**$ 32,087**	**$ 7,928**
Contractual								**$ -**	**$ -**	**$ -**
Subtotal Contracual			**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Other						**$ -**		**$ -**	**$ -**	**$ -**
Sub-award - UAF & Dr. Ginny Eckert	1	$ 11,808	$ 11,808	$ 11,808	$ -	**$ 11,808**	$ -	**$ 11,808**	**$ -**	**$ 11,808**
Sub-award - Dr. Chris Langdon	1	$ 20,000	$ 20,000	$ 20,000	$ -	**$ 20,000**	$ -	**$ 20,000**	**$ 2,500**	**$ 17,500**
Sub-award - OceansAlaska	1	$ 120,122	$ 120,122	$ 96,000	$ 24,122	**$120,122**	$ 9,428.09	**$ 96,000**	**$ 80,689**	**$ 15,311**
Sub-award - Premium Aquatics	1	$ 15,700	$ 15,700	$ -	$ 15,700	**$ 15,700**	$ -	**$ -**	**$ -**	**$ -**
Sub-award - Blue Starr Oyster Company	1	$ 15,000	$ 15,000	$ 15,000	$ -	**$ 15,000**	$ -	**$ 15,000**	**$ 15,000**	**$ -**
Travel - in-state round trips (sub-awards)	4	$ 1,500	$ 6,000	$ 6,000	$ -	**$ 6,000**	$ -	**$ 6,000**	**$ 6,253**	**$ (253)**
Travel - out-of-state round trips (sub-awards)	4	$ 2,050	$ 8,200	$ 8,200	$ -	**$ 8,200**	$ -	**$ 8,200**	**$ 4,031**	**$ 4,169**
Shipping	1	$ 5,000	$ 5,000	$ 5,000	$ -	**$ 5,000**	$ -	**$ 5,000**	**$ 2,225**	**$ 2,775**
Subtotal Other			**$ 201,830**	**$ 162,008**	**$ 39,822**	**$201,830**	**$ 9,428.09**	**$162,008**	**$ 110,697**	**$ 51,311**
Total Direct Charges			**$ 323,208**	**$ 283,386**	**$ 39,822**	**$323,208**	**$12,372.51**	**$283,386**	**$ 220,495**	**$ 62,890**
Indirect Charges - de minimus 10% of MTDC	**1**	**10%**	**$ 15,542**	**$ 15,541.79**	**$ -**	**$ 15,542**	$ 1,943.00	**$ 15,542**	**$ 15,544**	**$ (2)**
Total Budget			**$ 338,749**	**$298,927.45**	**$ 39,822**	**$338,749**	**$14,315.51**	**$298,927**	**$ 236,039**	**$ 62,888**

<u>USDA</u> (extended) – *total grant amount: $83,719 (for 1 year), invoiced $31,303.10 in FY 2021, prepared invoice for $25,778 for FY 2022 expenses.*

Alaska Fisheries Development Foundation
USDA RBDG
Budget (2020-03-31)

Expense	# of Units	Unit Cost	Total	Request from USDA	In-Kind Match	Invoiced to Date	In-kind match to date	Invoice 5	Match 5	Match Remaining	USDA Balance Remaining
Personnel											
AFDF PI (months)	0.25	$ 6,200	$ 1,550	$ 1,550.00	$ -	$ 1,550.00	$ -	$ 193.75		$ -	$ -
AFDF Operations Manager (months)	0.5	$ 4,400	$ 2,200	$ 2,200.00	$ -	$ 2,200.00	$ -	$ 275.00		$ -	$ -
AFDF Development Director (months)	1.0	$ 3,910	$ 3,910	$ 3,910.00	$ -	$ 3,910.00	$ -	$ 488.75		$ -	$ -
Subtotal Personnel			**$ 7,660**	**$ 7,660.00**	**$ -**	**$ 7,660.00**	**$ -**	**$ 957.50**		**$ -**	**$ -**
Fringe benefits						$ -					
Fringe - AFDF PI		19.85%	$ 308	$ 307.68	$ -	$ 307.68	$ -	$ 38.46		$ -	$ (0.00)
Fringe - AFDF Operations Manager		20.18%	$ 444	$ 443.52	$ -	$ 443.53	$ -	$ 55.26		$ -	$ (0.00)
Fringe - AFDF Dev. Director		20.66%	$ 808	$ 807.81	$ -	$ 807.80	$ -	$ 100.97		$ -	$ 0.01
Subtotal Fringe Benefits			**$ 1,559**	**$ 1,559.00**	**$ -**	**$ 1,559.00**	**$ -**	**$ 194.69**		**$ -**	**$ 0.00**
Travel						$ -					
Travel - in-state round trips	5.0	$ 2,000	$ 10,000	$ 7,000.00	$ 3,000	$ 14,556.93	$ 4,918.00	$12,069.44	$ 1,918.00	$ (1,918.00)	$ (7,556.93)
Subtotal Travel			**$ 10,000**	**$ 7,000.00**	**$ 3,000**	**$ 14,556.93**	**$ 4,918.00**	**$12,069.44**	**$ 1,918.00**	**$ (1,918.00)**	**$ (7,556.93)**
Supplies						$ -					
Commercial printing - hard copies	1000	$ 1.00	$ 1,000	$ 1,000.00	$ -	$ 995.23	$ -	$ 624.43		$ -	$ 4.77
Flash drives	100	$ 5	$ 500	$ 500.00	$ -	$ 748.05	$ -	$ 748.05		$ -	$ (248.05)
Advertising	5	$ 100	$ 500	$ 500.00	$ -	$ 199.00	$ -	$ -		$ -	$ 301.00
Subtotal Supplies			**$ 2,000**	**$ 2,000.00**	**$ -**	**$ 1,942.28**	**$ -**	**$ 1,372.48**		**$ -**	**$ 57.72**
Contractual						$ -					
Erik Obrien/Tamsen Peeples	1	$ 63,000	$ 63,000	$ 63,000.00	$ -	$ 31,949.00	$ -	$11,770.00		$ -	$ 31,051.00
SWAMC	1	$ 20,000	$ 20,000	$ 2,500.00	$ 17,500	$ -	$13,630.36	$ -	$ 3,716.32	$ 3,869.64	$ 2,500.00
APICDA	1	$ 11,000	$ 11,000	$ -	$ 11,000	$ -	$ 2,121.00	$ -		$ 8,879.00	$ -
Subtotal Contracual			**$ 94,000**	**$ 65,500.00**	**$ 28,500**	**$ 31,949.00**	**$15,751.36**	**$11,770.00**	**$ 5,634.32**	**$12,748.64**	**$ 33,551.00**
Total Direct Charges			**$ 115,219**	**$ 83,719.00**	**$ 31,500**	**$ 57,667.21**	**$20,669.36**	**$26,364.11**	**$ 5,634.32**	**$10,830.64**	**$ 26,051.79**
Indirect Charges (10% request)	**1.0**	**0%**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**		$ -	$ -
Total Budget			**$ 115,219**	**$ 83,719.00**	**$ 31,500**	**$ 57,667.21**	**$ 20,669.36**	**$ 26,364.11**	**$ 5,634.32**	**$ 10,830.64**	**$ 26,051.79**

Non-Federal Grants: <u>EDA BBB – Phase 1:</u> *Invoiced $25,047.26 in FY 2022 and $20,438.24 in the beginning of FY 2023, remaining balance will be collected in FY 2023.*

Southeast Conference
EDA BBB Grant - Alaska Mariculture Cluster - Phase 1
AFDF Subaward Budget 2022-03-07

Expense	# of Units	Unit Cost	Total	Request from EDA	In-Kind Match	Project Total	Cummulative Expenses	Available Balance
Personnel								
Executive Director (hours)	240	$ 42.88	$ 10,291	$ 10,291	$ -	**$ 10,291**	$ 11,320.32	$(1,029.12)
Finance Director (hours)	40	$ 31.54	$ 1,262	$ 1,262	$ -	**$ 1,262**	$ 2,081.64	$ (820.04)
Development Director (hours)	120	$ 31.25	$ 3,750	$ 3,750	$ -	**$ 3,750**	$ 4,156.25	$ (406.25)
Subtotal Personnel			**$ 15,303**	**$ 15,303**	**$ -**	**$ 15,303**	**$ 17,558.21**	**$(2,255.41)**
Fringe benefits							$ -	$ -
Executive Director		28.02%	$ 2,884	$ 2,884	$ -	**$ 2,884**	$ 3,171.95	$ (288.36)
Finance Director		28.13%	$ 355	$ 355	$ -	**$ 355**	$ 585.57	$ (230.68)
Development Director		29.18%	$ 1,094	$ 1,094	$ -	**$ 1,094**	$ 1,212.79	$ (118.54)
Subtotal Fringe Benefits			**$ 4,333**	**$ 4,333**	**$ -**	**$ 4,333**	**$ 4,970.31**	**$ (637.58)**
Travel							$ -	$ -
Travel (round trips)	5.0	$ 1,000	$ 5,000	$ 5,000	$ -	**$ 5,000**	$ 6,888.78	$(1,888.78)
Subtotal Travel			**$ 5,000**	**$ 5,000**	**$ -**	**$ 5,000**	**$ 6,888.78**	**$(1,888.78)**
Supplies							$ -	$ -
Commercial printing (pgs)	819	$ 1.00	$ 819	$ 819	$ -	**$ 819**	$ 1,022.75	$ (203.75)
Subtotal Supplies			**$ 819**	**$ 819**	**$ -**	**$ 819**	**$ 1,022.75**	**$ (203.75)**
Contractual							$ -	$ -
Sea Change Technology Partners, LLC	200	$ 100	$ 20,000	$ 20,000	$ -	**$ 20,000**	$ 10,500.00	$ 9,500.00
Subtotal Contracual			**$ 20,000**	**$ 20,000**	**$ -**	**$ 20,000**	**$ 10,500.00**	**$ 9,500.00**
Total Direct Charges			**$ 45,455**	**$ 45,455**	**$ -**	**$ 45,455**	**$ 40,940.05**	**$ 4,514.48**
Indirect Charges (10% of MTDC*)	**1.0**	**10%**	**$ 4,545**	**$ 4,545**	**$ -**	**$ 4,545**	**$ 4,545.45**	**$ (0.00)**
Total Budget			**$ 50,000**	**$ 50,000**	**$ -**	**$ 50,000**	**$ 45,485.50**	**$ 4,514.48**

PSMFC – AMI Phase 3: *$21,736.79 was collected in FY 2022, and planning to collect the remaining $78,623 in FY 2023.*

Alaska Fisheries Development Foundation
Alaska Mariculture Initiative - Phase 3
Budget 2021-08-20

January 1, 2022 - March 31, 2023

Expense	# of Units	Unit Cost	Total	Request from PSMFC	In-Kind Match	Project Total	Expenditures as of 9.30.2022	Outstanding Balance as of 9.30.2022
Personnel								
AFDF PI (months)	1.0	$ 6,392	$ 6,392	$ 6,392	$ -	**$ 6,392**	$ 852.27	**$ 2,557**
AFDF Finance Director (months)	1.0	$ 4,760	$ 4,760	$ 4,760	$ -	**$ 4,760**	$ 634.67	**$ 1,904**
AFDF Development Director (months)	1.0	$ 4,800	$ 4,800	$ 4,800	$ -	**$ 4,800**	$ 800.00	**$ 2,000**
Subtotal Personnel			**$ 15,952**	**$ 15,952**	**$ -**	**$ 15,952**	**$2,286.93**	**$ 6,461**
Fringe benefits							$ -	**$ -**
Fringe - AFDF PI		28.29%	$ 1,808	$ 1,808	$ -	**$ 1,808**	$ 241.11	**$ 723**
Fringe - AFDF Finance Director		28.49%	$ 1,356	$ 1,356	$ -	**$ 1,356**	$ 180.82	**$ 542**
Fringe - AFDF Deputy Director		27.61%	$ 1,325	$ 1,325	$ -	**$ 1,325**	$ 92.03	**$ 681**
Subtotal Fringe Benefits			**$ 4,490**	**$ 4,490**	**$ -**	**$ 4,490**	**$ 513.96**	**$ 1,947**
Travel								**$ -**
Travel - In-state Round Trips	16.0	$ 1,200	$ 19,200	$ 19,200	$ -	**$ 19,200**	$ 952.23	**$ 9,577**
Subtotal Travel			**$ 19,200**	**$ 19,200**	**$ -**	**$ 19,200**	**$ 952.23**	**$ 9,577**
Supplies								**$ -**
Training/Outreach Materials (Printing/Design/Purchase/Mailing)	500.0	$ 35	$ 17,500	$ 17,500	$ -	**$ 17,500**	$ -	**$ 17,500**
Subtotal Supplies			**$ 17,500**	**$ 17,500**	**$ -**	**$ 17,500**	**$ -**	**$ 17,500**
Contractual								**$ -**
Alaska Sea Grant	1.0	$ 35,004	$ 35,004	$ 35,004	$ -	**$ 35,004**	$ -	**$ 35,004**
			$ -	$ -	$ -	**$ -**		**$ -**
Subtotal Contractual			**$ 35,004**	**$ 35,004**	**$ -**	**$ 35,004**		**$ 35,004**
Total Direct Charges			**$ 92,146**	**$ 92,146**	**$ -**	**$ 92,146**	**$3,753.12**	**$ 70,489**
Indirect Charges - de minimus 10% of MTDC	**1.0**	**10%**	**$ 8,214**	**$ 8,214**	**$ -**	**$ 8,214**	**$1,095.22**	**$ 3,286**
Total Budget			**$ 100,360**	**$ 100,360**	**$ -**	**$100,360**	**$4,848.34**	**$ 73,775**

WWF – total budget $99,994, total requested $51,019.65.

Alaska Fisheries Development Foundation
Alaska Mariculture Alliance - Increasing Social License for Seaweed Farming
Budget 2021-01-30
2021-02-01 through 2023-09-30

Expense	# of Units	Unit Cost	Total	Total Request from WWF	Q1	Q2	Q3	Actual Q1-3 2021	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Requested as of Today	Remaining Balance as of Today
Personnel																		
AFDF PI - Executive Director (months)	3.5	$ 6,392	$ 22,372	$ 22,372	$ 2,034	$ 2,034	$ 2,034	$ 6,101	$ 2,034	$ 2,034	$ 2,034	$ 2,034	$ 2,034	$ 2,034	$ 2,034	$ 2,034	$ 6,101	$ 16,271
AFDF Finance Director (months)	1.0	$ 4,760	$ 4,760	$ 4,760	$ 433	$ 433	$ 433	$ 1,298	$ 433	$ 433	$ 433	$ 433	$ 433	$ 433	$ 433	$ 433	$ 1,298	$ 3,462
AFDF Deputy Director (months)	3.0	$ 4,800	$ 14,400	$ 14,400	$ 1,309	$ 1,309	$ 1,309	$ 3,927	$ 1,309	$ 1,309	$ 1,309	$ 1,309	$ 1,309	$ 1,309	$ 1,309	$ 1,309	$ 3,927	$ 10,473
Subtotal Personnel			**$ 41,532**	**$ 41,532**	**$ 3,776**	**$ 3,776**	**$ 3,776**	**$ 11,327**	**$ 3,776**	**$ 3,776**	**$ 3,776**	**$ 3,776**	**$ 3,776**	**$ 3,776**	**$ 3,776**	**$ 3,776**	**$ 11,327**	**$ 30,205**
Fringe benefits																	$ -	$ -
Fringe - AFDF PI		21.00%	$ 4,698	$ 4,698	$ 427	$ 427	$ 427	$ 1,281	$ 427	$ 427	$ 427	$ 427	$ 427	$ 427	$ 427	$ 427	$ 1,281	$ 3,417
Fringe - AFDF Operations Manager		21.00%	$ 1,000	$ 1,000	$ 91	$ 91	$ 91	$ 273	$ 91	$ 91	$ 91	$ 91	$ 91	$ 91	$ 91	$ 91	$ 273	$ 727
Fringe - AFDF Dev. Director		21.00%	$ 3,024	$ 3,024	$ 275	$ 275	$ 275	$ 825	$ 275	$ 275	$ 275	$ 275	$ 275	$ 275	$ 275	$ 275	$ 825	$ 2,199
Subtotal Fringe Benefits			**$ 8,722**	**$ 8,722**	**$ 793**	**$ 793**	**$ 793**	**$ 2,379**	**$ 793**	**$ 793**	**$ 793**	**$ 793**	**$ 793**	**$ 793**	**$ 793**	**$ 793**	**$ 2,379**	**$ 6,343**
Travel																	$ -	$ -
Travel - in-state round trips	6.0	$ 1,200	$ 7,200	$ 7,200	$ -	$ -	$ -	$ -	$ 1,200	$ 1,200	$ 1,200	$ -	$ 1,200	$ 1,200	$ -	$ 1,200	$ -	$ 7,200
Travel - AK to Lower 48 rd trip	3.0	$ 1,200	$ 3,600	$ 3,600	$ -	$ -	$ 1,200	$ -	$ -	$ -	$ -	$ 1,200	$ -	$ -	$ -	$ 1,200	$ -	$ 3,600
Subtotal Travel			**$ 10,800**	**$ 10,800**	**$ -**	**$ -**	**$ 1,200**	**$ -**	**$ 1,200**	**$ 1,200**	**$ 1,200**	**$ 1,200**	**$ 1,200**	**$ 1,200**	**$ -**	**$ 2,400**	**$ -**	**$ 10,800**
Equipment				$ -													$ -	$ -
NA	0	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal Equipment			**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Supplies				$ -													$ -	$ -
Commercial printing - hard copies	1000	$ 2.00	$ 2,000	$ 2,000	$ -	$ -	$ 1,000	$ -	$ -	$ -	$ 1,000	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,000
Flash drives	370	$ 5	$ 1,850	$ 1,850	$ -	$ -	$ 1,850	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,850
Subtotal Supplies			**$ 3,850**	**$ 3,850**	**$ -**	**$ -**	**$ 2,850**	**$ -**	**$ -**	**$ -**	**$ 1,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 3,850**
Contractual				$ -													$ -	$ -
Alaska Native Workgroup	1	$ 25,000	$ 25,000	$ 25,000	$ 2,273	$ 2,273	$ 2,273	$ -	$ 2,273	$ 2,273	$ 2,273	$ 2,273	$ 2,273	$ 2,273	$ 2,273	$ 2,273	$ -	$ 25,000
Subtotal Contracual			**$ 25,000**	**$ 25,000**	**$ 2,273**	**$ 2,273**	**$ 2,273**	**$ -**	**$ 2,273**	**$ 2,273**	**$ 2,273**	**$ 2,273**	**$ 2,273**	**$ 2,273**	**$ 2,273**	**$ 2,273**	**$ -**	**$ 25,000**
Other				$ -													$ -	$ -
ASGA/AMA Conference Sponsorship	1	$ 1,000	$ 1,000	$ 1,000	$ -	$ -	$ -	$ 308	$ -	$ 1,000	$ -	$ -	$ -	$ -	$ -	$ -	$ 308	$ 693
Subtotal Other			**$ 1,000**	**$ 1,000**	**$ -**	**$ -**	**$ -**	**$ 308**	**$ -**	**$ 1,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 308**	**$ 693**
Total Direct Charges			**$ 90,904**	**$ 90,904**	**$ 6,841**	**$ 6,841**	**$ 10,891**	**$ 14,013**	**$ 8,041**	**$ 9,041**	**$ 9,041**	**$ 8,041**	**$ 8,041**	**$ 8,041**	**$ 6,841**	**$ 9,241**	**$ 14,013**	**$ 76,891**
Indirect Charges (10% of MTDC)	**1.0**	**10%**	**$ 9,090**	**$ 9,090**	$ 826	$ 826	$ 826	$ 2,479	$ 826	$ 826	$ 826	$ 826	$ 826	$ 826	$ 826	$ 826	**$ 2,479**	**$ 6,611**
Total Budget			**$ 99,994**	**$ 99,994**	**$ 7,668**	**$ 7,668**	**$ 11,718**	**$ 16,492**	**$ 8,868**	**$ 9,868**	**$ 9,868**	**$ 8,868**	**$ 8,868**	**$ 8,868**	**$ 7,668**	**$ 10,068**	**$ 16,492**	**$ 83,502**

*MTDC = modified total direct costs do not include any portion of contracts above $25,000

Payment schedule	upon contract signing	remaining	Dec. 31, 2021	30-Jun-22	Dec. 31, 2022	Sept. 30, 2023
Payment Amount	$ 27,053	$ 10,561	$ 18,735	$ 18,735	$ 17,735	$ 17,735

MSC Salmon – *In October of 2019, PSPA transferred $146,415.55 MSC Salmon funds to AFDF for taking over the project.*

Below I listed more detailed Profit and Loss Statements by Year and Collection Reports for MSC Salmon, RFM Salmon and MSC & RFM P. Cod.

MSC Salmon Actuals by Year

	MSC Salmon 2019-2020	MSC Salmon 2020-2021	MSC Salmon 2021-2022	MSC Salmon 2022-2023	TOTAL
Ordinary Income/Expense					
Income					
4000 · REVENUES					
4150 · Contract Revenues	178,366.96	0.00	14,816.25	20,575.76	213,758.97
4310 · Contributions	1,867.07	71,492.49	20,669.48	99,058.69	193,087.73
Total 4000 · REVENUES	180,234.03	71,492.49	35,485.73	119,634.45	406,846.70
Total Income	180,234.03	71,492.49	35,485.73	119,634.45	406,846.70
Gross Profit	180,234.03	71,492.49	35,485.73		287,212.25
Expense					0.00
5000 · EXPENSES					0.00
5100 · Payroll Expenses					0.00
Total 5100 · Payroll Expenses	14,809.61	11,705.20	11,798.14	11,342.25	49,655.20
Overhead	11,153.82	5,906.57	7,146.50	8,121.62	32,328.51
5300 · Property/Space Rents	756.41	0.00	0.00	228.57	984.98
5400 · Professional Services	61,582.25	26,151.75	28,507.49	78,726.67	194,968.16
5500 · Telephone	45.77	0.00	0.00	0.00	45.77
5510 · Printing/Copying Svcs	57.72	18.95	0.00	24.95	101.62
5560 · Memberships & Contributions	0.00	1,500.00	1,500.00	0.00	3,000.00
5610 · Meetings & Workshops	466.94	1.26	98.75	0.00	566.95
5700 · Bank Charges	0.00	0.00	33.17	104.86	138.03
5810 · Travel Expense					
5811 · Per Diem	1,827.96	0.00	610.94	798.49	3,237.39
5810 · Travel Expense - Other	8,728.24	0.00	5,094.85	7,918.35	21,741.44
Total 5810 · Travel Expense	10,556.20	0.00	5,705.79	8,716.84	24,978.83
Project Supplies	83.89	0.00	0.00	0.00	83.89
Total 5000 · EXPENSES	99,512.61	45,283.73	54,789.84	107,265.76	306,851.94
Total Expense	99,512.61	45,283.73	54,789.84	107,265.76	306,851.94
Net Ordinary Income	80,721.42	26,208.76	-19,304.11	12,368.69	99,994.76
Net Income	**80,721.42**	**26,208.76**	**-19,304.11**	**12,368.69**	**99,994.76**

MSC Salmon 2022-2023 Collection Report

All Transactions

Date	Num	Name	Open Balance
4000 · REVENUES			
4310 · Contributions			
06/02/2022	MSMS2022-01	Peter Pan Seafood Company, LLC:MSC Salmon 2022-2023	
06/02/2022	MSCS2022-03	Canadian Fishing Company:MSC Salmon 2022-2023	
06/02/2022	MSCS2022-04	Pearl Bay Seafoods, LLC:MSC Salmon 2022-2023	
06/02/2022	MSCS2022-05	Seafood Producers Cooperative:MSC Salmon 2022-2023	
06/02/2022	MSCS2022-06	OBI Seafoods, LLC:MSC Salmon 2022-2023	
06/02/2022	MSCS2022-07	Haines Packing:MSC Salmon 2022-2023	
06/02/2022	MSCS2022-09	Seanna Seafoods LLC:MSC Salmon 2022-2023	
06/02/2022	MSCS2022-10	Norton Sound Economic Development Corpora:MSC Salmon 2022...	
06/02/2022	MSCS2022-11	Pacific Seafood Group dba Island Seafoods:MSC Salmon 2022-2...	
06/02/2022	MSCS2022-12	E & E Foods, Inc.:MSC Salmon 2022-2023	
06/06/2022	MSCS2022-13	Rogue Wave Processing:MSC Salmon 2022-2023	
06/06/2022	MSCS2022-14	E.C. Phillips & Sons:MSC Salmon 2022-2023	
06/06/2022	MSCS2022-02	Trident Seafoods Corporation:MSC Salmon 2022-2023	
06/06/2022	MSCS2022-08	Alaska Glacier Seafoods, Inc.:MSC Salmon 2022-2023	
06/06/2022	MSCS2022-15	Ekuk Fisheries LLC:MSC Salmon 2022-2023	
06/06/2022	MSCS2022-16	Alaska Seafood Holdings/Icy Strait Seafoo:MSC Salmon 2022-2023	
06/06/2022	MSCS2022-16	Alaska Seafood Holdings/Icy Strait Seafoo:MSC Salmon 2022-2023	
06/06/2022	MSCS2022-16	Alaska Seafood Holdings/Icy Strait Seafoo:MSC Salmon 2022-2023	
06/06/2022	MSCS2022-17	Alaska's Best Seafood LLC:MSC Salmon 2022-2023	
06/06/2022	MSCS2022-18	Copper River Seafoods, Inc.:MSC Salmon 2022-2023	
06/06/2022	MSCS2022-19	Whittier Seafood LLC:MSC Salmon 2022-2023	
06/06/2022	MSCS2022-20	Silver Bay Seafoods:MSC Salmon 2022-2023	
06/01/2022	MSCS2022-21	Camtu's Alaska Wild Seafoods:MSC Salmon 2022-2023	
06/27/2022	MSCS2022-22	Triad Fisheries (a/r):MSC Salmon 2022-2023	
08/12/2022	MSCC2022-31	FV Fishnpohl inc.:MSC Salmon 2022-2023	
10/28/2022	MSCS2022-32	Bornstein Seafoods:MSCSalmon 2022-2023	
Total 4310 · Contributions			**99,058.69**
Total 4000 · REVENUES			
TOTAL			

RFM Salmon Actuals by Year

	RFM Salmon 3rd & 4th ASA 2015	RFM Salmon Reassesment 2016	RFM Salmon 1st ASA 2017-2018	RFM Salmon 3rd ASA 2018-2019	RFM Salmon 4th ASA 2019-2020	RFM Salmon 2020-2021	RFM Salmon 2021-2022	RFM Salmon 2022-2023	TOTAL
Ordinary Income/Expense									
Income									
4000 · REVENUES									
4150 · Contract Revenues	44,386.28	96,992.66	53,364.74	26,535.00	61,209.60	50,532.27	0.00	0.00	333,020.55
4310 · Contributions	47,063.76	135,771.67	76,770.10	27,201.01	61,174.97	62,151.57	20,417.85	156,226.88	586,777.81
4500 · Interest	0.00	0.00	804.59	0.00	0.00	0.00	0.00	0.00	804.59
Total 4000 · REVENUES	91,450.04	232,764.33	130,939.43	53,736.01	122,384.57	112,683.84	20,417.85	156,226.88	920,602.95
Total Income	91,450.04	232,764.33	130,939.43	53,736.01	122,384.57	112,683.84	20,417.85	156,226.88	920,602.95
Gross Profit	91,450.04	232,764.33	130,939.43	53,736.01	122,384.57	112,683.84	20,417.85	156,226.88	920,602.95
Expense									0.00
5000 · EXPENSES									0.00
Total 5100 · Payroll Expenses	14,336.17	48,290.00	35,441.00	40,000.00	38,238.67	7,704.17	9,591.90	11,700.02	205,301.93
Indirect Rate	6,689.32	11,111.44	12,764.28	7,213.77	7,315.41	1,178.32	6,458.41	10,863.67	63,594.62
5200 · Business Insurance	0.00	0.00	0.00	776.25	0.00	0.00	0.00	0.00	776.25
5400 · Professional Services	63,958.75	101,670.55	74,019.62	31,794.38	66,647.10	40,909.93	29,888.19	129,575.65	538,464.17
5450 · Advertising and Promotion	0.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	250.00
5500 · Telephone	482.57	43.94	89.61	55.84	0.00	0.00	0.00	0.00	671.96
5510 · Printing/Copying Svcs	135.11	0.00	0.00	0.00	57.72	0.00	0.00	0.00	192.83
5700 · Bank Charges	135.00	95.00	106.95	0.00	48.15	48.15	48.15	96.30	577.70
5810 · Travel Expense									0.00
5811 · Per Diem	671.67	2,061.35	975.70	253.20	1,167.03	0.00	601.50	284.11	6,014.56
5810 · Travel Expense - Other	9,262.47	18,908.08	9,327.09	1,497.16	3,820.36	9,725.47	2,926.32	6,969.02	62,435.97
Total 5810 · Travel Expense	9,934.14	20,969.43	10,302.79	1,750.36	4,987.39	9,725.47	3,527.82	7,253.13	68,450.53
Total 5000 · EXPENSES	95,671.06	182,180.36	132,724.25	81,840.60	117,294.44	59,566.04	49,514.47	159,488.77	878,279.99
Total Expense	95,671.06	182,180.36	132,724.25	81,840.60	117,294.44	59,566.04	49,514.47	159,488.77	878,279.99
Net Ordinary Income	-4,221.02	50,583.97	-1,784.82	-28,104.59	5,090.13	53,117.80	-29,096.62	-3,261.89	42,322.96
Net Income	**-4,221.02**	**50,583.97**	**-1,784.82**	**-28,104.59**	**5,090.13**	**53,117.80**	**-29,096.62**	**-3,261.89**	**42,322.96**

RFM Salmon 2022-2023 Collection Report

All Transactions

Date	Num	Name	Open Balance
4000 · REVENUES			
4310 · Contributions			
05/31/2022	RFMS2022-01	Ekuk Fisheries LLC:RFM Salmon 2022-2023	
06/02/2022	RFMS2022-02	Peter Pan Seafood Company, LLC:RFM Salmon 2022-2023	
06/02/2022	RFMS2022-03	Canadian Fishing Company:RFM Salmon 2022-2023	
06/02/2022	RFMS2022-04	Triad Fisheries (a/r):RFM Salmon 2022-2023	
06/06/2022	RFMS2022-06	Trident Seafoods Corporation:RFM Salmon 2022-2023	
06/06/2022	RFMS2022-05	E.C. Phillips & Sons:RFM Salmon 2022-2023	
06/06/2022	RFMS2022-07	Alaska Seafood Holdings/Icy Strait Seafoo:RFM Salmon 2022-2023	
06/06/2022	RFMS2022-08	Silver Bay Seafoods:RFM Salmon 2022-2023	
06/09/2022	RFMS2022-09	OBI Seafoods, LLC:RFM Salmon 2022-2023	
Total 4310 · Contributions			
Total 4000 · REVENUES			**$156,226.88**
TOTAL			

MSC & RFM P. Cod Actuals by Year

	MSC & RFM Cod 1st ASA (2016)	MSC & RFM P. Cod 2017-2018	MSC & RFM P. Cod 2019	MSC & RFM P. Cod 2020	MSC & RFM P. Cod 2021	MSC & RFM P. Cod 2022	TOTAL
Ordinary Income/Expense							
Income							
4000 · REVENUES							
4150 · Contract Revenues	62,869.46	144,300.17	23,942.54	30,900.50	58,474.29	0.00	320,486.96
4310 · Contributions	27,537.00	78,341.00	109,248.71	86,762.00	43,692.00	61,230.00	406,810.71
4500 · Interest	0.00	37.45	0.00	0.00	0.00	0.00	37.45
Total 4000 · REVENUES	90,406.46	222,678.62	133,191.25	117,662.50	102,166.29	61,230.00	727,335.12
Total Income	90,406.46	222,678.62	133,191.25	117,662.50	102,166.29	61,230.00	727,335.12
Gross Profit	90,406.46	222,678.62	133,191.25	117,662.50	102,166.29	61,230.00	727,335.12
Expense							0.00
5000 · EXPENSES							0.00
5100 · Payroll Expenses							0.00
Total 5100 · Payroll Expenses	10,548.39	25,910.86	34,314.04	18,647.86	14,833.46	18,292.48	122,547.09
Overhead Cost - 15%	4,866.46	9,499.36	11,659.21	6,585.84	7,706.75	16,732.02	57,049.64
5200 · Business Insurance	0.00	776.25	0.00	0.00	0.00	0.00	776.25
5400 · Professional Services	79,525.71	174,850.17	74,730.05	59,643.41	29,161.25	96,911.77	514,822.36
5500 · Telephone	0.00	151.43	220.10	45.76	0.00	0.00	417.29
5510 · Printing/Copying Svcs	89.67	263.64	2.65	57.73	0.00	0.00	413.69
5520 · Shipping & Postage	6.45	0.00	0.00	0.00	0.00	0.00	6.45
5550 · Parking	0.00	0.00	129.38	0.00	8.67	0.00	138.05
5560 · Memberships & Contributions	3,000.00	3,000.00	3,000.00	3,000.00	1,500.00	1,500.00	15,000.00
5610 · Meetings & Workshops	31.76	77.65	0.00	43.63	0.00	298.16	451.20
5700 · Bank Charges	90.00	0.00	48.15	37.45	49.22	32.10	256.92
5810 · Travel Expense							0.00
5811 · Per Diem	401.69	951.22	565.48	251.88	103.25	4,420.48	6,694.00
5810 · Travel Expense - Other	1,618.86	7,198.04	7,360.74	859.30	472.46	6,043.53	23,552.93
Total 5810 · Travel Expense	2,020.55	8,149.26	7,926.22	1,111.18	575.71	10,464.01	30,246.93
Total 5000 · EXPENSES	100,178.99	222,678.62	132,029.80	89,172.86	53,835.06	144,230.54	742,125.87
Total Expense	100,178.99	222,678.62	132,029.80	89,172.86	53,835.06	144,230.54	742,125.87
Net Ordinary Income	-9,772.53	0.00	1,161.45	28,489.64	48,331.23	-83,000.54	-14,790.75
Net Income	**-9,772.53**	**0.00**	**1,161.45**	**28,489.64**	**48,331.23**	**-83,000.54**	**-14,790.75**

MSC & RFM P. Cod 2022 Collection Report

Type	Date	Num	Name	
4000 · REVENUES				
4310 · Contributions				
Invoice	07/04/2022	MSCC2022-02	Alaska Jig Association (C):MSC & RFM P. Cod 2022	
Invoice	07/04/2022	MSCC2022-04	Copper River Seafoods, Inc.:MSC & RFM P. Cod 2022	
Invoice	07/04/2022	MSCC2022-05	O'Hara Corporation:MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-06	Pearl Bay Seafoods, LLC:MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-07	Westward Seafoods, Inc.:MSC & RFM P. Cod 2022	
Invoice	07/04/2022	MSCC2022-08	Fishermen's Finest, Inc.:MSC & RFM P. Cod 2022	
Invoice	07/04/2022	MSCC2022-09	Ocean Peace Inc.:MSC & RFM P. Cod 2022	
Invoice	07/04/2022	MSCC2022-10	United States Seafoods, LLC:MSC & RFM P. Cod 2022	
Invoice	07/04/2022	MSCC2022-11	Aleutian Longline LLC:MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-12	Glacier Fish Company (r):MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-13	Alaskan Leader Fisheries:MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-14	American Seafoods Company:MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-15	Arctic Sablefish, LLC:MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-16	Cape Romanzof Fisheries:MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-17	Bristol Wave:MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-18	Coastal Villages Longline, LLC:MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-19	Big Creek Fisheries:MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-20	E & E Foods, Inc.:MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-21	North Pacific Seafoods dba AK Pacific Sea:MSC & RFM P. Cod 20[illegible]	
Invoice	08/04/2022	MSCC2022-22	OBI Seafoods, LLC:MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-23	Shelford's Boat Ltd.:MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-24	Silver Bay Seafoods:MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-25	Tatoosh Seafoods, LLC (A/R):MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-26	Trident Seafoods Corporation:MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-27	UniSea Inc.:MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-28	Alyeska Seafoods, Inc.:MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-01	Seven Seas Fish Company:MSC & RFM P. Cod 2022	
Invoice	08/04/2022	MSCC2022-03	Peter Pan Seafood Company, LLC:MSC & RFM P. Cod 2022	
Total 4310 · Contributions				
Total 4000 · REVENUES				
TOTAL				**$60,959**

FY 2023 Projection

FY 2023 Budget Projection for All Programs (no match)

Last Revision 2022-11-10

	Indirect	Federal Programs				Non Federal Programs													Total All Programs
		USDOE - ARPA-E II	NOAA - Oysters	USDA - Bigelow	USDA	ASOS	Builders Vision	EDA AOC	EDA BBB Phase 1	EDA BBB - Research & Dev	EDA BBB - Green Energy	EVOS	GAPP	MSC & RFM P. Cod	MSC Salmon	RFM Salmon	RFM Halibut and Sablefish	PSFMC - AMI Phase III	WWF	
4000 · REVENUES																			
4100 · Grant & Contractual Revenues		$20,144	$75,261	$72,929	$ 25,778		$ 90,000	$ 180,000	$ 22,684	$ 673,335	$ 124,694	$527,006	$19,050	$ 25,000	$ 20,000		$ 138,750	$ 74,242	$89,486	$ 2,178,359
4105 · Miscellaneous Income	$ 1,000					$ 5,000			$ -	$ -										$ 6,000
4300 · Membership Dues	$ 30,000								$ -	$ -										$ 30,000
4310 · Contributions						$119,858			$ -	$ -				$ 108,202	$ 106,500	$ 203,065				$ 537,625
4500 · Interest	$ 10								$ -	$ -										$ 10
Indirect Cost		$ -	$ 1,943	$ 7,272			$ 10,000	$ 20,000	$ 2,268	$ 6,572	$ 2,198	$ 35,795	$ -	$ 17,588	$ 18,975	$ 13,500	$ 7,500	$ 4,381	$ 3,306	$ 151,296
Total 4000 · REVENUES	$ 31,010	$20,144	$77,204	$80,201	$ 25,778	$124,858	$100,000	$ 200,000	$ 24,953	$ 679,906	$ 126,892	$562,801	$19,050	$ 150,790	$ 145,475	$ 216,565	$ 146,250	$ 78,623	$92,792	$ 2,903,290
5000 · EXPENSES																				
Total 5100 · Payroll Expenses	$ 53,355	$ -	$ 3,442	$ 4,679	$ -	$ 17,000	$ 80,000	$ 65,000	$ -	$ 30,021	$ 8,819	$ 31,950	$19,050	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 8,408	$18,276	$ 420,000
5200 · Business Insurance	$ 9,000					$ 2,700			$ -											$ 11,700
5250 · Business License	$ 50								$ -											$ 50
5300 · Property/Space Rents	$ 1,140					$ 13,590			$ -											$ 14,730
5400 · Professional Services	$ 6,500	$20,144	$60,739	$67,200	$ -	$ 61,000	$ 10,000	$ 100,000	$ 4,514	$ 627,750	$ 112,500	$309,000	$ -	$ 100,702	$ 95,000	$ 173,065	$ 74,000	$ 35,004	$59,091	$ 1,916,210
5450 · Advertising and Promotion	$ 2,000				$ -	$ 8,000			$ -	$ 3,750	$ 750	$ -								$ 14,500
5500 · Telephone	$ 7,300								$ -											$ 7,300
5510 · Printing & Copying	$ 500				$ -	$ 725	$ -	$ -	$ -	$ 1,125	$ 375	$ -							$ 3,850	$ 6,575
5520 · Shipping & Postage	$ 500					$ 210			$ -	$ 3,750									$ 869	$ 5,329
5530 · Subscriptions & Publication Fee	$ 2,000			$ 500					$ -											$ 2,500
5560 · Memberships & Contributions	$ 1,200								$ -			$ -		$ 1,500	$ 1,500					$ 4,200
5610 · Meetings & Workshops	$ 800					$ 1,700			$ -										$ -	$ 2,500
5700 · Bank Charges	$ 400					$ 90			$ -											$ 490
Total 5810 · Travel Expense	$ -	$ -	$ 3,000	$ 550	$ -	$ 8,000	$ -	$ 10,000	$ -	$ 6,000	$ 2,250	$ -	$ -	$ 11,000	$ 10,000	$ 10,000	$ 5,000	$ 9,577	$ 7,400	$ 82,777
5830 · Project Supplies and Equipment	$ 500		$ 8,079		$ -	$ 9,000		$ 5,000	$ -	$ 938		$186,056	$ -					$ 17,500		$ 227,072
Total 5000 · EXPENSES	$ 85,245	$20,144	$75,261	$72,929	$ -	$122,015	$ 90,000	$ 180,000	$ 4,514	$ 673,334	$ 124,694	$527,006	$19,050	$ 133,202	$ 126,500	$ 203,065	$ 99,000	$ 70,489	$89,486	$ 2,715,934
Net Income	$(54,235)	$ -	$ 1,943	$ 7,272	$25,778	$ 2,843	$ 10,000	$ 20,000	$ 20,438	$ 6,573	$ 2,198	$ 35,795	$ -	$ 17,588	$ 18,975	$ 13,500	$ 47,250	$ 8,134	$ 3,306	$ 187,357

New Grants: Federal Grants: USDA – Bigelow:

U.S. DEPARTMENT OF AGRICULTURE
RESEARCH, EDUCATION, AND ECONOMICS
AGREEMENT BUDGET

COOPERATOR: Alaska Fisheries Development Foundation AGREEMENT NO.: TYPE OF ACTION:	AGENCY TO REIMBURSE	COOPERATOR CONTRIBUTION(S)	Actual Requesting for 9.1.2022-9.30.2022		Agency Remaining Balance	Match Remaining Balance
			Agency to Reimburse	Match		
A. Salaries and Wages						
1. Senior/Key Person . . . . . JD	$1,858.25	$0.00	$123.88	$0.00	$1,734.37	$0.00
2. Other Personnel (Alaska Sea Grant Fellow - Mariculture Development Coordinator)	$0.00	$10,000.00	$0.00	$909.09	$0.00	$9,090.91
3. Support Personnel/Secretarial/Clerical . . . . . .HW	$2,708.50	$0.00	$180.57	$0.00	$2,527.93	$0.00
Total Wages and Salaries	**$4,566.75**	**$10,000.00**	**$304.45**	**$909.09**	**$4,262.30**	**$9,090.91**
Fringe Benefits (If charged as Direct Costs) for Senior/Key . . . . . JD	$548.74	**$0.00**	$36.58	**$0.00**	$512.16	$0.00
Fringe Benefits (If charged as Direct Costs) for Support Personnel . . . . . .HW	$732.92	**$0.00**	$48.86	**$0.00**	$684.06	$0.00
B. Total Fringe Benefits (If charged as Direct Costs)	**$1,281.66**	$0.00	**$85.44**	$0.00	**$1,196.22**	**$0.00**
C. Total Salaries, Wages, and Fringe Benefits (A plus B)	**$5,848.41**	**$10,000.00**	**$389.89**	**$909.09**	**$5,458.52**	**$9,090.91**
D. Equipment (Provide supporting data; list items and dollar amounts for each item	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
E. Materials and Supplies	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
F. Travel (List destination and amount for each trip. See Notes 8.)						
1. Domestic (Include Canada, Mexico, and U.S. Possessions)	$550.00	$0.00	$0.00	$0.00	$550.00	$0.00
2. Foreign	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
G. Publication Costs	$500.00	$0.00	$0.00	$0.00	$500.00	$0.00
H. ADP/Computer Services	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
I. Subcontracts (5)	$84,000.00	$10,000.00	$0.00	$0.00	$84,000.00	$10,000.00
J. All Other Direct Costs (Provide supporting data. List items and dollar amounts for each item.)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
K. Total Direct Costs (C through J)	**$90,898.41**	**$20,000.00**	**$389.89**	**$909.09**	**$90,508.52**	**$19,090.91**
L. Indirect Costs (Specify rate and base)						
Rate: de minimus indirect cost rate (10% of MTDC)	$9,089.84	$0.00	$605.99	$0.00	$8,483.85	$0.00
Base:	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
M. Total Costs (K plus L)	**$99,988.25**	**$20,000.00**	**$995.88**	**$909.09**	**$98,992.37**	**$19,090.91**

Non-Federal Grants: EVOS – *total grant amount: $26,375,105 (for 10 years), AFDF amount is $5,011,531*

EVOS Mariculture ReCon: AFDF Subaward Budget

Year		FY22	FY23	FY24	FY25	FY26		FY27	FY28	FY29	FY30	FY31	Subtotal
		Year 1	Year 2	Year 3	Year 4	Year 5		Year 6	Year 7	Year 8	Year 9	Year 10	
Personnel													
	Ex. Director	$14,000	$14,280	$14,566	$14,857	$15,154		$15,457	$15,766	$16,082	$16,403	$16,731	**$153,296**
	Finance Director	$13,000	$13,260	$13,525	$13,796	$14,072		$14,353	$14,640	$14,933	$15,232	$15,536	**$142,346**
	Deputy Director	$10,000	$10,200	$10,404	$10,612	$10,824		$11,041	$11,262	$11,487	$11,717	$11,951	**$109,497**
Travel													
	In-state PI meeting	$1,200	$1,230	$1,261	$1,292	$1,325		$1,358	$1,392	$1,426	$1,462	$1,499	**$13,444**
	farm site visits	$3,000	$3,075	$3,152	$3,231	$3,311		$3,394	$3,479	$3,566	$3,655	$3,747	**$33,610**
	workshop travel		$25,000	$25,000								$50,000	**$100,000**
Contractual													
	Expert farmer, first $25k	$25,000											**$25,000**
	Partner farmers, first $25k	$225,000											**$225,000**
	contaminant testing		$25,920		$26,568			$5,446	$5,446	$5,446	$5,446	$5,446	**$79,720**
	FLUPSY rearing			$13,376	$13,711	$14,053		$14,405	$14,765	$15,134	$15,512		**$100,956**
	Genetics experts		$10,000	$10,000									**$20,000**
Supplies													
	Production arrays	$36,000	$36,000	$36,000	$36,000	$36,000		$36,000	$36,000				**$252,000**
	Triploid oyster seed		$50,000	$50,000									**$100,000**
	Sampling supplies	$18,000	$18,000	$18,000	$18,000	$18,000		$18,000	$18,000	$18,000	$18,000		**$162,000**
	Workshop supplies	$630				$470						$5,000	**$6,100**
	Oyster broodstock		$250	$700	$275	$800		$800	$500	$500	$500		**$4,325**
	minidot sensors	$11,000		$1,000		$1,000							**$13,000**
	miniPAR sensors	$39,676	$2,834	$2,834		$2,834							**$48,178**
	cyclops Turbidity sensors	$19,250		$1,375	$1,375	$1,375							**$23,375**
	Hobo T/S sensors	$21,000				$5,600			$8,400				**$35,000**
	Tilt current meters	$40,500	$27,000			$13,500			$9,000				**$90,000**
MTDC		$477,256	$237,049	$201,193	$139,716	$138,318		$120,254	$138,650	$86,574	$87,927	$109,910	**$1,736,848**
F&A		$47,726	$23,705	$20,119	$13,972	$13,832		$12,025	$13,865	$8,657	$8,793	$10,991	**$173,685**
Contractual above $25k													
	Expert farmer	$14,000	$41,000	$41,000	$41,000	$41,000		$41,000	$41,000	$41,000	$41,000	$41,000	**$383,000**
	Partner farmer	$45,000	$297,000	$297,000	$297,000	$297,000		$297,000	$297,000	$297,000	$297,000	$297,000	**$2,718,000**
Total		$583,982	$598,754	$559,312	$491,688	$490,150		$470,280	$490,515	$433,232	$434,720	$458,901	**$5,011,533**
		$583,982	$598,754	$559,312	$491,688	$490,150		$470,280	$490,515	$433,232	$434,720	$458,901	**$5,011,533**

EDA BBB - Research & Development

Southeast Conference EDA BBB Phase 2
Alaska Mariculture Cluster - Research & Development Component
Alaska Fisheries Development Foundation Subaward
Budget FINAL 2022-03-14 - REVISED

Expense	# of Units	Base Unit Cost	Total	Request from EDA	Match	Project Subtotal	Year 1 EDA	Year 1 Match	Year 2 EDA	Year 2 Match	Year 3 EDA	Year 3 Match	Year 4 EDA	Year 4 Match	Total
Personnel *(includes 3% raise in years 2-4)*							Personnel								
AFDF ED (months)	8.0	$ 7,433	$ 62,196	$ 62,196	$ -	$ 62,196	$ 14,867	$ -	$ 15,312	$ -	$ 15,772	$ -	$ 16,245	$ -	$ 62,196
AFDF Finance Director (months)	4.0	$ 5,466	$ 22,868	$ 22,868	$ -	$ 22,868	$ 5,466	$ -	$ 5,630	$ -	$ 5,799	$ -	$ 5,973	$ -	$ 22,868
AFDF Development Director (months)	8.0	$ 5,417	$ 45,323	$ 45,323	$ -	$ 45,323	$ 10,833	$ -	$ 11,158	$ -	$ 11,493	$ -	$ 11,838	$ -	$ 45,323
Subtotal Personnel			$ 130,387	$ 130,387	$ -	$ 130,387	$ 31,166	$ -	$ 32,101	$ -	$ 33,064	$ -	$ 34,056	$ -	$ 130,387
Fringe benefits							Fringe Benefits								$ -
Fringe - AFDF ED		29.53%	$ 18,366	$ 18,366	$ -	$ 18,366	$ 4,390	$ -	$ 4,522	$ -	$ 4,657	$ -	$ 4,797	$ -	$ 18,366
Fringe - AFDF Finance Director		28.18%	$ 6,444	$ 6,444	$ -	$ 6,444	$ 1,540	$ -	$ 1,587	$ -	$ 1,634	$ -	$ 1,683	$ -	$ 6,444
Fringe - AFDF Dev. Director		27.06%	$ 12,264	$ 12,264	$ -	$ 12,264	$ 2,932	$ -	$ 3,019	$ -	$ 3,110	$ -	$ 3,203	$ -	$ 12,264
Subtotal Fringe Benefits			$ 37,075	$ 37,075	$ -	$ 37,075	$ 8,862	$ -	$ 9,128	$ -	$ 9,402	$ -	$ 9,684	$ -	$ 37,075
Travel							Travel								$ -
Travel - in-state round trips	16.0	$ 1,500	$ 24,000	$ 24,000	$ -	$ 24,000	$ 6,000	$ -	$ 6,000	$ -	$ 6,000	$ -	$ 6,000	$ -	$ 24,000
Travel - AK to Lower 48 rd trip	4.0	$ 2,000	$ 8,000	$ 8,000	$ -	$ 8,000	$ 2,000	$ -	$ 2,000	$ -	$ 2,000	$ -	$ 2,000	$ -	$ 8,000
Subtotal Travel			$ 32,000	$ 32,000	$ -	$ 32,000	$ 8,000	$ -	$ 8,000	$ -	$ 8,000	$ -	$ 8,000	$ -	$ 32,000
Equipment							Equipment								$ -
	0	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal Equipment			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplies							Supplies								$ -
boxes, liners, vials, gel packs	200	$ 25.00	$ 5,000	$ 5,000	$ -	$ 5,000	$ 1,250	$ -	$ 1,250	$ -	$ 1,250	$ -	$ 1,250	$ -	$ 5,000
Printing (pgs)	2000	$ 3	$ 6,000	$ 6,000	$ -	$ 6,000	$ 1,500	$ -	$ 1,500	$ -	$ 1,500	$ -	$ 1,500	$ -	$ 6,000
Subtotal Supplies			$ 11,000	$ 11,000	$ -	$ 11,000	$ 2,750	$ -	$ 2,750	$ -	$ 2,750	$ -	$ 2,750	$ -	$ 11,000
Contractual							Contractual								$ -
1 - Alaska Shellfish Growers Association	1	$ 500,000	$ 500,000	$ 500,000	$ -	$ 500,000	$ 125,000	$ -	$ 125,000	$ -	$ 125,000	$ -	$ 125,000	$ -	$ 500,000
2 - Seaweed Tissue Analysis (unnamed contractor)	1	$ 858,000	$ 858,000	$ 858,000	$ -	$ 858,000	$ 214,500	$ -	$ 214,500	$ -	$ 214,500	$ -	$ 214,500	$ -	$ 858,000
3 - Site selection data & analysis (unnamed contractor)	1	$ 1,440,000	$ 1,440,000	$ 1,440,000	$ -	$ 1,440,000	$ 360,000	$ -	$ 360,000	$ -	$ 360,000	$ -	$ 360,000	$ -	$ 1,440,000
4 - Joint Innovation Projects (unnamed contractor)	24	$ 75,000	$ 1,800,000	$ 550,000	$ 1,250,000	$ 1,800,000	$ 137,500	$ 312,500	$ 137,500	$ 312,500	$ 137,500	$ 312,500	$ 137,500	$ 312,500	$ 1,800,000
Subtotal Contracual			$ 4,598,000	$ 3,348,000	$ 1,250,000	$ 4,598,000	$ 837,000	$ 312,500	$ 837,000	$ 312,500	$ 837,000	$ 312,500	$ 837,000	$ 312,500	$ 4,598,000
Other							Other								$ -
Shipping samples	200	$ 100	$ 20,000	$ 20,000	$ -	$ 20,000	$ 5,000	$ -	$ 5,000	$ -	$ 5,000	$ -	$ 5,000	$ -	$ 20,000
Web design/maintenance/communications	4	$ 5,000	$ 20,000	$ 20,000	$ -	$ 20,000	$ 5,000	$ -	$ 5,000	$ -	$ 5,000	$ -	$ 5,000	$ -	$ 20,000
	1	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal Other			$ 40,000	$ 40,000	$ -	$ 40,000	$ 10,000	$ -	$ 10,000	$ -	$ 10,000	$ -	$ 10,000	$ -	$ 40,000
Total Direct Charges			$ 4,848,462	$ 3,598,462	$ 1,250,000	$ 4,848,462	$ 897,778	$ 312,500	$ 898,979	$ 312,500	$ 900,216	$ 312,500	$ 901,489	$ 312,500	$ 4,848,462
Indirect Charges (10% of EDA request)	1.0	10%	$ 35,046	$ 35,046	$ -	$ 35,046	$ 8,762	$ -	$ 8,762	$ -	$ 8,762	$ -	$ 8,762	$ -	$ 35,046
Total Budget			$ 4,883,508	$ 3,633,508	$ 1,250,000	$ 4,883,508	$ 906,539	$ 312,500	$ 907,740	$ 312,500	$ 908,977	$ 312,500	$ 910,251	$ 312,500	$ 4,883,508

EDA BBB - Green Energy

Southeast Conference EDA BBB Phase 2
Alaska Mariculture Cluster - Green Energy Component
Alaska Fisheries Development Foundation Subaward
Budget FINAL 2022-03-12

Expense	# of Units	Base Unit Cost	Total	Request from EDA	Match	Project Subtotal	Year 1 EDA	Year 1 Match	Year 2 EDA	Year 2 Match	Year 3 EDA	Year 3 Match	Year 4 EDA	Year 4 Match	Total
Personnel *(includes 3% raise in years 2-4)*							**Personnel**								
AFDF ED (months)	2.0	$ 7,433	$ 15,549	$ 15,549	$ -	**$ 15,549**	$ 3,717	$ -	$ 3,828	$ -	$ 3,943	$ -	$ 4,061	$ -	**$ 15,549**
AFDF Finance Director (months)	2.0	$ 5,466	$ 11,434	$ 11,434	$ -	**$ 11,434**	$ 2,733	$ -	$ 2,815	$ -	$ 2,899	$ -	$ 2,986	$ -	**$ 11,434**
AFDF Development Director (months)	2.0	$ 5,417	$ 11,331	$ 11,331	$ -	**$ 11,331**	$ 2,708	$ -	$ 2,790	$ -	$ 2,873	$ -	$ 2,959	$ -	**$ 11,331**
Subtotal Personnel			**$ 38,314**	**$ 38,314**	**$ -**	**$ 38,314**	**$ 9,158**	**$ -**	**$ 9,433**	**$ -**	**$ 9,716**	**$ -**	**$ 10,007**	**$ -**	**$ 38,314**
Fringe benefits							**Fringe Benefits**								**$ -**
Fringe - AFDF ED		29.53%	$ 4,592	$ 4,592	$ -	**$ 4,592**	$ 1,098	$ -	$ 1,130	$ -	$ 1,164	$ -	$ 1,199	$ -	**$ 4,592**
Fringe - AFDF Finance Director		28.18%	$ 3,222	$ 3,222	$ -	**$ 3,222**	$ 770	$ -	$ 793	$ -	$ 817	$ -	$ 806	$ -	**$ 3,186**
Fringe - AFDF Dev. Director		27.06%	$ 3,066	$ 3,066	$ -	**$ 3,066**	$ 733	$ -	$ 755	$ -	$ 778	$ -	$ 767	$ -	**$ 3,032**
Subtotal Fringe Benefits			**$ 10,880**	**$ 10,880**	**$ -**	**$ 10,880**	**$ 2,601**	**$ -**	**$ 2,679**	**$ -**	**$ 2,759**	**$ -**	**$ 2,771**	**$ -**	**$ 10,809**
Travel							**Travel**								**$ -**
Travel - in-state round trips	8.0	$ 1,500	$ 12,000	$ 12,000	$ -	**$ 12,000**	$ 3,000	$ -	$ 3,000	$ -	$ 3,000	$ -	$ 3,000	$ -	**$ 12,000**
Subtotal Travel			**$ 12,000**	**$ 12,000**	**$ -**	**$ 12,000**	**$ 3,000**	**$ -**	**$ 3,000**	**$ -**	**$ 3,000**	**$ -**	**$ 3,000**	**$ -**	**$ 12,000**
Equipment							**Equipment**								**$ -**
none	0	$ -	$ -	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ -**
Subtotal Equipment			**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Supplies							**Supplies**								**$ -**
Printing (pgs)	200	$ 10	$ 2,000	$ 2,000	$ -	**$ 2,000**	$ 500	$ -	$ 500	$ -	$ 500	$ -	$ 500	$ -	**$ 2,000**
Subtotal Supplies			**$ 2,000**	**$ 2,000**	**$ -**	**$ 2,000**	**$ 500**	**$ -**	**$ 500**	**$ -**	**$ 500**	**$ -**	**$ 500**	**$ -**	**$ 2,000**
Contractual							**Contractual**								**$ -**
1 - Green Energy Plan (unnamed contractor)	1	$ 250,000	$ 250,000	$ 250,000	$ -	**$ 250,000**	$ 62,500	$ -	$ 62,500	$ -	$ 62,500	$ -	$ 62,500	$ -	**$ 250,000**
2 - Renewable best practices (unnamed contractor)	1	$ 350,000	$ 350,000	$ 350,000	$ -	**$ 350,000**	$ 87,500	$ -	$ 87,500	$ -	$ 87,500	$ -	$ 87,500	$ -	**$ 350,000**
Subtotal Contracual			**$ 600,000**	**$ 600,000**	**$ -**	**$ 600,000**	**$ 150,000**	**$ -**	**$ 150,000**	**$ -**	**$ 150,000**	**$ -**	**$ 150,000**	**$ -**	**$ 600,000**
Other							**Other**								**$ -**
Advertising/social media	8	$ 500	$ 4,000	$ 4,000	$ -	**$ 4,000**	$ 1,000	$ -	$ 1,000	$ -	$ 1,000	$ -	$ 1,000	$ -	**$ 4,000**
-	-	$ -	$ -	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ -**
Subtotal Other			**$ 4,000**	**$ 4,000**	**$ -**	**$ 4,000**	**$ 1,000**	**$ -**	**$ 1,000**	**$ -**	**$ 1,000**	**$ -**	**$ 1,000**	**$ -**	**$ 4,000**
Total Direct Charges			**$ 667,193**	**$ 667,193**	**$ -**	**$ 667,193**	**$ 166,259**	**$ -**	**$ 166,611**	**$ -**	**$ 166,975**	**$ -**	**$ 167,279**	**$ -**	**$ 667,123**
Indirect Charges (10% of EDA request)	1.0	10%	$ 11,719	$ 11,719	$ -	**$ 11,719**	$ 2,930	$ -	$ 2,930	$ -	$ 2,930	$ -	$ 2,930	$ -	**$ 11,719**
Total Budget			**$ 678,913**	**$ 678,913**	**$ -**	**$ 678,913**	**$ 169,188**	**$ -**	**$ 169,541**	**$ -**	**$ 169,904**	**$ -**	**$ 170,208**	**$ -**	**$ 678,842**

The breakdown for all these grants you can find in "FY 2023 Budget Projection for All Programs" attachment above.

Cash Flow As of October 31, 2022

1. **AFDF Current Account Balances**

Cash Account	Account Balance 11/12/2021	Account Balance 2/22/2022	Account Balance 10/31/2022
Unrestricted Checking XXXXXX1035	$69,304.91	$36,493.14	$61,910.68
MSC Salmon XXXXXX0955	$135,593.87	$109,343.87	$99,313.26
MSC RFM P. Cod XXXXXX9698	$90,116.30	$78,803.84	$500
MariMap XXXXXXX9594	$500	$500	$500
SOS XXXXXX9706	$92,173.88	$113,533.70	$27,126.78
ARPA-E XXXXXXXXXXX9586	$500	$500	$500
ADNR XXXXXX7017	$500	$500	$500
AMI_WWF XXXXXX2156	$10,527.75	$4,762	$500
RFM Salmon XXXXXX3253	$88,345.46	$74,350.32	$103,750.58
USDA XXXXXX1997	$500	$500	$500
Total	**$488,062.17**	**$419,286.87**	**$295,101.30**

Credit Account	Account Balance 10/31/2022
Visa CC XXXX-XXXX-XXXX-4128	$12,594.68
Available Credit	$42,820

2. **FY 2022 Cash Flow Summary for Operating Funds (also called unrestricted or indirect)**

Handout: "FY 2022 Budget for all the programs", Columns: Indirect Total Expenses

$49,316	10/31/2022 Operating Unrestricted Cash Balance (sum of amounts highlighted in yellow above minus CC balance
+$150,202	Projected Overhead to cover indirect expense from "FY 2023 Budget Projection for all the programs"
- $54,235	Projected Net Indirect Income for FY 2023 from "FY 2023 Budget Projection for all the programs"
+ $4,000	Uncollected invoiced Membership for FY 2022
= $149,283	**Expected remaining operating balance on 9/30/2023.**

Accrual Basis

Balance Sheet

	Oct 31, 22
ASSETS	
Current Assets	
Checking/Savings	
1515 · Unrestricted Checking 1035	61,910.68
1520 · MSC Salmon 0955	99,313.26
1530 · Cod Certification 9698	500.00
1535 · MaricultureMap 9594	500.00
1540 · ASOS 9706	27,126.78
1545 · ARPA_E 9586	500.00
1570 · ADNR - 7017	500.00
1580 · AMI 2156	500.00
1585 · RFM Salmon 3253	103,750.58
1590 · USDA 1997	500.00
Total Checking/Savings	295,101.30
Accounts Receivable	183,651.43
Total Current Assets	478,752.73
TOTAL ASSETS	**478,752.73**
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	101,320.48
Credit Cards	12,594.68
Other Current Liabilities	16,694.21
Total Current Liabilities	130,609.37
Total Liabilities	130,609.37
Equity	348,143.36
TOTAL LIABILITIES & EQUITY	**478,752.73**

*This **Balance Sheet** shows how much we have in each account as of October 31, 2022, after all the current payables and transfers will be completed. We have $101,320.48 in accounts payables, $12,594.68 in Credit Card payments for October 2022, and $16,694.21 in other current liabilities, such as Employee Vacation, payroll taxes, etc.*

Overall Financial Health

According to the attached "FY 2023 Budget for All Programs" above, you can see that we expect to have quite improved cash flow compared to our previous year. AFDF's projected Revenues for FY 2023 ***$2,903,290*** *and projected Expenses are* ***$2,715,934****, leaving a Net Income of* ***$187,357*** *for all programs.* ***$150,202*** *of those funds are for overhead, which helps us to cover indirect expenses.*

After all the calculations, remaining operating balance as of September 30, 2022, is expected to be $149,283*. (See Cash Flow above). This is a slight increase from last year and is an indication that the overall financial health of the organization is improving.*

FY 2022 Budget Actual for All Programs (no match)

As of 2022-09-30

	Indirect	Federal Programs					Non Federal Programs												TOTAL
		USDOE - ARPA E II	NOAA - AMI Phase 2	NOAA - Oysters	USDA - Bigelow	USDA	AMA	ASOS	ADNR	Denali Comission	EVOS	EDA BBB - Phase 1	GAPP	MSC & RFM P. Cod	MSC Salmon	RFM Salmon	PSFMC - AMI Phase 3	PSFMC - Seaweed	SWAMC	WWF	
4000 · REVENUES																					
4250 SOS Entry Fees	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,050.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,050.00
4255 SOS Sponsorship Revenues	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 118,845.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 118,845.00
4100 · Grant & Contract Revenues	$ -	$ 265,786.87	$ 24,394.85	$ 144,566.14	$ 389.89	$ -	$ 45,000.00	$ -	$ 8,666.78	$ 86,298.62	$ 9,250.00	$ 22,770.24	$ 9,525.00	$ -	$ 20,575.76	$ -	$ 17,903.51	$ 32,369.20	$ 28,344.05	$ 19,835.07	$ 735,675.98
4105 · Miscellaneous Income	$ 865.25	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,395.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,260.25
4200 · Indirect Cost Recovery		$ 9,542.87	$ 2,005.15	$ 7,772.00	$ 605.99	$ -	$ -			$ 1,212.10	$ 11,931.50	$ 2,277.02	$ -	$ 16,732.02	$ 8,121.62	$ 10,863.67	$ 3,833.28	$ -	$ 3,635.04	$ 4,131.58	$ 82,663.84
4300 · Membership Dues	$ 29,750.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 29,750.00
4310 · Contributions							$ -				$ -			$ 43,893.32	$ 90,497.72	$ 145,165.94	$ -	$ -	$ -	$ -	$ 279,556.98
4500 · Interest	$ 5.94	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 5.94
Total 4000 · REVENUES	**$ 30,621.19**	**$ 275,329.74**	**$ 26,400.00**	**$ 152,338.14**	**$ 995.88**	**$ -**	**$ 45,000.00**	**$ 125,290.00**	**$ 8,666.78**	**$ 87,510.72**	**$ 21,181.50**	**$ 25,047.26**	**$ 9,525.00**	**$ 60,625.34**	**$ 119,195.10**	**$ 156,029.61**	**$ 21,736.79**	**$ 32,369.20**	**$ 31,979.09**	**$ 23,966.65**	**$ 1,253,807.99**
																					$ -
5000 · EXPENSES																					
5100 · Payroll Expenses																					
Total 5100 · Payroll Expenses	$ 25,191.59	$ 37,236.64	$ 12,767.00	$ 16,790.23	$ 995.88	$ 2,752.33		$ 13,932.07	$ 368.26	$ 2,322.24	$ 21,181.50	$ 27,073.97	$ 9,525.00	$ 26,122.33	$ 19,526.32	$ 17,989.81	$ 16,962.59	$ 3,287.50	$ 10,135.35	$ 21,582.00	$ 285,742.61
5200 · Business Insurance	$ 903.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 903.00
5250 · Business License	$ 25.00	$ -				$ -		$ -		$ -		$ -		$ -	$ -		$ -		$ -	$ -	$ 25.00
5300 · Property/Space Rents	$ 1,140.00	$ 1,515.94	$ -	$ -	$ -	$ -	$ -	$ 24,340.38	$ -	$ -	$ -	$ 228.57	$ -	$ 228.58	$ 228.57	$ 228.57	$ 228.57	$ -	$ 500.00	$ 228.57	$ 28,867.75
5400 · Professional Services	$ 28,969.69	$ 91,292.25	$ 6,726.82	$ 93,948.78	$ -	$ 11,770.00	$ 45,000.00	$ 49,217.26	$ 7,498.02	$ 75,000.00	$ -	$ 10,500.00	$ -	$ 98,691.76	$ 103,274.16	$ 153,575.94	$ -	$ 27,000.00	$ 6,511.88	$ -	$ 808,976.56
5450 · Advertising and Promotion	$ 2,028.43	$ -	$ 866.37	$ -	$ -	$ -	$ 957.72	$ 7,406.17	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 537.00	$ -	$ -	$ -	$ 11,795.69
5500 · Telephone	$ 4,925.53	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,925.53
5510 · Printing/Copying Svcs	$ 407.56	$ 502.30	$ 1,145.20	$ -	$ -	$ 437.11	$ -	$ 789.36	$ -	$ 2,419.58	$ -	$ 532.47	$ -	$ -	$ -	$ -	$ 32.47	$ -	$ -	$ 463.48	$ 6,729.53
5520 · Shipping & Postage	$ 506.01	$ -	$ 292.54	$ -	$ -	$ 187.32	$ -	$ 120.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 568.78	$ 1,674.65
5530 · Subscriptions & Publication Fee	$ 2,034.54	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 24.95	$ -	$ -	$ -	$ -	$ -	$ 2,059.49
5540 · Supplies & Materials	$ 77.01	$ 7,042.08	$ -	$ 22,901.95	$ -	$ 748.05	$ -	$ 14,117.88	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,762.50	$ 2,500.00	$ 58,149.47
5550 · Parking	$ -	$ -	$ -	$ -	$ -	$ 44.50	$ -	$ 290.00	$ -	$ -	$ -	$ -	$ -	$ 8.67	$ 4.34	$ 4.34	$ -	$ -	$ -	$ -	$ 351.85
5560 · Memberships & Contributions	$ 1,175.00	$ -	$ -	$ -	$ -	$ -	$ 50.00	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,500.00	$ 1,500.00	$ -	$ -	$ -	$ -	$ 1,000.00	$ 5,225.00
5570 · Labor or Services Donated	$ 2,000.00	$ -	$ -	$ -		$ -		$ -			$ -	$ -		$ -	$ -	$ -	$ -		$ -		$ 2,000.00
5600 · Board Expenses	$ 83.67	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 83.67
5610 · Meetings & Workshops	$ 775.00	$ 7,190.44	$ 295.00	$ -	$ -	$ 2,920.96	$ 2,661.48	$ 3,989.00	$ -	$ 157.50	$ -	$ 545.00	$ -	$ 298.16	$ -	$ -	$ -	$ -	$ 1,800.00	$ 89.32	$ 20,721.86
5700 · Bank Charges	$ 375.97	$ -	$ -	$ -	$ -	$ -	$ -	$ 252.61	$ -	$ -	$ -	$ -	$ -	$ 32.10	$ 104.86	$ 96.30	$ -	$ -	$ -	$ -	$ 861.84
5810 · Travel Expense																					$ -
Total 5810 · Travel Expense	$ 2,598.45	$ 8,858.85	$ 13,828.45	$ 10,283.44	$ -	$ 6,917.33	$ -	$ 9,877.45	$ 800.50	$ 4,080.36	$ -	$ 6,465.21	$ -	$ 9,380.97	$ 12,164.80	$ 7,933.38	$ 9,420.93	$ -	$ 2,269.36	$ 7,733.98	$ 112,613.46
5840 · Project Equipment	$ -	$ 20,004.55	$ -	$ 8,413.74	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 28,418.29
Total 5000 · EXPENSES	$ 73,216.45	$ 173,643.05	$ 35,921.38	$ 152,338.14	$ 995.88	$ 25,777.60	$ 48,669.20	$ 124,332.18	$ 8,666.78	$ 83,979.68	$ 21,181.50	$ 45,345.22	$ 9,525.00	$ 136,262.57	$ 136,828.00	$ 179,828.34	$ 27,181.56	$ 30,287.50	$ 31,979.09	$ 34,166.13	$ 1,380,125.25
	$ 73,216.45	$ 173,643.05	$ 35,921.38	$ 152,338.14		$ 25,777.60	$ 48,669.20	$ 124,332.18	$ 8,666.78	$ 83,979.68	$ 21,181.50	$ 45,345.22	$ 9,525.00	$ 136,262.57	$ 136,828.00	$ 179,828.34	$ 27,181.56	$ 30,287.50	$ 31,979.09	$ 34,166.13	$ 1,379,129.37
Net Income	**$ (42,595.26)**	**$ 101,686.69**	**$ (9,521.38)**	**$ -**	**$ -**	**$ (25,777.60)**	**$ (3,669.20)**	**$ 957.82**	**$ -**	**$ 3,531.04**	**$ -**	**$ (20,297.96)**	**$ -**	**$ (75,637.23)**	**$ (17,632.90)**	**$ (23,798.73)**	**$ (5,444.77)**	**$ 2,081.70**	**$ -**	**$ (10,199.48)**	**$ (126,317.26)**
Unpaid payiables (invoiced in FY 2022, will pay in FY 2023)						**$ 20,464.26**								**$ 20,475.87**		**$ 61,427.62**					**$ 102,367.75**
Funds Received in FY 2021			**$ (9,521.38)**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**		**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ (10,199.48)**	**$ (19,720.86)**
Funds Received in FY 2023	$ -	$ -	$ -	$ -	$ -	$ (25,777.60)	$ (3,669.20)	$ -	$ -	$ -	$ -	$ (20,297.96)	$ -	$ -	$ -	$ -	$ (5,444.77)	$ -	$ -	$ -	$ (55,189.53)
Adjusted Net Income as of 9.30.2022	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		$ -	$ -	**$ 50,960.88**

FY 2023 Budget Projection for All Programs (no match)

Last Revision 2022-11-10

	Indirect	Federal Programs				Non Federal Programs														Total All Programs
		USDOE - ARPA-E II	NOAA - Oysters	USDA - Bigelow	USDA	ASOS	Builders Vision	EDA AOC	EDA BBB Phase 1	EDA BBB - Research & Dev	EDA BBB - Green Energy	EVOS	GAPP	MSC & RFM P. Cod	MSC Salmon	RFM Salmon	RFM Halibut and Sablefish	PSFMC - AMI Phase III	WWF	
4000 · REVENUES																				
4100 · Grant & Contractual Revenues		$20,144	$75,261	$72,929	$ 25,778		$ 90,000	$ 180,000	$ 22,684	$ 673,335	$ 124,694	$527,006	$19,050	$ 25,000	$ 20,000		$ 138,750	$ 74,242	$89,486	$ 2,178,359
4105 · Miscellaneous Income	$ 1,000					$ 5,000			$ -	$ -										$ 6,000
4300 · Membership Dues	$ 30,000								$ -	$ -										$ 30,000
4310 · Contributions						$119,858			$ -	$ -				$ 108,202	$ 106,500	$ 203,065				$ 537,625
4500 · Interest	$ 10								$ -	$ -										$ 10
Indirect Cost		$ -	$ 1,943	$ 7,272			$ 10,000	$ 20,000	$ 2,268	$ 6,572	$ 2,198	$ 35,795	$ -	$ 17,588	$ 18,975	$ 13,500	$ 7,500	$ 4,381	$ 3,306	$ 151,296
Total 4000 · REVENUES	**$ 31,010**	**$20,144**	**$77,204**	**$80,201**	**$ 25,778**	**$124,858**	**$100,000**	**$ 200,000**	**$ 24,953**	**$ 679,906**	**$ 126,892**	**$562,801**	**$19,050**	**$ 150,790**	**$ 145,475**	**$ 216,565**	**$ 146,250**	**$ 78,623**	**$92,792**	**$ 2,903,290**
5000 · EXPENSES																				
Total 5100 · Payroll Expenses	$ 53,355	$ -	$ 3,442	$ 4,679	$ -	$ 17,000	$ 80,000	$ 65,000	$ -	$ 30,021	$ 8,819	$ 31,950	$19,050	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 8,408	$18,276	$ 420,000
5200 · Business Insurance	$ 9,000					$ 2,700			$ -											$ 11,700
5250 · Business License	$ 50								$ -											$ 50
5300 · Property/Space Rents	$ 1,140					$ 13,590			$ -											$ 14,730
5400 · Professional Services	$ 6,500	$20,144	$60,739	$67,200	$ -	$ 61,000	$ 10,000	$ 100,000	$ 4,514	$ 627,750	$ 112,500	$309,000	$ -	$ 100,702	$ 95,000	$ 173,065	$ 74,000	$ 35,004	$59,091	$ 1,916,210
5450 · Advertising and Promotion	$ 2,000				$ -	$ 8,000			$ -	$ 3,750	$ 750	$ -								$ 14,500
5500 · Telephone	$ 7,300								$ -											$ 7,300
5510 · Printing & Copying	$ 500				$ -	$ 725	$ -	$ -	$ -	$ 1,125	$ 375	$ -							$ 3,850	$ 6,575
5520 · Shipping & Postage	$ 500					$ 210			$ -	$ 3,750									$ 869	$ 5,329
5530 · Subscriptions & Publication Fee	$ 2,000			$ 500					$ -											$ 2,500
5560 · Memberships & Contributions	$ 1,200								$ -			$ -		$ 1,500	$ 1,500					$ 4,200
5610 · Meetings & Workshops	$ 800					$ 1,700			$ -										$ -	$ 2,500
5700 · Bank Charges	$ 400					$ 90			$ -											$ 490
Total 5810 · Travel Expense	$ -	$ -	$ 3,000	$ 550	$ -	$ 8,000	$ -	$ 10,000	$ -	$ 6,000	$ 2,250	$ -	$ -	$ 11,000	$ 10,000	$ 10,000	$ 5,000	$ 9,577	$ 7,400	$ 82,777
5830 · Project Supplies and Equipment	$ 500		$ 8,079		$ -	$ 9,000		$ 5,000	$ -	$ 938		$186,056	$ -					$ 17,500		$ 227,072
Total 5000 · EXPENSES	**$ 85,245**	**$20,144**	**$75,261**	**$72,929**	**$ -**	**$122,015**	**$ 90,000**	**$ 180,000**	**$ 4,514**	**$ 673,334**	**$ 124,694**	**$527,006**	**$19,050**	**$ 133,202**	**$ 126,500**	**$ 203,065**	**$ 99,000**	**$ 70,489**	**$89,486**	**$ 2,715,934**
Net Income	**$ (54,235)**	**$ -**	**$ 1,943**	**$ 7,272**	**$ 25,778**	**$ 2,843**	**$ 10,000**	**$ 20,000**	**$ 20,438**	**$ 6,573**	**$ 2,198**	**$ 35,795**	**$ -**	**$ 17,588**	**$ 18,975**	**$ 13,500**	**$ 47,250**	**$ 8,134**	**$ 3,306**	**$ 187,357**

FY 20-22 AFDF's *Alaska Symphony of Seafood* Expansion Project

BBRSDA PROJECT SUMMARY REPORT

Project Principal Name, Company/Org., & Contact Info:
Julie Decker (Executive Director) and Julie Cisco (Executive Administrator)
Alaska Fisheries Development Foundation (AFDF)
Address: PO Box 2223, Wrangell, AK 99929-2223
Phone: (907) 276-7315; Email: jdecker@afdf.org ; jcisco@afdf.org

Project period: 12.27.2019 – 12.31.2022 **Report Date:** 10.24.2022
Project Budget: $150,000 **Amount rec'd & spent to date:** $50,000
Remaining Funds: $100,000 **Next installment requested**: $50,000

Project Description

Key personnel: Julie Decker, Julie Cisco, Ekaterina Ratzlaff, Val Motley (FPN Events)
Partners: 1) Symphony Steering Committee: Tomi Marsh (ASMI Board); Jeremy Woodrow and Ashley Heimbigner (ASMI); Keith Singleton (Alaskan Leader Seafoods, Bristol Bay fisherman); Rising Tide Communications; Trident Seafoods; American Seafoods; 2) AFDF Board of Directors; 3) event co-hosts: United Fishermen of Alaska (UFA), Pacific Seafood Processors Association (PSPA), Northwest Fisheries Association (NWFA); 4) annual sponsors (approximately 45 companies/orgs).

Project Goal: ***Expand the positive impact of the Alaska Symphony of Seafood (Symphony).*** *The project goal will be accomplished via the following objectives:*

- ***Objective 1 –*** *Increase the revenues for the annual Symphony event, from $100,000 per year to $225,000 per year*
- ***Objective 2*** *– Increase the number of Symphony product entries from an average of 15 to 30 annually and increase the number of Bristol Bay sockeye salmon entrants*
- ***Objective 3*** *–Increase promotions, exposure and sales of Symphony products*
- ***Objective 4 –*** *Create cooperative retail promotions for winning Symphony products*
- ***Objective 5*** *– Track project results, including focus on continued improvements through exit surveys*

Please see link to full project proposal, metrics for success, and other information.

Lessons Learned

SUCCESSES

In 2023, AFDF will celebrate the 30th anniversary of the Alaska Symphony of Seafood. Although we are delayed from our original projection for our goal to expand the positive impacts of the Symphony, we continue to implement important changes to the Symphony, such as creating new special awards (Bristol Bay Choice, Salmon Choice, Whitefish Choice) which increase

opportunities to promote Alaska seafood products. We are also working to raise the exposure of the event and tighten connections between buyers and entrants. For 2023, AFDF has secured a Holland America chef as a judge (Nov. 16, 2022). AFDF has also secured a new sponsor, Global Seafood Alliance (GSA), which can help promote the event, products, winners and sponsors through GSA's Seafood Advocate Magazine and the Aquapedia podcase. Additional ways AFDF intends to solicit target partners is through naming rights to categories/special awards, provision of retail space as a benefit to winners, sponsorships, to name a few. Also new this year, AFDF will also be adding additional benefits for winners with the inclusion of the AFDF Startup Accelerator. See HIGHLIGHTS below for more.

CHALLENGES

COVID-19 has had an immense impact on the implementation of this initiative to expand the impact of the Symphony. Beginning in March, 2020, the following events were cancelled due to COVID: SENA (March, 2020), Seattle Open House (Nov., 2020), Juneau Open House (Feb., 2021), SENA (March, 2021). Additionally, fundraising efforts were severely restricted as serious risk, uncertainty and cost to operate plagued much of the seafood industry and its partners. Beginning Nov., 2021, AFDF started the regular Symphony events gain.

In addition, the AFDF's Executive Director was on personal leave in 2020 for four months due to a tragic accident which killed her two children, reducing staff to two people. Then, in Dec., 2021, AFDF's Deputy Director was hospitalized in the ICU for several months with serious health issues. Consequently, many of the tasks/metrics for this project have yet to be fulfilled due to the postponement of the 2020 and 2021 Symphony events and limitations of staff capacity.

Since Dec. 2021, AFDF has focused on increasing its capacity in order to meet the original goals of the Symphony Initiative and the BBRSDA partnership. Beginning Jan. 2022, AFDF began job recruitment efforts, which resulted in the hiring of 4 new staff (6 staff total) between April and August, 2022. Julie Cisco, a veteran of the seafood industry and BB permit holder, will be the lead AFDF staff on Symphony, working with Val Motley this year, as Val transitions away from event services for the Symphony after 20+ years. Cisco also holds a shared position with GAPP, which allows for knowledge sharing regarding promotional activities, and hopefully will lead to additional industry partnerships regarding the Symphony.

Additionally, this year AFDF is integrating the Alaska Ocean Cluster into AFDF's programs, and Garrett Evridge as the 7th AFDF employee, which will enable us to offer consultation services with Symphony entrants (if desired) and potential inclusion into the next cohort at AFDF's Startup Accelerator (previously the Alaska Ocean Cluster). This can help startups with good product innovations to scale-up production by connecting them with venture capital, business services, or sources of raw product.

Given all the challenges above, AFDF diligently worked to address them and has emerged better positioned than in the past 15 years to execute the remainder of this project.

Highlights of Project Accomplishments: The following tasks have been completed despite the COVID-19 cancellations and other challenges that have befell AFDF staff.

- Convened Symphony Steering Committee to discuss strategic changes to the Symphony, including new categories and awards which offer additional opportunities for promotions and winners; AFDF Board approved committee recommendations.
- Offered six special awards, starting in 2022, including ***Bristol Bay Choice, Whitefish Choice, Salmon Choice, Seattle People's Choice, Juneau People's Choice, Grand Prize***.
- Other special awards considered for future events: *Best Startup, Best Packaging, Best Director-to-Consumer, 100% Club, Sustainability Award, Wild Alaska Pollock Choice*
- 2019-20 Product Slideshow completed – posted to AFDF website and will be featured at events
- 1st ASOS Exit Survey completed
- Increased advertising budget by 54% over previous 4-year average
- Organized panel presentation during 2021 Pacific Marine Expo (PME), facilitated by Julie Decker and titled, ***Alaska Symphony of Seafood Awards and How to Develop a New Product***, including industry experts on quality control and food science (Chris Sannito), product development (Keith Singleton), and marketing (Lilani Dunn); announced winners of each category and special awards, including inaugural winner of the Bristol Bay Choice announced by Andy Wink, BBRSDA ED
- Issued press release regarding winners
- In 2022, completed 4 media interviews; over 10 articles published about Symphony winners; all articles posted on AFDF FB page, including National Fisherman article, SeafoodSource version, and this one which highlights the new Bristol Bay Choice award
- Placed 2 ads, plus one article, in the SENA Expo Magazine (March, 2022 – see below)
- Entered all winners in SENA's Seafood Excellence Awards; 3 out of 11 national finalists included Symphony products
- 2023 Call for Product released; issued press release (attached), which highlights two different BB sockeye salmon winners
- Completed a "***Guide to Business Services for Value-added Product Development***" and posted to AFDF website (attached)

In Progress:

- Revamping AFDF website, including Symphony section, to enable more effective communications and promotions of to the Symphony ($25,000)
- Organizing PME panel (Nov. 18 @ 11:45am), ***Meet the creators (and winners) of this year's Alaska Symphony of Seafood entries,*** to highlight all 2023 Symphony entries (not just winners), including a 2-min pitch for each and announcement of winners
- Increasing radio and print ads, interviews and articles, including Coast Alaska, KDLG, Edible Alaska, Alaska Business Monthly, Alaska Public Media, National Fisheries Institute (NFI)

- Switched to Rising Tide Communications for graphic design of Symphony promotions
- Working with new sponsor, Global Seafood Alliance, to promote Symphony events, entrants, winners, and sponsors in its ***Seafood Advocate Magazine***, as well as its ***Aquademia*** podcast.

Summary of Project Expenditures

To date, only $50,000 has been requested and received by AFDF of the original BBRSDA commitment of $150,000. Total project expenses to date are approximately $225,000.

Request No-Cost Extension: COVID and AFDF staff challenges have essentially delayed the 3-year project by two years. Therefore, ***AFDF is requesting a 2-year no-cost extension through December 31, 2024, which would provide the remaining $100,000 over the next two years.***

Final Project Report Approval

Julie Decker

10/24/2022

Project Principal: Julie Decker, Executive Director Date

Andy Wink, BBRSDA Executive Director Date

PME panel on value-added product development, Nov., 2021.

Excerpt from promotional brochure for SENA, March, 2022.

Press Release
FOR IMMEDIATE RELEASE

Media Contact:
Julie Decker, Executive Director
Alaska Fisheries Development Foundation
907-276-7315
jdecker@afdf.org

Alaska Symphony of Seafood – Announcing Call for Product 2023

Deadline for entry is Oct. 21, 2022

Wrangell, Alaska (Tuesday, August 30, 2022) —The Alaska Fisheries Development Foundation (AFDF) is proud to announce the 2023 Alaska Symphony of Seafood, including the Call for Product. ***The deadline for entry into this year's competition is Friday, October 21, 2022. The Call for Product can be downloaded here.***

Since 1994, AFDF has organized the "Symphony", a competition for commercial-ready value-added products made from Alaska seafood. The Symphony is an exciting platform that encourages companies to invest in value-added product development, helps promote those new products and competitively positions Alaska seafood in national and global markets. Product development is critically important to the entire industry and the fishing communities that depend on it. Innovative new products position the industry to remain competitive and relevant to consumers.

Previous winners and entrants have leveraged the Symphony platform and continue to see increased sales and market exposure of their products. Last year, Ocean Beauty Seafoods' ***Echo Falls Wild Alaska Sockeye Salmon Tapas Slices – Mediterranean*** was a double winner (Retail and Salmon Categories), and moved on to be a finalist in the Seafood Excellence Awards during the Seafood Expo North America (SENA) in Boston. All the 2022 Symphony winners can be viewed here.

The first of this year's events, the Seattle Open House, will be held on the evening November 16, 2022, co-hosted with Northwest Fisheries Association, at Bell Harbor International Conference Center. Here, all products will be prepared and displayed by professional culinary staff. Following the judging, an Open House will be held for all entrants, seafood industry invitees, sponsors, the press and the judges. The next event will be an awards ceremony in Juneau on February 23, 2023, co-hosted by United Fishermen of Alaska, allowing the display and sampling of products by the Alaska Legislature and other special guests. Visit the AFDF website for more information on the Symphony, including sponsorship opportunities and upcoming dates.

Symphony Initiative

After a delay due to COVID, AFDF has re-engaged its initiative to expand the positive impacts of the Symphony for the Alaska seafood industry. The industry has invested heavily in quality improvements (both during harvesting and processing) increasing the capacity to create new value-added products. As a result of these investments, the quality and sophistication of these products has reached a new level.

This year, the Symphony will feature six separate special awards: Grand Prize, Salmon, Whitefish, Seattle People's Choice, Juneau People's Choice and the Bristol Bay Choice, in addition to the categories of Retail, Food Service and Beyond the Plate. The new categories will allow more opportunities for promotion and recognition, including increased exposure for value-added products out of Bristol Bay.

The first-place winners from each category, plus the Bristol Bay Choice, will receive booth space at the distinguished SENA in Boston and entry into their national new product competition, the Seafood Excellence Awards, as well as airfare to and from the show provided by our sponsor, Alaska Air Cargo.

Bristol Bay Choice

The Bristol Bay Regional Seafood Development Association (BBRSDA) and AFDF are the perfect partners to work together to support and promote the value-added products coming out of Bristol Bay. In recent years, the fleet has invested heavily in quality improvements and it is paying off by enabling product development. Increased quality at the point of harvest improves quality throughout the supply chain. This allows higher-quality value-added products, which is truly something to promote and celebrate. The Bristol Bay Choice was awarded for the first time in 2022 to the outstanding value-added product from Bristol Bay Sockeye, helping to raise awareness of high-quality products from the Bristol Bay region.

2022 Winner of the Bristol Bay Choice special award – Alaskan Leader Seafoods' *Wild Caught Bristol Bay*

COMING SOON – Revamped AFDF Website!

AFDF is currently working to revamp its website. This investment will enable AFDF to enable better promotion and recognition for all entrants and sponsors of this significant event. Stay tuned for the new website launch later in 2022!

Thank You to Sponsors

In order to hold these events, the Symphony is 100% funded by industry and its supporters each year. AFDF would like to recognize and thank our sponsors from last year. Major sponsors include Alaska Seafood Marketing Institute, Bristol Bay Regional Seafood Development Association, Lineage Logistics, Trident Seafoods, Marine Stewardship Council, Northwest Fisheries Association, Alaska Air Cargo, At-Sea Processors Association and the United Fishermen of Alaska. See here for a complete list of sponsors from last year. Sponsorships are currently available for the 2023 events.

About the Alaska Fisheries Development Foundation

Founded in 1978, AFDF is dedicated to identifying common opportunities in the Alaska seafood industry and developing efficient, sustainable outcomes that provide benefits to the economy, environment and communities. For more information, visit www.afdf.org.

Guide to Business Services for Value-Added Product Development

Alaska Fisheries Development Foundation, Inc.

Web/Logo Design

Super Graphics

Need Eco-friendly, high-quality large-format print, dazzling retail signage or fleet graphics that draw attention? We've got you covered.

Address: 2201 15th Ave. W., Seattle, WA 98119
Phone: 206-284-2201
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Alpha Graphics

Wondering how to turn your ground-breaking vision into a high-impact visual? Need a short run print project for your corporate event next week? Whatever the job, AlphaGraphics marketing and print professionals have you covered.

Address: 3131 Elloitt Ave., Suite 100, Seattle WA 98121
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Contact Email: camille.hanhardt@alphagraphicsseattle.com

Art Matters Foundation

We assist artists who make work intending to break ground aesthetically and socially.

Address: PO Box 311, New York, NY 10012
Phone:
Contact Email: info@artmattersfoundation.org

MSI Communications

MSI Communications is a full-service agency with capabilities and expertise to cover every advertising, marketing, communications and public-relations need.

Address: 808 E Street, Suite 200, Anchorage, AK 99501
Phone: 907-569-7070
Contact Email:

Rising Tide Communications

Rising Tide runs on in-house horsepower, enhanced with collaborators who are hand-selected from the top of their respective fields. As Riding Tide Communications has grown, we've developed a reputation for being creative, collaborative and super-effective.

Address: 211 H Street, Anchorage, AK 99501
Phone:
Contact email: kate@risingtidealaska.com

D2 Seattle
Integrated marketing for modern brands

Address: PO Box 99, Kirkland, WA 98083
Phone: 425-823-8442
Contact email: diane@d2seattle.com

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Frontier Packaging
Experience matters and Frontier Packaging provides industry specific and industry proven packaging, consolidated shipments, logistical support, and unmatched service to Alaska, the Pacific Northwest and around the world.

Address: 1201 Andover Park East, Suite 101, Tukwila, WA 98188 USA
Phone: 800-767-7333
Contact email: kimh@frontierpackaging.com

Seattle-Tacoma Box
Family owned and operated since 1889, Seattle-Tacoma Box Company provides innovative packaging solutions at competitive prices.

Address: 23400 71st Place South, Kent, WA 98032
Phone: (253) 854-9700
Contact email: Davidb@seattlebox.com

Summit Packaging
Streamlining packaging, unlocking growth.

Address: 1401 West Valley Hwy. N, Auburn, WA 98001
Phone: (253) 858-8181
Contact email: Greg.Ong@summitpackaging.com

Transportation

Lynden Transportation
Lynden's bulk shipping capabilities range from temperature-controlled edible products to hazardous chemical shipments. Our custom-built equipment is designed with your needs in mind.

Address: 6520 Kulis Drive, Anchorage, AK 99502
Phone: (800) 596-3361
Contact email: gobeso@lynden.com

CFI Commodity Forwarders INC.

Commodity Forwarders specializes in the transportation and distribution of perishable products through our people, network and technology. Fresh or frozen, seafood, meat, flowers, foodstuffs or produce; your CFI team will expertly handle for air, ocean, truck and rail transportation.

Address: 4000 W. 50th, #1, Anchorage, AK 99502
Phone: (907) 243-1144
Contact email:

Samsung Tug & Barge

Serving Alaska for over 70 years, Samson is one of the best barge and cargo hauling services around.

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Phone: (206) 767-7820
Contact email:

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Connecting Western Alaska to the World.

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Phone: (206) 282-9979
Contact email:

Broker

Encore

Encore Real Estate Investment Services is dedicated to assisting clients in the acquisition and disposition of net leased and multi-tenant retail properties across the country. We provide advisory and brokerage expertise with the highest level of commitment and attention to detail, which ensures a higher assurance of closing and a faster turnaround time as each client is assisted and advised on strategic exit and entrance strategies aimed at achieving their investment goals.

Address: 30500 Northwestern Highway, Suite 400, Farmington Hills, MI 48334
Phone: (248) 702-0280
Contact email:

Creative Circle

Remote Hiring Made Simple. For two decades, our local teams have connected marketing and creative professionals with companies all over the U.S and Canada.

Address:
Phone:
Contact email: msampolinski@creativecircle.com

Custom Processing

Independent Packers

Food processing company located in Seattle, WA

Address: 2001 W. Garfield St. Seattle, WA 98119
Phone: (206) 285-6000
Contact email:

Home Port Processors

Address: 2875 Roeder Ave. #11, Bellingham, WA 98225
Phone: (360) 676-4707
Contact email:

North Star Cold Storage, Stanwood, WA

Address: 27100 Pioneer Hwy., Stanwood, WA 98292
Phone: (360) 629-9591
Contact email:

Cold Locker

Cold Locker Processing and Storage is positioned just outside Seattle, Washington to support resource abundant Alaska and local area resources. The facility houses a fully capable production plant producing ready-to-cook items and a cold storage warehouse to support seafood inventory, short-hold, cross-dock, consolidation programs and inventory storage.

Address: 2200 140th Ave East, Suite 200, Sumner, WA 98390
Phone: (253)321-3233
Contact email: info@coldlocker.com

Cold Storages/Refrigeration

Bellingham Cold Storage

Join an established food industry campus with valuable support services and impressive economies of scale. You'll have access to 3PL experts and the tools you need to prepare, store and move your product.

Address: 2825 Roeder Ave., Bellingham, WA 98227-0895
Phone: (360) 733-1640
Contact email:

City Ice

Address: 2001 W Garfield Street #C100 Pier 90, Building 86, Seattle, WA 98119
Phone: (206) 285-6500
Contact email:

E-Commerce

Crystal Creek

Crystal Creek specializes in frozen fulfillment, logistics, and shipping services for ecommerce companies. We offer dedicated client support, sustainable operations, and innovative solutions. As a certified B-Corp, we are committed to socially responsible business practices.

Address: 2460 Salashan Loop, Fernadale, WA 98248
Phone: (360) 778-1543
Contact email:

Nutritional Panels / Food Science

Exact Science Services
As a quality assurance or R&D professional, you expect fast, accurate, and client-focused results - with your needs and budget as the priority.

Address: 1355 Pacific Place, Suite #101, Ferndale, WA 98248
Phone: (360) 733-1205
Contact email: lab@exactsciencetific.com

Alaska Sea Grant, Chris Sannito
Seafood processing, sanitation control procedures, HACCP, etc.

Address: Kodiak Seafood & Marine Science Center, 118 Trident Way, Kodiak, AK 99615
Phone: 907-539-2012
Contact email: csannito@alaska.edu

Banks / Lenders

Alaska Department of Commerce, Division of Economic Development, Revolving Loan Funds

Address: 550 West 7th Avenue, Suite 1550, Anchorage, AK
Phone: 907-269-8150, 907-465-2510, 1-800-478-5626
Email: investments@alaska.gov

AlaskaUSA

Bank of America

First Bank

First National Bank of Alaska

Key Bank

Northrim Bank

Wells Fargo

Substitute language for proposal 161
Submitted by Julie Decker, Alaska Fisheries Development Foundation
October 27, 2022

PROPOSAL 161 – POLICY ON GROUNDFISH FISHERY RESOURCES MANAGEMENT

Create and establish Alaska Board of Fisheries policy regarding the management of groundfish fishery resources in State of Alaska waters, as follows:

GOAL AND BENEFITS

It is the goal of the Alaska Board of Fisheries and the Alaska Department of Fish and Game to manage groundfish stocks in accordance with the Sustained Yield (Article 8, section 4) and the Common Use (Article 8, section 3) directives of the Constitution of the State of Alaska. Management of the groundfish resources in accordance with Alaska's constitution is expected to protect, maintain and improve the resource. ~~manner that will protect, maintain, improve, and extend these resources for the greatest overall benefit.~~

Management of these fisheries for the purpose of achieving this goal will result in a variety of benefits which include but are not limited to:

(1) Maintaining healthy stocks of groundfish to ensure their continued reproductive viability and the maintenance of their role in the ecosystem;

(2) Providing a sustained ~~and reliable~~ supply of high-quality product to consumers ~~and substantial and stable employment in all sectors of the economy relating to these fisheries~~; and

(3) Providing opportunities for commercial, sport, subsistence, and personal use fisheries.

~~**The Alaska Board of Fisheries also recognizes the benefits of managing for the highest socio-economic benefit consistent with the below objectives**~~

OBJECTIVES

To achieve the management goals above and provide the benefits available from these resources, it is necessary to set objectives which will protect stocks and provide for ~~optimum~~ sustained utilization of these resources. With regards to the management of groundfish fishery resources in State of Alaska waters, the Alaska Board of Fisheries has the following objectives:

1. **Minimize adverse interactions with other stocks and fisheries.**
2. **Protect habitat from unsustainable fishing practices.**
3. **Utilize management measures that ensure adherence to annual and seasonal catch limits.**
4. **Harvest the resource to optimize quality and value of product.**
5. **Harvest the resource with consideration of ecosystem interactions.**
6. **Coordinate with federal management agencies responsible for groundfish fishery management.**
7. **Manage fisheries based upon the best available information.**
8. **Manage fisheries consistent with conservation and sustained yield of healthy groundfish resources.**
9. **~~Avoid sport, subsistence, and personal use conflicts~~ Maintain commercial, sport, subsistence and personal use opportunities.**

Alaska Board of Fisheries
Marit Carlson-Van Dort, Chair
Submitted via online portal & via email: dfg.bof.comments@alaska.gov

RE: Support for Proposal 161 October 11, 2022

Dear Chair Carlson-Van Dort and Alaska Board of Fisheries Members:

The undersigned fishermen and processors participating in Alaska's Pacific cod fisheries thank you for the opportunity to comment in strong support of Proposal 161 - Policy on Groundfish Fishery Resources Management.

This proposal is necessary to retain sustainability certification for Alaska's state waters Pacific cod fisheries by both the Responsible Fisheries Management (RFM) and Marine Stewardship Council (MSC) programs. **Alaska needs RFM and MSC certification to sell cod into nearly all markets in the U.S. and European Union, among others.** This proposal was put forward in response to the RFM and MSC certifications carrying a condition related to the lack of written fishery-specific management objectives for Pacific cod harvested in Alaska state waters. The Alaska Fisheries Development Foundation (AFDF) is the client for these certifications. A condition means that the certification bodies are granting the client time to address the issue before the next certification cycle. If it is not addressed, these fisheries will lose sustainability certification and access to the most valuable markets for Alaska cod.

As the client responsible for fulfilling any conditions, AFDF facilitated discussions among a steering committee that represented a broad group of Pacific cod stakeholders to draft a BOF proposal to meet the condition for the certification (submitted in April 2022**). This proposal is non-allocative, benefits all gear groups, and is supported by stakeholders as a whole. It outlines a very broad management policy for the BOF, similar to policies for other species such as crab and salmon. Proposal 161 does not change current BOF management. It only serves to document the broad goals and objectives that the BOF already uses to guide groundfish management so that Alaska can "get credit" for the management the BOF already does and satisfy this technical requirement to retain certification.**

Serious impacts would result from the Alaska cod industry losing certification. Loss of certification means lower value received for Alaska's Pacific cod harvests. It would also create confusion in the marketplace for all Alaska cod due to the continued certification of cod harvested in federal waters but not in state waters, as well as damage the overall Alaska seafood brand. There would also be significant increased handling and logistics costs because cod from state waters would need to be accounted for, processed, and marketed separately from cod harvested in federal waters. Many Alaska fishermen and processors participate in both federal and state waters cod fisheries, and our harvests collectively share an important marketplace.

Alaska Department of Fish and Game (ADF&G) supports maximizing the value from Alaska's fisheries, with one of the primary goals of the department being to optimize economic benefits from fish and wildlife resources. Cod is economically important to every gear group (jig, pot, longline, trawl) and all regions (Bering Sea, Aleutian Islands, Western Gulf of Alaska, Central Gulf, and Eastern Gulf), consistently making up 10% or more of the ex-vessel value of all species in Alaska. The state waters cod Guideline Harvest Levels (GHLs) combined exceeded 71 million pounds in 2022. However, as previously stated, with the loss of certification all cod caught off Alaska in state and federal waters would be affected; in 2021, that was more than 156 million pounds, with a first wholesale value of $283 million.

While the conditions first placed on cod were the impetus for this proposal, it is submitted as a statewide proposal for all Alaska groundfish fisheries, to be considered at the board's March 2023 meeting. Given a similar situation for the certification of the Prince William Sound pollock fishery, the move to include all such fisheries statewide was made to proactively address any other potential certification of a groundfish fishery in state waters. Adopting this proposal will allow Alaska to continue reaping maximum economic benefit from these important fisheries.

Managing fisheries sustainably for generations is the primary responsibility of the BOF and ADF&G. But we must also be able to maintain and expand markets to sell those fish to have a successful fishery. We respectfully request that the BOF adopt Proposal 161 and establish a broad, written policy for groundfish management that aligns with the BOF's current practices. With this action, the Alaska state waters cod fishery and other groundfish fisheries will continue to meet the requirements for RFM and MSC certifications, and Alaska will get marketplace credit for the exemplary fisheries management practices already in place.

Thank you for your consideration and service.

Sincerely,

Jason Anderson, **Alaska Seafood Cooperative**
Chris Barrows, **Pacific Seafood Processors Association**
Julie Bonney, **Alaska Groundfish Databank**
Julie Decker, **Alaska Fisheries Development Foundation**
Angel Drobnica, **Western Alaska Community Development Association**
Abby Fredrick, **Silver Bay Seafoods**
Hannah Heimbuch, **Under 60 Cod Harvesters**
Darius Kasprzak, **Alaska Jig Association**
Stephanie Madsen, **At-Sea Processors Association**
Malcolm Milne, **North Pacific Fisheries Association**
Stefanie Moreland, **Trident Seafoods**
Chad See, **Freezer Longline Coalition**
Rebecca Skinner, **Alaska Whitefish Trawlers Association**

BOF proposal: POLICY ON GROUNDFISH FISHERY RESOURCES MANAGEMENT
Strategy for Passage
Outline by AFDF
2022-09-06

Background:

- The MSC and RFM certifications of Alaska cod carry a condition related to the lack of written fishery specific objectives in the state fishery; the condition is related to cod harvested in state waters. Deadline to fulfill condition: MSC = Jan. 2025; RFM = Jan. 2027.
- As the Client responsible for fulfilling any conditions, AFDF facilitated discussions among a steering committee that represented all major cod stakeholders.
- The steering committee agreed to work with AFDF to draft a BOF proposal in order meet the condition for the certification, which was submitted in April, 2022 (see proposal at end of this document).
- The proposal was written more broadly to encompass all groundfish, therefore, the BOF will hear public testimony during the Committee of the Whole during the Oct. cod meeting, however, deliberations and any action taken will occur in March during the statewide meeting. The proposal and any written testimony will be provided to the board at both meetings. The BOF will also typically take any additional testimony in March.

Strategy:

- All industry stakeholder groups should present united support for the proposal. Conversely, if there is any question whether ALL COD STAKEHOLDERS support this proposal, it will be very difficult to gain BOF support.
- Alaska residents should be at forefront in verbal testimony and in meeting with BOF members.
- Industry agrees not to use or reference this policy when advocating for other allocative proposals.
- Stakeholders should talk to BOF members about this proposal separately and distinctly from any other cod proposals at this meeting. For example, if in a group/association, choose one person to talk about this proposal and a different member(s) to talk about allocative proposals.
- Designate a small group (~3) to provide verbal testimony as a group in October, and if possible, also in March. The group should represent small boat fleet, CDQs and processors.
- Draft a letter of support to be signed and submitted by all members of the steering committee, due Oct. 11, 2022.

Talking Points:

- **WHO**
  - This proposal was developed by reps from all gear groups that fish cod in Alaska.
  - This proposal is non-allocative, non-controversial, and supported by all.
- **WHAT**
  - This proposal outlines a very broad management policy for the BOF, similar to other broad policies for other species (crab, salmon).
  - **The proposal does not change current BOF management, it only documents the broad goals and objectives that the BOF already use to guide groundfish management.**
  - The proposal is intended to allow Alaska to "get credit for" the management the BOF already does by satisfying this technical requirement to retain certification.

- **WHY**
    - Alaska currently has a 'condition' on the MSC & RFM cod certifications as a result of not having such a policy in writing. A condition means we have time to fix the issue without losing sustainability certification. But without BOF action, Alaska cod will lose sustainability certification in the next cycle. Alaska needs MSC/RFM certification to sell cod in most markets.
    - **THE THREAT = LOSING CERTIFICATION.** Losing certification means:
        - confusion in the marketplace for all Alaska cod
        - harm to the Alaska brand
        - cod harvested in state waters can no longer claim sustainability certification
        - reduced market access for cod from state waters
        - increased handling/logistics costs, because cod from state waters will need to be separated from federal
- **IMPACTS**
    - ***Cod is important to every gear group (jig, pot, longline, trawl) and all regions (BS, AI, WG, CG, EG).*** The state water cod GHLs combined = more than 71 million lbs in 2022.
    - The State/ADFG supports getting the maximum value of the fishery (*one of the primary goals of the Dept is to optimize economic benefits from fish and wildlife resources.)*
    - All cod caught off Alaska in State and federal waters will be affected; in 2021, that was more than 156 M lbs with a first wholesale value of $283 million.
    - Cod consistently makes up 10% or more of the ex-vessel value of all species in Alaska.
    - Cod is landed commercially in communities across the entire coast.
    - ADFG staff comments are neutral/supportive.

****

PROPOSAL XXX – POLICY ON GROUNDFISH FISHERY RESOURCES MANAGEMENT.

Create and establish Alaska Board of Fisheries policy regarding the management of groundfish fishery resources in State of Alaska waters, as follows:

GOAL AND BENEFITS

It is the goal of the Alaska Board of Fisheries and the Alaska Department of Fish and Game to manage groundfish stocks in a manner that will protect, maintain, improve, and extend these resources for the greatest overall benefit.

Management of these fisheries for the purpose of achieving this goal will result in a variety of benefits which include but are not limited to:

(1) Maintaining healthy stocks of groundfish to ensure their continued reproductive viability and the maintenance of their role in the ecosystem;

(2) Providing a sustained and reliable supply of high-quality product to consumers and substantial and stable employment in all sectors of the economy relating to these fisheries; and

(3) Providing opportunities for sport, subsistence, and personal use fisheries.

The Alaska Board of Fisheries also recognizes the benefits of managing for the highest socio-economic benefit consistent with the below objectives.

OBJECTIVES

To achieve the management goal and provide the benefits available from these resources, it is necessary to set objectives which will protect stocks and provide for optimum utilization of these resources. With regards to the management of groundfish fishery resources in State of Alaska waters, the Alaska Board of Fisheries has the following objectives:

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4. **Harvest the resource to optimize quality and value of product.**
5. **Harvest the resource with consideration of ecosystem interactions.**
6. **Coordinate with federal management agencies responsible for groundfish fishery management.**
7. **Manage fisheries based upon the best available information.**
8. **Manage fisheries consistent with conservation and sustained yield of healthy groundfish resources.**
9. **Avoid sport, subsistence, and personal use conflicts.**

What is the issue you would like the board to address and why?

At its March 23, 2013 meeting, the board repealed 5 AAC 28.089. GUIDING PRINCIPLES FOR GROUNDFISH FISHERY REGULATIONS, citing an interest in removing duplicative and unnecessary regulatory wording pertaining to the State's management of its groundfish fisheries. However, we believe that the board did not fully recognize the value that this regulation had in documenting sound and precautionary conservation management practices for the public's consideration.

The Board has a history of adopting policies in other fisheries which are intended to give guidance to future Boards, department staff, and the public (i.e., policies for the management of sustainable salmon stocks, King and Tanner crab, mixed stock fisheries, and statewide escapement goals). The Board and public will benefit from an overall groundfish policy that provides guidance in decision-making during consideration of future proposals. Formalizing this policy for groundfish is consistent with the State's approach in managing the health and sustainability of other Alaska's fisheries and will help document Alaska's record as a leader of fisheries conservation and responsible management.

PROPOSED BY: Alaska Fisheries Development Foundation

PO Box 2223, Wrangell, AK 99929
Ph: 907-276-7315
jdecker@afdf.org

****

MacroCAsh Interest Statement
Lead Organization: Ocean Rainforest
Estimated Budget: $3.5M Project Duration: 24 months

Summary: MacroCAsh is an interest statement for a two-year project designed to assess the commercial viability of extracting and concentrating Rare Earth Elements (REE) - specifically lanthanides - from cultivated laminarian kelp species. The project will develop extraction and selective accumulation techniques, assess the relationship between seawater content and REEs in laminarians, and evaluate the feasibility of scaling biomass production to 100 million wet metric tonnes per year in US waters, equivalent to 1000 metric tonnes of REE. This will remove 10 million metric tonnes CO2 from the ocean, provide ecosystem services through bioremediation, and feed into the production of high, medium, and low value products for various market segments, with a potential annual value of more than $35 billion USD. At the conclusion of this project, the partners expect to determine the feasibility of the large-scale cultivation of laminarian kelp species for the purpose of REE extraction, followed by REE concentration to produce a bio-ore that is of commercial interest, environmentally sound and can provide meaningful amounts of REE.

Deliverables and Project Impact: This project will create **1)** After 12 months a preliminary assessment of opportunities and feasibility, **2)** After 24 months a first-of-its-kind minimally destructive REE phytoextraction and biorefining approach, coupled with a Life Cycle Analysis (LCA), **3)** Techno Economic Analysis (TEA) of the process, **4)** Suitability map for potential large-scale cultivation areas in US water, and **5)** Feasibility report for scaling to production of 100 million tonnes with estimate of the REE total volume extracted for each of the above locations. The LCA and TEA will define performance targets that enable cost and environmentally favorable biorefining. A suitability map and feasibility report detailing large-scale cultivation potential will help us to better understand what marine space is available for kelp cultivation and to what extent this overlaps with bioavailability of REEs.

Background: Demand for REEs has increased in recent years due to their critical use in electrification and renewable energy applications. National security interest and the corresponding need to pursue domestically sourced materials further exacerbate the need for transformative, low-cost approaches for non-invasive recovery and processing of REEs. Our uniquely qualified work group can provide passive lanthanide recovery and selective accumulation systems using sustainable, regenerative marine resources and low energy processing technology that would support the development of a domestic bioeconomy.

The two most relevant factors that dictate the capacity of laminarians to accumulate metals are bioavailability of metals in the surrounding water and uptake efficiency/capacity of seaweed (Besada, 2009). The capacity of the biosorption has been observed at 22 μg/g of dry weight biomass, which may be 10–20 times higher than those in terrestrial plants and more than 100 times higher than in sea water. By that estimate, 1,000 metric tonnes of REE could be recovered per 100 million tonnes of wet weight biomass per year (Vitova, 2019).

Integrated biorefinery technologies (including bioprocessing, conversion, fractionation, modification refining and recovery) are required to make a sustainable macro algae biorefinery, which feeds into several value chains derived from one and the same feedstock (e.g. feed, food, pharma, cosmetics, fertilizers, packaging materials, bio energy) (Lange, 2020).

The MacroCAsh group intends to correlate optimal biosorption of REEs across multiple laminarian species in the context of spatiotemporal bioavailability in the surrounding waters of the Bokan Project, the only REE project adjacent to saltwater and near its processing facility (partner UCORE), as well as four permitted seaweed farms in Southeast Alaska and two in Southern California.

The group: MacroCAsh is a group of contractors from the **ARPA-E's MARINER's** Program (Ocean Rainforest, University of Alaska, Alaska Fisheries Development Foundation, National Renewable Energy Laboratory, NOAA), the **ARPA-E's WIX program** (University of Illinois, The City College of New York), and the **ARPA-E's MEITNER** program (Colorado State University). In addition, the group will include the **mining company** Ucore Rare Metals Inc. and **seaweed biorefinery company** Oceanium.

Project Objectives: **1)** Evaluate the REE and biomass proximate composition of laminarian kelp species and associated seawater samples collected from pre-selected locations. **2)** Use biorefinery processing to extract kelp-derived compounds, generating a metals-enriched waste-stream. **3)** Develop engineering process model with

full process mass and energy balance. **4)** Valorize REE extracts through concentration and isolation. **5)** Conduct LCA and TEA. **6)** Assess site potential for large-scale kelp cultivation in US waters.

Scope of Work: The project objectives will be achieved through the following tasks:

1. Sample collection - *University of Alaska Fairbanks and Ocean Rainforest*

a. Sites for collection of water and seaweed samples will be determined based on species distribution and proximity to potential marine sources of REEs, such as existing or past mining effluents.

b. Laminarians of various species, both wild and cultivated, will be sampled at these sites and at selected control sites for REE content. Samples will be collected at intervals throughout the year.

c. Water samples for REE content will be collected at these sites at the same time to enable an estimate of the ability of the seaweeds to concentrate REEs.

2. Biomass Extraction - *Oceanium and University of Alaska Anchorage*

a. Using a lab scale cascade biorefinery process, protein, beta-glucan, and fucoidan will be extracted from the biomass, leaving a mineral-rich wastewater and solid kelp residue where minerals are likely concentrated. The wastewater may be concentrated to a brine by reverse osmosis, mimicking wastewater treatment practice.

b. If the REEs are solubilized and are primarily enriched in the wastewater stream, a selective bioaccumulation approach will be modified based on a patent pending process related to mine wastewater to enrich for select high-value REEs to reach the critical enrichment target that will be defined by the TEA/LCA team.

3. Sample Analysis - *National Renewable Energy Laboratory*

a. In support of an engineering process model for full process mass and energy balance, biomass samples and associated seawater samples will undergo compositional analysis to correlate bioavailability with biosorption mechanisms. This step will assess the relationship between seawater content and REE concentrations in laminarian kelps, with the aim of elucidating the relationship between negatively charged polysaccharides and REE adsorption capacity.

b. Full composition analysis of water and biomass samples will be completed regularly after sample collection. The biomass samples will receive before-and-after processing comparisons to ascertain to what extent extraction sequences impact REE composition and distribution across the different biorefining fractions.

4. Valorization of REEs - *City College of New York, University of Illinois, and Ucore*

a. A range of thermal treatment environments will be initially explored on the liquid residue stream. The focus will be on identifying optimal conditions that position REEs more amenable for extraction. Specific attention will be on moderate temperatures at saturation pressures with possible co-reactant injection to investigate adjusting REE oxidation states.

b. The extractability of trace REEs from the residual solid is governed by their speciation. Hence, this task will identify REE concentration in residual solids after biorefinery via ICP-MS. After REE extraction, a significant proportion of the residual solid rich in Ca, Mg, Fe, P, S, and Sr will remain which could be potentially used as a construction material.

5. LCA/TEA - *Colorado State University*

a. This will include the development of a process model integrating all unit process operations of the system. Input from tasks 1-4 will be used to validate the modeling.

b. Outputs from the engineering process model will serve as inputs to sustainability modeling work which will include concurrent LCA and TEA. Modeling work will provide data feedback and be used to identify performance targets.

6. Scaling Potential - *Ocean Rainforest, Alaska Fisheries Development Foundation, NOAA Fisheries Alaska Region*

a. Data analysis from Task 3 will provide the input necessary for spatial considerations on which to build a site-suitability map. Special attention will be paid to Task 3 indicators that maximize biomass adsorption of REEs as well as the typical environmental, social, economic, and structural limitations considered in marine spatial planning.

b. The scaling potential of a 100 million metric tonnes per year biomass production industry will also incorporate outputs from Task 1-5 to determine the feasibility of producing commercially viable concentrates of REE ore from large-scale cultivation of laminarian kelp species.

References:

Besada, V, Andrade, M, Schuktze, F, Gazalez, J. 2009. Heavy Metals in Edible Seaweeds Commercialized for Human Consumption. January 2009. Journal of Marine Systems 75(1–2): 305–313.

Vitova, M, Cizkova, M, Zachleder, V. 2019. Lanthanides in Algae. Intech open. CHAP. DO: 10.5772/intechopen.8260.

Lange, L, Bak, U.G, Hansen, S.C.B, Gregersen, O, Harmsen, P, Karlson, E.V, Meyer, A, Mikkelsen, M.D, Broek, L.v.D, Hreggviðsson, G.O. 2020. Opportunities for seaweed biorefinery, Sustainable Seaweed Technologies *Cultivation, Biorefinery, and Applications.* Volume in Advances in Green and Sustainable Chemistry. ISBN 978-0-12-817943-7

Partner Descriptions:

Alaska Fisheries Development Foundation (AFDF): Since 1978, AFDF has turned challenges into opportunities through research and development in the Alaska seafood industry. AFDF currently is a member of the Alaska team, active in ARPA E's MARINER program, focused primarily on TTO/T2M.

Professor Castaldi is currently the lead PI on the ARPA-E WIX (DE-AR0001400) program entitled *Gypsum & clay-based additives to MSW for pre-combustion enhancement of syngas and solid residue improvement*. The City College of New York (established as 'The Free Academy' in 1847) is the founding institution of the City University of New York and the only public engineering school in New York City.

Jason Quinn, Ph.D., is an Associate Professor in the Mechanical Engineering Department at CSU and has extensive experience concerning the design, construction, and validation of engineering process models for the critical assessment of microbial-based systems through techno-economic and life cycle assessment.

Professor Nishant Garg at University of Illinois Urbana-Champaign is the lead PI on the ARPA-E WIX (Waste into X, DE-AR0001401) program entitled *RADAR-X: Rapid AI-based Dissection of Ashes using Raman and XRF Spectroscopy* (awarded $1M, 2021-2023) where his team is characterizing hundreds of ash residues obtained post-combustion of municipal solid waste across various WTE facilities in the US. Professor Garg's research focuses on the characterization and chemistry of inorganic materials via state-of-the-art analytical tools.

NOAA Fisheries is responsible for the stewardship of the nation's ocean resources and their habitat. NOAA provides vital services for the nation, all backed by sound science and an ecosystem-based approach to management of productive and sustainable fisheries, safe sources of seafood, recovery and conservation of protected resources, and healthy ecosystems.

Lieve M Laurens, PhD. is a principal scientist and algae program lead at the National Renewable Energy Laboratory (NREL), with over 20 years of experience in microbial and algae biochemistry and biotechnology. The Biosciences center at NREL, and the team that Dr. Laurens leads, is pursuing routes to algae valorization for carbon capture and fuels and products applications, that includes macroalgae deconstruction. The NREL team has well-documented analytical methods available for in depth polymer characterization, access to high-sensitivity (<10 ppb) ICP-MS and ICP-OES for REE quantification in soluble fractions of the biorefining process.

Oceanium is a seaweed biorefinery company based in Scotland, UK. The company was established to enable the farmed seaweed value chain; creating demand be converting seaweed into high demand food and nutrition ingredients and biomaterials. The company is currently working through production scale-up processing 150 Tonnes of kelp in 2022, while bringing first products to market in the US. The company has R&D laboratories equipped for lab-scale seaweed processing and analysis. Oceanium CTO, Charles, D Bavington, Ph.D., a biochemist with over 20 years experience in commercial marine biotechnology, will lead biomass extraction efforts.

Ocean Rainforest has been cultivating and processing seaweed in the Faroe Islands since 2012, with the mission of applying science, innovation, and expertise to produce premium quality seaweed for sale and research. Through the ARPA-E MARINER program, an international research team under the project name of MacroSystems, primed by Ocean Rainforest, Inc., is currently demonstrating the economic and social opportunities of offshore cultivation of seaweeds, specifically a species named *Macrocystis pyrifera,* in the U.S.

Ucore is a proven and resilient leader in the REE mining sector, with the mission of delivering leading advanced technology that provides separation and mining services to the mining and mineral extraction industry. Through strategic partnerships, UCORE aims to disrupt China's dominance of the US REE supply chain through the development of a HREE processing facility – the Alaska Strategic Metals Complex (SMC) in Southeast Alaska and the long-term development of its HREE resource located at Bokan Mountain on Prince of Wales Island, Alaska.

Brandon Briggs, PhD. is an associate professor in the Department of Biological Sciences at the University of Alaska Anchorage. His research is highly interdisciplinary and has both a geomicrobiology and applied microbiology focus, using molecular, physiological, microscopic, and bioinformatic techniques to understand how microbes respond to environmental conditions and in turn how microbes can modify their environment.

Dr. Michael Stekoll is Emeritus Professor of Chemistry and Biochemistry at the University of Alaska Fairbanks with over 40 years of research experience with seaweed mariculture. He has published on the culture of various kelp species such as *Macrocystis* and *Saccharina* and several species of the red seaweeds *Porphyra/Pyropia*. He is currently the Principal Investigator in a 3-year ARPA-E Category 1 project concerned with developing large scale kelp mariculture in Alaska for potential biofuels.

MacroCAsh

Principal Investigator, Ocean Rainforest

Technology Summary

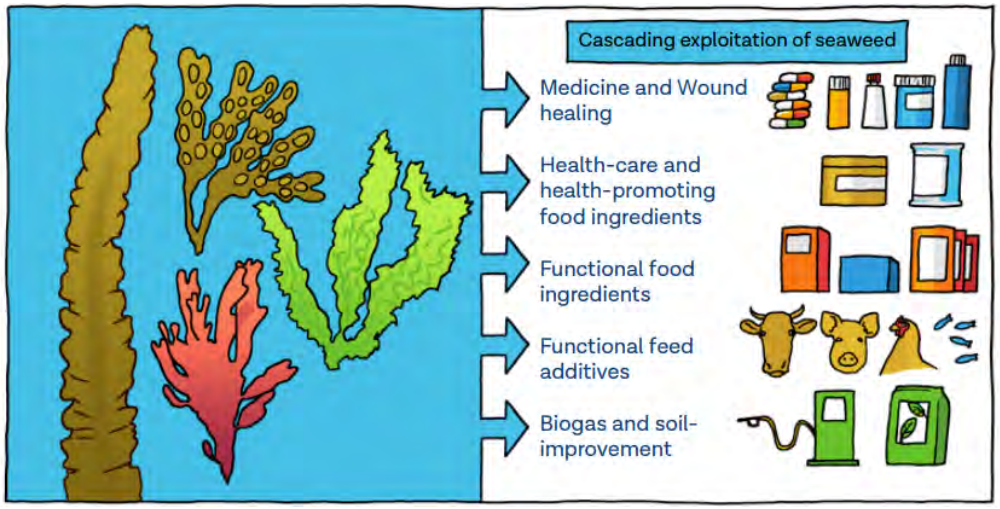
- Assess the relationship between seawater content and Rare Earth Elements (REEs) in laminarian kelp species
- Develop REE extraction and selective accumulation techniques.
- Improve the overall profitability of the cascading seaweed biorefinery concept by converting **ash to cash!**

Technology Impact

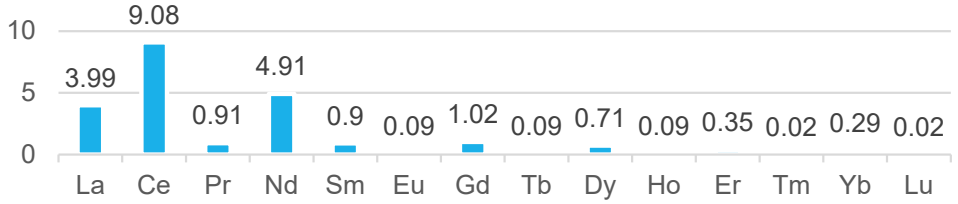
Cultivate 100 million WMT/y of kelp, equivalent to 1000 MT of REE, remove 10 million MT of CO2 from the ocean, create a new, sustainable blue bio-economy with annual value potential > USD 35 Billion.

Deliverables

Preliminary assessment of opportunities and feasibility after 12 months
Novel phytoextraction and biorefining approach with LCA
Full Techno Economic Analysis of the process
Suitability map for large scale kelp cultivation in US waters
Feasibility report for scaling to 100Mt wet weight production



Lanthanides in brown seaweed in µg/g (Goecke et al.)

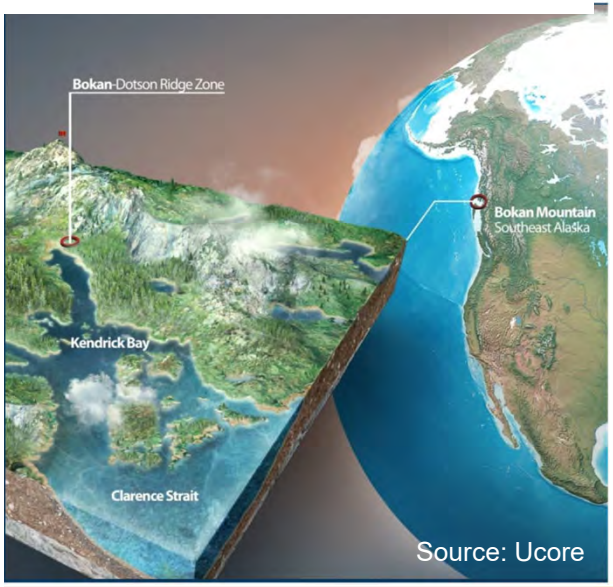


Ucore & Bokan Project

Bokan Project – located in Southern Southeast Alaska

The highest grade heavy REE NI 43-101 resource in the US

Using the RapidSX™ critical metals separation technology platform



arpa·e
CHANGING WHAT'S POSSIBLE

MacroCAsh - *Process and Objectives*

A two-year, $3.5M project designed to assess the commercial feasibility of extracting and concentrating rare earth elements (specifically lanthanides) from cultivated laminarian kelp species.

Task 1: Sample Collection → **Task 2:** Biomass Extraction

Task 3: Sample Analysis → **Task 4:** Valorization of REEs

Task 5: TEA & LCA → **Task 6:** Scaling Potential

CHANGING WHAT'S POSSIBLE

KelpMeal:

Product development research to evaluate the potential for existing fishmeal processing equipment to act as a primary stabilization of kelp prior to secondary value-added processing

Principle Investigator: Julie Decker, Alaska Fisheries Development Foundation (AFDF)
Project Timeline: Phase 1: December 1, 2022 – Feb 1, 2023; Phase 2: Feb. 1 – June 30, 2023
Project Budget: Phase 1: $50,000; Phase 2: $50,000

Background

Founded in 1978, the Alaska Fisheries Development Foundation (AFDF) is a 501(c)3 nonprofit which identifies opportunities common to the Alaska seafood industry and develops efficient, sustainable outcomes that provide benefits to the economic, environment and communities.

Although the seaweed industry in Alaska is less than a decade old, it is poised to experience considerable growth in the near future due to a number of factors that make Alaska an ideal place for growing and processing seaweed. For example, Alaska has the largest amount of state and federal waters, combined with the least amount of conflicting uses, of all the states; Alaska has the largest existing seafood processing infrastructure in the U.S.; Alaska has approximately 9,000 vessels registered for commercial fishing, most of which have excess capacity during the year; seaweed is generally planted in the fall and harvested in the spring during seasonal low periods for both processors and fishermen; and growing seaweed provides environmental and economic benefits to coastal communities.

Recognizing Alaska's massive potential regarding mariculture development, in 2014, AFDF began spearheading the *Alaska Mariculture Initiative* – a strategy to accelerate the development of mariculture in Alaska. The Initiative led to the establishment of the Alaska Mariculture Task Force (Task Force) by Administrative Orders #280 and #297 under then Governor Walker and the adoption of a statewide comprehensive plan, called the Alaska Mariculture Development Plan (*Plan*) with the goal to grow a $100 million mariculture industry in 20 years. The Final Report to Governor Dunleavy (2021) included a *Five-Year Action Plan*, as well as *Indicators of Progress*.

One of the chapters in the *Plan* is titled, "Develop New Mariculture Markets and Products" (pgs. 20-21), and includes the following key recommendation:

> *"As mariculture of shellfish and aquatic plants grows in Alaska, marketing research and development, as well as product development, will help assure that increased production results in increased opportunity and stable revenue for the industry and the State."*

The *Plan* also identifies the need *"for sugar and ribbon kelp, [to] develop international markets and **product stabilization**"* (pg. 21) as a near-term research priority for seaweed (pgs. 21 & 26).

From 2017 through 2022, approximately 80 new seaweed farm applications submitted the state, for a total of approximately 3,500 acres, if all are approved. Farmed production increased from

15,000 lbs to 650,000 lbs between 2017 to 2022. The production of Alaska seaweed farmers has already exceeded existing local market capacity. New farmers will be hesitant to expand and seed more acres and local value-added seaweed product developers will be hesitant to develop new value-added products if they do not have a viable brand and marketplace to sell their seaweed and seaweed-based products. This is now the primary bottleneck to continued growth and the associated economic development.

In an effort to address the processing bottleneck, AFDF also commissioned a study, Assessment of Alaska Seaweed Processing Locations (2021) , to analyze the logistics and economics of six different communities in Alaska as potential seaweed processing hubs. In this analysis, one of the considerations was a hub-and-spoke example for primary processing from several locations to feed into a centralized secondary processing location. For this to be economically feasible, stabilization of the product by primary processing needs to be highly efficient.

In addition, the industry needs to know what products to produce, how to produce them, and where to sell them in order to be commercially viable and justify investments in new equipment to scale-up to maximize the benefits to communities. This information is necessary and will help drive business planning (by farmers and processors) related to the types of seaweed grown, locations and volumes.

Project Description

The Alaska seaweed industry has identified a need for efficient, low-cost processing methods that will provide increased daily throughput and initial stabilization (primary processing) of kelp, allowing the mariculture industry to continue to expand. The *KelpMeal* project will evaluate the feasibility of using a fishmeal processing plant for primary stabilization of kelp prior to further value-added processing by conducting a trial production of 50,000 pounds fresh frozen *Saccharina latissima*. The project will analyze the composition of the liquid and solid residuals produced to determine potential market applications and value, and ship liquid and solid kelp residuals to multiple manufacturers for continued product development research. Understanding the commercial viability of this production method will benefit kelp farmers entering this new industry, processing working towards economic feasibility of processing in combination with product development, and the existing commercial fishing industry through facility co-use and/or equipment repurposing. The research results will be reported to the public for the benefit of all users.

Scope of Work:

Phase 1

1. **Project initiation**
    - 1.1. Establish project timeline
    - 1.2. Kick-off activities
2. **Trial production**
    - 2.1. Clean fishmeal processing plant
    - 2.2. Transport 50,000lbs frozen kelp to plant
    - 2.3. Thaw kelp

2.4. Process kelp into liquid and solid residuals
2.5. Pack residuals in bags & IBCs

Phase 2:

3. **Residual analysis**
   3.1. Compile liquid and solid samples
   3.2. Ship samples to lab for composition analysis
   3.3. Analyze samples
4. **Reporting**
   4.1. Evaluate production logistics and economics
   4.2. Evaluate composition analysis data for potential commercial application
   4.3. Generate research report regarding composition, economics and market analysis
   4.4. Ship residuals to end-users for continued product and market research

Key Deliverables

Phase 1:

1. Primary processing and stabilization of 50,000 lbs fresh frozen kelp into liquid and solid residuals

Phase 2:

2. Composition analysis of residuals
3. Research report available to the public regarding composition analysis, economic analysis, and market analysis
4. Primary processed products (residuals) available for continued product and market research

Budget

Category	**Cost**
Phase 1	
Raw material (kelp)	$40,000
Processing (fishmeal facility)	$10,000
Subtotal – Phase 1	**$50,000**
Phase 2	
Composition analysis	$10,000
Research report	$10,000
Administration	$10,000
Freight	$10,000
Subtotal – Phase 2	**$50,000**
Total (Phases 1 & 2)	**$100,000**

Project 5. Green Energy

Alaska Fisheries Development Foundation										
State entity subawardee 1		Year 1		Year 2		Year 3		Year 4		
Line Item Budget		Federal Share	Non-Federal Share	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share	
Personnel	$ 38,314.00	$ 9,158.00	$ -	$ 9,432.74	$ -	$ 9,715.72	$ -	$ 10,007.19	$ -	$ 38,313.66
Fringe Benefits	$ 10,880.00	$ 2,600.57	$ -	$ 2,678.59	$ -	$ 2,758.95	$ -	$ 2,841.72	$ -	$ 10,879.83
Travel	$ 12,000.00	$ 3,000.00	$ -	$ 3,000.00	$ -	$ 3,000.00	$ -	$ 3,000.00	$ -	$ 12,000.00
Equipment	$ -									$ -
Supplies	$ 2,000.00	$ 500.00	$ -	$ 500.00	$ -	$ 500.00	$ -	$ 500.00	$ -	$ 2,000.00
Contractual	$ 600,000.00	$ 150,000.00	$ -	$ 150,000.00	$ -	$ 150,000.00	$ -	$ 150,000.00	$ -	$ 600,000.00
Construction	$ -									$ -
Other	$ 4,000.00	$ 1,000.00	$ -	$ 1,000.00	$ -	$ 1,000.00	$ -	$ 1,000.00	$ -	$ 4,000.00
Total Direct Charges	$ 667,194.00	$ 166,258.57	$ -	$ 166,611.33	$ -	$ 166,974.67	$ -	$ 167,348.91	$ -	$ 667,193.49
Indirect Charges	$ 11,719.00	$ 2,930.00		$ 2,930.00	$ -	$ 2,930.00	$ -	$ 2,930.00	$ -	$ 11,720.00
Total Component Project Budget	$ 678,913.00	$ 169,188.57	$ -	$ 169,541.33	$ -	$ 169,904.67	$ -	$ 170,278.91	$ -	$ 678,913.49

Total Project Budget AFDF	
Federal Share (EDA grant funded)	$ 678,913
Non-Federal (Matching) Share	$ -
Total Project Budget	$ 678,913
Federal Grant Rate	100%

AUTHORIZED STAFFING PLAN

Alaska Fisheries Development Foundation

Staffing Plan - Budget						Year 1		Year 2		Year 3		Year 4	
Name	Annual Salary/Rate	% of Annual Hours for project	Annual $ from Award	Number of Years	Total Cost by Employee	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share
AFDF ED		17%	$ 3,717.00	4	$ 14,866.50	$ 3,717.00	$ -	$ 3,828.51	$ -	$ 3,943.37	$ -	$ 4,061.67	$ -
AFDF Finance Director		17%	$ 2,733.00	4	$ 10,932.17	$ 2,733.00	$ -	$ 2,814.99	$ -	$ 2,899.44	$ -	$ 2,986.42	$ -
AFDF Development Director		17%	$ 2,708.00	4	$ 10,833.33	$ 2,708.00	$ -	$ 2,789.24	$ -	$ 2,872.92	$ -	$ 2,959.10	$ -
Total Personnel Costs					**$ 36,632.00**	$ 9,158.00	$ -	$ 9,432.74	$ -	$ 9,715.72	$ -	$ 10,007.19	$ -
Total Fringe Costs (Please Provide the Basis for Fringe Calculations)					**$10,402**	$ 2,600.57	$ -	$ 2,678.59	$ -	$ 2,758.95	$ -	$ 2,841.72	$ -
		AFDF ED		30%	**$4,592**	$ 1,097.63	$ -	$ 1,130.56	$ -	$ 1,164.48	$ -	$ 1,199.41	$ -
		AFDF Finance Director		28%	**$3,222**	$ 770.16	$ -	$ 793.26	$ -	$ 817.06	$ -	$ 841.57	$ -
		AFDF Development Directo		27%	**$3,066**	$ 732.78	$ -	$ 754.77	$ -	$ 777.41	$ -	$ 800.73	$ -

Staffing Plan - Narrative
Alaska Fisheries Development Foundation

Name	Title	Project Responsibilities
AFDF ED	Executive Director	project management
AFDF Finance Director	Finance Director	financial management
AFDF Development Director	Development Director	project management

Travel Breakout
Alaska Fisheries Development Foundation

Trip	Location	Qty	Per trip	Total
Travel in State round trip	Alaska	8	$ 1,500.00	$ 12,000.00

Contractual Costs
Alaska Fisheries Development Foundation

Organization Name	Contractor	Organization Type	Details of services	Cost
TBD	Contractor	TBD	- Strategy for low-carbon industry (unnamed contractor)	$ 200,000.00
TBD	Contractor	TBD	ergy audit procedures & standards (unnamed contractor)	$ 400,000.00

Supply Specific - Narrative
Alaska Fisheries Development Foundation

Supply	cost / Qty	Purpose	Additional Details	Cost
Printing	1000	printing		$ 1,000.00

Green Energy Component Narrative

1. Program Description and Scope of Work

a. Executive Summary

The Green Energy Mariculture component project, lead by Southeast Conference and partnered with the Alaka Fisheries Development Foundation (AFDF) as a subaward recipient, will develop a long-term renewable energy plan, collect baseline data measurements of how energy is currently being used in the industry and generate an analysis with recommendations for renewable energy alternatives, and develop a "best practices guide" through energy audit procedures and standards for the Alaska mariculture industry. These three deliverables will help ensure that the industry develops sustainably and minimizes fossil fuel combustion by improving energy efficiency and using renewable energy when feasible. The mariculture industry would develop with a reliance on fossil fuels *but for* an intervening investment in renewable energy technology, expertise and development. This component project allows the Alaska Mariculture Cluster to fulfill the EDA's environmentally sustainable development investment priority by empowering mariculture entrepreneurs to reduce greenhouse gas emissions from their energy infrastructure. In addition, the green energy component project fulfills the recovery and resilience priority by preventing reliance on fossil fuels that may become more expensive and less accessible in the future. The EDA's investment in this project now allows the mariculture industry to grow with energy efficiency, renewable energy, and best practices incorporated into initial designs rather than hoping for a transition in the future. This effort also opens the door to entrepreneurs and business owners in rural areas and those of diverse backgrounds to access a more sustainable, cost effective industry. The lead applicant for the Alaska Mariculture Cluster is Southeast Conference. The lead organization for this Green Energy component project is Alaska Fisheries Development Foundation.

b. Scope of Work

Project deliverables include the development a long-term renewable energy plan, the collection of baseline data measurements of how energy is currently being used in the industry to generate an analysis with recommendations for renewable energy alternatives and develop a "best practices guide" through energy audit procedures and standards for the Alaska mariculture industry. The mariculture industry is composed of aquatic farms, harvest and transport vessels, seafood processing facilities, hatcheries and nurseries distributed throughout coastal Alaska. The number of these facilities and businesses will grow as the industry grows; stakeholders of particular interest in the opportunities that mariculture presents are commercial fishermen and seafood processors. Several have already made investments to expand their businesses into mariculture and many more are likely to enter, particularly if public investments are made to reduce risk of entry. This is important to note in the context of this component project, because these existing commercial fishing and seafood processing assets are likely to be repurposed for use in the mariculture industry and hence are important assets to invest in energy efficiency and renewable energy improvements. This project will develop a roadmap to enhance the resiliency of Alaska's mariculture facilities.

This component project will develop a *Green Energy Plan for Alaska's Mariculture Industry* which will provide a statewide vision for increased energy efficiency and integration of renewable energy in mariculture which will redirect the industry away from a dependence on fossil fuels and toward utilization of renewable energy resources. In addition to a statewide plan, the industry requires local resources. For example, industry needs to develop renewable energy expertise and infrastructure within local communities and at remote sites. Specifically, mariculture farm sites rarely have access to shore-based electricity grids. Sites rely on generators to provide electricity for lifts, pumps and other equipment on site. The loads are typically small and intermittent, but require generators to run as long as people work the site. This type of load is particularly well suited to solar power but local owners need an accessible resource to understand how to design, procure, implement and maintain solar powered mariculture sites.

Alaska's commercial fishing industry is built on decades of fossil fuel reliance, and its efforts to transition show that building a mariculture industry that utilizes green energy from the beginning will maximize success. Volatile fuel costs stress the fishing industry while premium sustainable seafood markets increasingly demand demonstration of low carbon footprint. High fuel prices hinder economic development for vessel operators, whether commercial fishermen, mariculture farmers; in many cases, fishermen are the farmers, and this trend is likely to continue as fishermen look to diversify revenue sources as future uncertainties related to climate change impact fish stocks. When fuel prices surge, fishermen fish fewer days, delay equipment upgrades, and hire fewer crew members to offset costs. In order to avoid the challenges currently facing the fishing industry, the mariculture industry must develop green energy technology now.

The Green Energy Mariculture component project aims to do this through the development of research and strategies that will be freely available to entrepreneurs, business owners, processors, investors, and others in the industry or looking to enter the industry through the following two deliverables. The first is to develop a long-term strategy for a low-carbon mariculture industry in Alaska (farms, vessels, processing facilities, hatcheries and nurseries, including finding pathways for energy efficiency improvements, conversions to renewable or hybrid systems, delineation of needed equipment, infrastructure and workforce development, cost estimates, associated timelines and community planning in strategic hubs to support the transition. We will engage a contractor through an RFP process to collect baseline measurements of how energy is currently used in the industry. This will include connecting with mariculture site owners or producers, examining current energy systems, measuring use and producing a report of findings. From this report, an analysis will be generated including recommendations for potential micro-solar and other renewable energy generation projects and describing how the mariculture industry can grow while relying on renewable energy sources. Deliverables include outreach to disseminate the findings and recommendations through digital methods, in-person community presentations and workshops, and sharing the information with curriculum developers.

The second objective is to facilitate adoption of renewable best practices through the development of energy audit procedures and standards for the Alaska mariculture industry, including hatcheries and nurseries, farms and processing facilities. This project will engage a contractor through an RFP process to develop procedures that will allow site and vessel owners

to conduct self-audits on their energy use to gauge their energy consumption and provide cost analysis and comparison to reduce energy consumption or transition to renewable energy sources. Deliverables include a "best practices" or user guide developed for the industry and distributed throughout the industry including to curriculum developers and in workforce training programs.

2. Regional Industry Assets and Needs

a. Regional Description

Each component of this cluster is focused on the four southern regions of coastal Alaska (Southeast (SE), Prince William Sound (PWS), Kenai Peninsula (KP), Southwest (SW)) due to the location of the waters appropriate for mariculture development, as well as the existing seafood industry participants and interested workforce, infrastructure, and vessels which already operate and move across communities to access fishery resources. See attached separate FIPS code spreadsheet as directed by EDA staff.

Alaska comprises more than half of the US coastline, continental shelf, and exclusive economic zone (EEZ) and is a world leader in seafood production; over 60% of the seafood harvested in the US comes from Alaska waters. Therefore, Alaska has the coastline and infrastructure to support growth of its mariculture industry. At the same time, Alaska has over 250 rural coastal communities that are largely inaccessible by road and have limited employment opportunities. Many of these communities have high numbers of Alaska Native residents, who make up 22% of the state's population. The communities in these coastal regions have the need and desire to build ocean-related businesses, diversifying opportunities for residents to live and work in their communities in an industry that is beneficial to the environment and complementary to commercial and subsistence fishing.

b. Industry, Employer, and CEDS alignment

Mariculture development is a priority in state and regional development efforts and as well as aligning with the *Alaska Mariculture Development Plan*, this cluster also aligns with the CEDS fo each of the EDDs (SEC - pgs. 2, 11, 24, 41-43, PWSEDD – pgs. 8, 32, 41, 44, 58, KPEDD – pgs. 39-50, SWAMC – pgs. 1, 4, 5, 7), and the State of Alaska (pgs. 2, 11, 24, 41-43).

3. Proposed Solution

The BBBRC will build on the success achieved by project partners to serve similar business models in the commercial fishing industry. Specifically, the Rural Energy for America Program managed by the USDA and Economic Development Districts (EDDs) in Alaska have demonstrated a feasible path for achieving energy efficiency and renewable energy adoption in small businesses. The EDDs provide subsidized energy audits that business owners use to identify and quantify energy efficiency opportunities. The business owners then use the audit reports to apply for funding from the Rural Energy for America Program. Since 2019, the Southwest Alaska Municipal Conference (SWAMC) has helped 27 Alaskan small businesses and commercial fishers in Bristol Bay receive funding through REAP, and the program has 127 registrants. Energy audits for commercial buildings are well supported by ASHRAE publications

and software, but energy audits for small vessels and mariculture sites are not established. SWAMC's program to support fishing vessel energy efficiency retrofits built on earlier work by the Alaska Longline Fishermen's Association (ALFA), the Alaska Fisheries Development Foundation (AFDF) and others to develop an energy auditing method for fishing vessels. These organizations purchased equipment to measure vessel energy loads, conducted energy audits on dozens of vessels to establish baseline assumptions, and released a model of vessel fuel consumption patterns. SWAMC's program relies in part on the results of these early energy audits and proves that developing an energy audit procedure, inviting business owners to participate in energy auditing programs and providing a path to energy efficiency funding is feasible.

We propose a similar program to establish energy auditing procedures for the mariculture industry. In the first phase, energy audits will be performed at sites throughout the state. Data loggers that measure fuel consumption, electrical and hydraulic loads will be installed to record energy consumption throughout one year of operation, the results will be compiled in a publicly accessible database and a model will be developed that allows energy auditors to estimate energy usage based on conversations with mariculture site operators. Finally, we will release a report documenting standard assumptions that should be used in energy assessments of mariculture sites. These standard assumptions will allow fair energy audits to be conducted remotely, allowing isolated, rural communities to access federal funding programs like REAP that require energy audits.

Remote energy audits are essential to ensuring equitable distribution of energy efficiency funds. When small businesses may see savings of a few thousand dollars per year through energy efficiency improvements, justifying travel costs of thousands of dollars for an energy auditor from Anchorage to access a remote site is impossible. Providing a baseline collection of energy audit measurements and standard assumptions will support energy efficiency efforts for years to come.

The baseline data collected while developing standardized energy auditing assumptions will support a comprehensive green energy plan for the mariculture industry. We expect three types of energy demand within the industry: marine site operation, vessel operation, and shoreside processing infrastructure. Each of these types of energy demand warrants a unique renewable energy approach. Existing mariculture sites in Alaska have intermittent loads of less than one kilowatt that may be well served by solar installations with battery infrastructure. Reducing emissions from vessels will require different technologies depending on operations. Skiffs that remain at the mariculture sites may be fully battery-electric and recharge at the site, depending on the solar resource availability. Larger vessels that provide transportation to the sites may be best served by hybrid diesel-electric systems, renewable liquid fuels, or hydrogen fuel cell systems. Any of these technologies will require shoreside infrastructure to provide recharging or refueling opportunities. Finally, shoreside infrastructure may increase load on local electric grids or develop their own power sources. A comprehensive plan will chart a path toward zero carbon operations while minimizing energy costs, capitalizing on the intersection between types of energy loads and maximizing benefits for local communities.

In addition to the industry-wide green energy plan, we will also create resources designed to serve Indigenous and rural mariculture enterprises. For example, the green energy plan may recommend small solar power systems to serve mariculture sites. We will develop

standard guidelines for mounting solar panels at marine sites, purchasing and installing panels, batteries and charge controllers, and financing the systems. This information will be compiled online, in written reports, and distributed through in-person and virtual workshops.

The solutions presented here will accelerate industry growth and innovation by reducing barriers to sustainable energy and limiting exposure to volatile fuel costs. Stable energy costs will reduce risk for entrepreneurs as they start and grow their businesses. The reduced risk will encourage additional private investment in these businesses. Mariculture sites that rely on sustainable energy will also have access to premium markets for sustainable seafood. Utilizing renewable energy will increase reinvestment of mariculture profits in local communities by reducing fuel costs. The reinvestment will support additional local employment. Early investment in sustainable energy will create a virtuous cycle as entrepreneurs benefit from the reliable energy source and create a market for renewable energy technology that spurs further investment in developing technologies for the mariculture industry. The proposal aligns with EDA's Recovery and Resilience investment priority by ensuring that the industry is resilient to volatile fuel prices and increasing pressure to reduce greenhouse gas emissions. This component project empowers the Mariculture Cluster to reduce greenhouse gas emissions from their energy infrastructure in order to fulfill the EDA's environmentally-sustainable development investment priority.

4. Partners and Program Outreach

a. Partnerships

- **Alaska Fisheries Development Foundation (AFDF)**
- **Alaska Longline Fishermen's Association (ALFA)**
- **Economic Development Districts (EDDs)**

With regard to energy systems, coastal Alaska's assets include industry leading expertise in fishing vessel energy auditing and efficiency through established programs managed by the Alaska Fisheries Development Foundation (AFDF), the Alaska Longline Fishermen's Association (ALFA), and Southwest Alaska Municipal Conference (SWAMC). AFDF and ALFA began working on vessel fuel efficiency in 2013. Their work has developed energy auditing processes for fishing vessels, identified energy efficiency improvements and quantified the potential and limitations of hybrid diesel-electric propulsion systems for fishing vessels in Alaska. Their work informed dozens of energy efficiency investments by fishing vessels in Alaska.

AFDF will manage development of a Green Energy Plan and ALFA will manage development of renewable best practices for Indigeneous and rural farmers, hatcheries, and nurseries. The manager of each objective will develop the relevant request for proposals to identify contractors with the necessary expertise, capacity and connections to execute the solution described in the previous section. After the contractor is hired, the manager will monitor their progress and direct their effort to ensure that the final product serves the industry.

b. Promoting Diversity, Equity, and Inclusion

Applying the Equity Engagement Goals of the Alaska Mariculture Cluster, at least 25% percent of the sites/facilities surveyed will be owned by individuals identified as Alaska Native (underserved populations). Additionally, at least 25% of the sites/facilities surveyed will be rural (underserved communities). Of the almost half-million square miles that make up this aggregate project area, only 45 square miles are designated as urban, ensuring that all or nearly all the sites surveyed will be in rural areas.

Additionally, 13 of Alaska's 25 Qualified Opportunity Zones (distressed, low income communities, many of which have experienced a lack of investment for decades) are located in the project area, ensuring this component project is well positioned to support equitable opportunities.

5. Measurable Goals and Impacts

Each of our objectives are associated with measurable goals and impacts. Table 1 describes our goals across three categories: execution of the solutions proposed above, measurement of the success of the solution, and racial and geographic diversity. While executing the solutions will result in a report or a number of site surveys, success will be measured in renewable energy penetration and efficiency. Since 13 of Alaska's 25 Qualified Opportunity Zones are located in the project area, our equity goals ensure that green energy investment will flow equally to rural, Alaska Native and low income communities that have endured a long standing lack of investment.

Task 1: Baseline energy use profiles

Objective	Execution Goals	Performance Goals	Equity Goals
Baseline energy use profiles	Create a publicly accessible database of energy usage Release a report documenting patterns and results from the measurement campaign	Measure energy usage at 20 mariculture sites	25% of sites surveyed will be owned by Alaska Natives; 25% will be rural Survey at least one site in every Qualified Opportunity Area in the project region.
Green energy plan	Release a renewable energy plan	Achieve 30% green energy by 2027 and 90% by 2040	Equal renewable energy penetration across all geographic areas in the project.
Renewables in best practices	Release a best practices guide by the third year of the project	30% of sites powered with renewable energy by 2027	30% of rural and minority owned sites powered with green energy

6. Sustainability Plan

The Alaska Mariculture Cluster's growth will be sustained by the Alaska Mariculture Alliance (AMA) and the Mariculture Research and Training Center (MRTC). These two entities will provide the long-term structure necessary for continuity after the project period ends. The AMA provides leadership and longevity to mariculture development, while providing for coordination across a broad spectrum of stakeholders. The MRTC is the central entity for coordinating mariculture research and training activities, furthering information sharing and efficient use of resources toward the statewide vision and goal. More information regarding the sustainability of the Alaska Mariculture Cluster can be found in the Governance, Coordination and Outreach component narrative.

Project 3. Research & Development

Alaska Department of Fish and Game									
State entity subawardee 1		Year 1		Year 2		Year 3		Year 4	
Line Item Budget		Federal Share	Non-Federal Share	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share
Personnel	$ 527,047.76	$ 93,695.14	$ 38,066.81	$ 93,695.13	$ 38,066.81	$ 93,695.13	$ 38,066.81	$ 93,695.13	$ 38,066.81
Fringe Benefits	$ 333,832.05	$ 59,346.50	$ 24,111.51	$ 59,346.50	$ 24,111.51	$ 59,346.50	$ 24,111.51	$ 59,346.50	$ 24,111.51
Travel	$ 8,920.00	$ -	$ -	$ -	$ -	$ 1,740.00	$ -	$ 7,180.00	$ -
Equipment	$ 360,000.00	$ 15,000.00	$ -	$ 345,000.00	$ -	$ -	$ -	$ -	$ -
Supplies	$ 296,400.00	$ 138,400.00	$ 5,000.00	$ 64,000.00	$ -	$ 69,000.00	$ -	$ 20,000.00	$ -
Contractual	$ 542,300.00	$ 22,300.00	$ -	$ 90,000.00	$ -	$ 330,000.00	$ -	$ 100,000.00	$ -
Construction	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Direct Charges	$ 2,068,499.81	$ 328,741.63	$ 67,178.32	$ 652,041.63	$ 62,178.32	$ 553,781.63	$ 62,178.32	$ 280,221.63	$ 62,178.32
Indirect Charges	$ 151,939.73	$ 37,984.93	$ -	$ 37,984.93	$ -	$ 37,984.93	$ -	$ 37,984.93	$ -
Total Component Project Budget	$ 2,220,439.54	$ 366,726.57	$ 67,178.32	$ 690,026.56	$ 62,178.32	$ 591,766.56	$ 62,178.32	$ 318,206.56	$ 62,178.32

Total Project Budget AK Dept. Fish and Game	
Federal Share (EDA grant funded)	$ 1,966,726.26
Non-Federal (Matching) Share	$ 253,713.28
Total Project Budget	$ 2,220,439.54
Federal Grant Rate	89%

AUTHORIZED STAFFING PLAN
Alaska Department of Fish and Game

Staffing Plan - Budget						Year 1		Year 2		Year 3		Year 4	
Name	Annual Salary/Rate	% of Annual Hours for project	Annual $ from Award	Number of Years	Total Cost by Employee	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share
Kristen Gruenthal	$73,925	33%	$24,639.23	4.00	$98,557	$ 18,479.42	$ 6,159.81	$ 18,479.42	$ 6,159.81	$ 18,479.42	$ 6,159.81	$ 18,479.42	$ 6,159.81
Wei Cheng	$90,541	33%	$30,177	4.00	$120,709	$ 30,177.21	$ -	$ 30,177.21	$ -	$ 30,177.21	$ -	$ 30,177.21	$ -
Heather Hoyt	$96,340	11%	$11,041	4.00	$44,162	$ 9,033.22	$ 2,007.38	$ 9,033.22	$ 2,007.38	$ 9,033.22	$ 2,007.38	$ 9,033.22	$ 2,007.38
Judy Berger	$113,808	6%	$7,113	4.00	$28,452	$ 4,742.00	$ 2,371.00	$ 4,742.00	$ 2,371.00	$ 4,742.00	$ 2,371.00	$ 4,742.00	$ 2,371.00
Erica Chenoweth	$72,372	10%	$7,541	4.00	$30,165	$ 7,541.17	$ -	$ 7,541.17	$ -	$ 7,541.17	$ -	$ 7,541.17	$ -
Zachary Pechacek	$62,628	9%	$5,875	4.00	$23,498	$ 5,874.52	$ -	$ 5,874.52	$ -	$ 5,874.52	$ -	$ 5,874.52	$ -
Tanya Johnson	$55,811	10%	$5,816	4.00	$23,262	$ 5,815.55	$ -	$ 5,815.55	$ -	$ 5,815.55	$ -	$ 5,815.55	$ -
Erin Dooley	$44,995	8%	$3,748	4.00	$14,992	$ 3,748.12	$ -	$ 3,748.12	$ -	$ 3,748.12	$ -	$ 3,748.12	$ -
Keenan Troll	$61,858	13%	$7,732	4.00	$30,929	$ 5,154.87	$ 2,577.44	$ 5,154.87	$ 2,577.44	$ 5,154.87	$ 2,577.44	$ 5,154.87	$ 2,577.44
Andy Barclay	$99,970	3%	$3,129	4.00	$12,516	$ 3,129.05	$ -	$ 3,129.05	$ -	$ 3,129.05	$ -	$ 3,129.05	$ -
Chris Habicht	$176,587	8%	$14,710	4.00	$58,839	$ -	$ 14,709.70	$ -	$ 14,709.70	$ -	$ 14,709.70	$ -	$ 14,709.70
Sara Gilk-Baumer	$122,947	8%	$10,241	4.00	$40,966	$ -	$ 10,241.49	$ -	$ 10,241.49	$ -	$ 10,241.49	$ -	$ 10,241.49
Total Personnel Costs					**$527,048**	**$ 93,695.14**	**$ 38,066.81**	**$ 93,695.13**	**$ 38,066.81**	**$ 93,695.13**	**$ 38,066.81**	**$ 93,695.13**	**$ 38,066.81**
Total Fringe Costs (Please Provide the Basis for Fringe Calculations)				0.00% max	**$0**	**$ 374,780.54**	**$ 152,267.22**	**$ 374,780.54**	**$ 152,267.22**	**$ 374,780.53**	**$ 152,267.22**	**$ 374,780.53**	**$ 152,267.22**

Staffing Plan - Narrative
Alaska Department of Fish and Game

Name	Title	Project Responsibilities
Kristen Gruenthal	Fisheries Genetic	project oversight, RAD sequencing, whole genome resequencing
Wei Cheng	Fisheries Genetic	extraction and protocol optimization, RAD sequencing
Heather Hoyt	Fishery Biologist	laboratory oversight
Judy Berger	Fishery Biologist	sample kit preparation and tissue archiving
Erica Chenoweth	Fishery Biologist	extraction optimization, genotyping, library prep
Zachary Pechacek	Fishery Biologist	extractions, genotyping, library prep
Tanya Johnson	Fish and Wildlife	prep and receiving field kits, extractions, general lab support
Erin Dooley	Fish and Wildlife	prep and receiving field kits, extractions, general lab support
Keenan Troll	Analyst/Program	database support
Andy Barclay	Fishery Biologist	coordinate field collections of kelp by others
Chris Habicht	Fishery Scientist	project oversight
Sara Gilk-Baumer	Fisheries Genetic	project assistance

Travel breakout
Alaska Department of Fish and Game

Trip	location	days	travelers	Roundtrip Airfare	Hotel	Per diem	Car rental	Total
Year 3				$ -	$ -	$ -	$ -	$ -
Alaska AFS	Alaska TBD	4	1	$ 500.00	$ 800.00	$ 240.00	$ 200.00	$ 1,740.00
								$ 1,740.00
Year 4				$ -	$ -	$ -	$ -	$ -
Phycology Soc.	U.S. TBD	4	2	$ 2,000.00	$ 2,000.00	$ 640.00	$ 200.00	$ 4,840.00
Stakeholder Mtg	Alaska TBD	2	2	$ 1,200.00	$ 800.00	$ 240.00	$ 100.00	$ 2,340.00
								$ 7,180.00

Alaska Department of Natural Resources									
State entity subawardee 2		Year 1		Year 2		Year 3		Year 4	
Line Item Budget		Federal Share	Non-Federal Share	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share
Personnel	$ 550,200.00	$ 137,550.00	$ -	$ 137,550.00	$ -	$ 137,550.00	$ -	$ 137,550.00	$ -
Fringe Benefits	$ 388,166.10	$ 97,041.53	$ -	$ 97,041.53	$ -	$ 97,041.53	$ -	$ 97,041.53	$ -
Travel	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Equipment	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplies	$ 200,000.00	$ 50,000.00	$ -	$ 50,000.00	$ -	$ 50,000.00	$ -	$ 50,000.00	$ -
Contractual	$ 100,000.00	$ 25,000.00	$ -	$ 25,000.00	$ -	$ 25,000.00	$ -	$ 25,000.00	$ -
Construction	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Direct Charges	$ 1,238,366.10	$ 309,591.53	$ -	$ 309,591.53	$ -	$ 309,591.53	$ -	$ 309,591.53	$ -
Indirect Charges	$ 169,187.41	$ 42,296.85	$ -	$ 42,296.85	$ -	$ 42,296.85	$ -	$ 42,296.85	$ -
Total Component Project Budget	$ 1,407,553.51	$ 351,888.38	$ -	$ 351,888.38	$ -	$ 351,888.38	$ -	$ 351,888.38	$ -

Total Project Budget AK DNR	
Federal Share (EDA grant funded)	$ 1,407,553.51
Non-Federal (Matching) Share	$ -
Total Project Budget	$ 1,407,553.51
Federal Grant Rate	100%

AUTHORIZED STAFFING PLAN
Alaska Department of Natural Resources

Staffing Plan - Budget						Year 1		Year 2		Year 3		Year 4	
Name	Annual Salary/Rate	% of Annual Hours for project	Annual $ from Award	Number of Years	Total Cost by Employee	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share
Employee 1 - Agronomist 3	$94,000	25%	$23,500.00	4.00	$ 94,000.00	$ 23,500.00	$ -	$ 23,500.00	$ -	$ 23,500.00	$ -	$ 23,500.00	$ -
Employee 2 - Agronomist 2	$73,000	100%	$73,000	4.00	$ 292,000.00	$ 73,000.00	$ -	$ 73,000.00	$ -	$ 73,000.00	$ -	$ 73,000.00	$ -
Employee 3 - Agronomist 1, Step D	$58,000	35%	$20,300	4.00	$ 81,200.00	$ 20,300.00	$ -	$ 20,300.00	$ -	$ 20,300.00	$ -	$ 20,300.00	$ -
Employee 4 - NRT 3	$41,500	50%	$20,750	4.00	$ 83,000.00	$ 20,750.00	$ -	$ 20,750.00	$ -	$ 20,750.00	$ -	$ 20,750.00	$ -
Total Personnel Costs					$ 550,200.00	$ 137,550.00	$ -	$ 137,550.00	$ -	$ 137,550.00	$ -	$ 137,550.00	$ -
Total Fringe Costs (Please Provide the Basis for Fringe Calculations)				71%	$ 388,166.10	$ 97,041.53	$ -	$ 97,041.53	$ -	$ 97,041.53	$ -	$ 97,041.53	$ -

Fringe calculation determination

Employee	annual healthcare	annual 401k match	percentage of program	healthcare fringe	401K Fringe	Total annual grant
Employee 1	$ 30,000.00	$ 30,000.00	25%	$ 7,500.00	$ 7,500.00	$ 15,000.00

Contractual Costs
Alaska Department of Natural Resources

Employee 2	$ 30,000.00	$ 20,000.00	100%	$ 30,000.00	$ 20,000.00	$ 50,000.00
Employee 3	$ 24,000.00	$ 20,000.00	35%	$ 8,400.00	$ 7,000.00	$ 15,400.00
Employee 4	$ 52,300.00	$ 41,500.00	50%	$ 26,150.00	$ 20,750.00	$ 46,900.00
Employee 5			0%	$ -	$ -	$ -
						$ 127,300.00

per year, x 4 years = $509,200

Organization Name	Contractor	Organization Type	Details of services	Cost
lab work for testing	contractor	private company, laboratory	testing, $20,000/year x 4 years	$ 80,000.00
equipment rental	contractor	private company, r	to implement, $5,000 x 4 years	$ 20,000.00

Staffing Plan - Narrative
Alaska Department of Natural Resources

Name	Title	Project Responsibilities
Employee 1	Agronomist 3	Overall design and supervision of project
Employee 2	Agronomist 2	Implementation operations, day to day responsibility and authority
Employee 3	Agronomist 1, Step D	Assist research and operations
Employee 4	NRT 3 (Natural Resource Technician)	Field work

Supply Specific - Narrative
Alaska Department of Natural Resources

Supply	cost / Qty	Purpose	Additional Details	Cost
fuel, fertilizer, test product		conduct test plot project	4 years as needed	$ 200,000.00

Alaska Fisheries Development Foundation

State entity subawardee 1	Year 1		Year 2		Year 3		Year 4		
Line Item Budget	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share	
Personnel	$ 130,387.00	$ 31,165.92	$ -	$ 32,100.89	$ -	$ 33,063.92	$ -	$ 34,055.84	$ -	$ 130,386.57
Fringe Benefits	$ 37,075.00	$ 8,861.95	$ -	$ 9,127.81	$ -	$ 9,401.65	$ -	$ 9,683.70	$ -	$ 37,075.11
Travel	$ 32,000.00	$ 8,000.00	$ -	$ 8,000.00	$ -	$ 8,000.00	$ -	$ 8,000.00	$ -	$ 32,000.00
Equipment										$ -
Supplies	$ 11,000.00	$ 2,750.00	$ -	$ 2,750.00	$ -	$ 2,750.00	$ -	$ 2,750.00	$ -	$ 11,000.00
Contractual	$ 4,598,000.00	$ 837,000.00	$ 312,500.00	$ 837,000.00	$ 312,500.00	$ 837,000.00	$ 312,500.00	$ 837,000.00	$ 312,500.00	$ 4,598,000.00
Construction										$ -
Other	$ 40,000.00	$ 10,000.00	$ -	$ 10,000.00	$ -	$ 10,000.00	$ -	$ 10,000.00	$ -	$ 40,000.00
Total Direct Charges	$ 4,848,462.00	$ 897,777.87	$ 312,500.00	$ 898,978.71	$ 312,500.00	$ 900,215.57	$ 312,500.00	$ 901,489.53	$ 312,500.00	$ 4,848,461.68
Indirect Charges	$ 35,046.00	$ 8,761.54	$ -	$ 8,761.54	$ -	$ 8,761.54	$ -	$ 8,761.85	$ -	$ 35,046.47
Total Component Project Budget	$ 4,883,508.00	$ 906,539.41	$ 312,500.00	$ 907,740.24	$ 312,500.00	$ 908,977.11	$ 312,500.00	$ 910,251.38	$ 312,500.00	$ 4,883,508.14

Total Project Budget AFDF	
Federal Share (EDA grant funded)	$ 3,633,508.14
Non-Federal (Matching) Share	$ 1,250,000.00
Total Project Budget	$ 4,883,508.14
Federal Grant Rate	74%

AUTHORIZED STAFFING PLAN
Alaska Fisheries Development Foundation

Staffing Plan - Budget						Year 1		Year 2		Year 3		Year 4	
Name	Annual Salary/Rate	% of Annual Hours for project	Annual $ from Award	Number of Years	Total Cost by Employee	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share	Federal Share	Non-Federal Share
AFDF ED		17%	$ 3,717.00	4	$ 14,866.50	$ 3,716.63	$ -	$ 3,716.63	$ -	$ 3,716.63	$ -	$ 3,716.63	$ -
AFDF Finance Director		17%	$ 2,733.00	4	$ 10,932.17	$ 2,733.04	$ -	$ 2,733.04	$ -	$ 2,733.04	$ -	$ 2,733.04	$ -
AFDF Development Director		17%	$ 2,708.00	4	$ 10,833.33	$ 2,708.33	$ -	$ 2,708.33	$ -	$ 2,708.33	$ -	$ 2,708.33	$ -
Total Personnel Costs					**$ 36,632.00**	$ 8,861.95	$ -	$ 9,127.81	$ -	$ 9,401.65	$ -	$ 9,683.70	$ -
Total Fringe Costs (Please Provide the Basis for Fringe Calculations)													
		AFDF ED		30%	**$18,367**	$ 4,390.23	$ -	$ 4,521.93	$ -	$ 4,657.59	$ -	$ 4,797.32	$ -
		AFDF Finance Director		28%	**$6,444**	$ 1,540.32	$ -	$ 1,586.53	$ -	$ 1,634.12	$ -	$ 1,683.15	$ -
		AFDF Development Direct		27%	**$12,264**	$ 2,931.41	$ -	$ 3,019.35	$ -	$ 3,109.93	$ -	$ 3,203.23	$ -

Staffing Plan - Narrative
Alaska Fisheries Development Foundation

Name	Title	Project Responsibilities
AFDF ED	Executive Director	project management
AFDF Finance Director	Finance Director	financial management
AFDF Development Director	Development Director	project management

Travel Breakout
Alaska Fisheries Development Foundation

Trip	Location	Qty	Per trip	Total
Travel in State round trip	Alaska	16	$ 1,500.00	$ 24,000.00
Travel AK to lower 48 round trip	lower 48	4	$ 2,000.00	$ 8,000.00

Contractual Costs
Alaska Fisheries Development Foundation

Organization Name	Contractor	Organization Type	Details of services	Cost
TBD	Contractor	TBD	1 - Alaska Shellfish Growers Association	$ 500,000.00
TBD	Contractor	TBD	2 - Seaweed Tissue Analysis	$ 858,000.00
TBD	Contractor	TBD	3 - Site selection data & analysis	$ 1,440,000.00
TBD	Contractor	TBD	4 - Joint Innovation Projects	$ 1,800,000.00

Supply / Other Specific - Narrative
Alaska Fisheries Development Foundation

Supply	cost / Qty	Purpose	Additional Details	Cost
Printing	2000 / 3	printing		$ 6,000.00
supplies	200 / 25	boxes, liners, vials, gel packes		$ 5,000.00
shipping	200 /100	shipping samples		$ 20,000.00
web design	5000	web design / maint. Communications		$ 20,000.00

Mariculture Research and Development Component Narrative

1. Program Description and Scope of Work

a. Executive Summary

The Southeast Conference's Alaska Mariculture Cluster (AMC) Research and Development Project proposes targeted research for use in developing innovative seaweed and shellfish products, including carbon capture benefits, and addressing key issues facing aquatic farmers and mariculture processors. With eight active kelp farm sites and 37 more permit applications in the permitting pipeline (McKinley Research Group, 2021), the Alaska seaweed industry is generating great interest, while shellfish farmers have been growing oysters in Alaska waters for over a century.

Projects funded will support creation of new markets for Alaska seaweed, collect data on mariculture farm site suitability and operational efficiencies, reduce operational costs at seaweed nurseries, increase the translation of research into commerce, and share knowledge and experiences between industry participants.

Project success will be measured by the number of applied research projects completed, number of research positions created, mariculture farm site suitability and carbon capture benefit data collected, and the number of workforce and business operation training participants reached through data distribution trainings and publications.

b. Scope of Work

Seaweed Tissue Analysis: The AMC will contract for tissue analysis of 25 - 30 seaweed species native to Alaska. This analysis will establish chemistry and nutritional profiles of species from three Alaska regions, critical for marketing materials and product manufacturer outreach. Seaweed safety issues will be addressed through heavy metal analysis for seven representative seaweed farms or areas of concern.

Product Research and Development: Alaska oysters are currently sold fresh and there is a need to develop shelf-stable or frozen products to diversify markets available to Alaska's shellfish farmers. AMC will fund shellfish product development trials to be completed at existing facilities at the Alaska Sea Grant's Kodiak Seafood & Marine Science Center. The product development research will be carried out by a postdoctoral fellow and the budget includes funding for a project microbiologist to conduct food safety analyses.

AMC will also fund the State of Alaska's Alaska Plant Materials Center (APMC) to conduct seaweed agricultural product development trials. Large-scale seaweed feed and fertilizer markets have developed in other regions of the world, but research is needed pertaining to the seaweed species native to Alaska. APMC agronomists will develop protocols for seaweed product handling, processing, and stabilization as well as evaluate the performance of these pilot feed and fertilizer products at their test farms.

Joint Innovation Projects: The Alaska Fisheries Development Foundation will create and implement a new program designed to accelerate development of applied technologies addressing barriers to growth in Alaska's mariculture industry. AFDF has previous experience with similar projects related to Alaska's seafood industry. AFDF will use a competitive process to solicit, select, and fund joint projects proposed by mariculture businesses, seafood

processors, technology companies, or other businesses and organizations. Selection criteria will include the feasibility of the proposed joint innovation project, potential impact of the project on removing barriers to mariculture industry growth, and other resources committed by the project proponent, among others. Examples could include working with a seaweed business to test a new aquatic farm technology, novel sensors for collecting ocean data, or innovative automated processing machines to optimize seaweed harvest procedures. Findings from these projects will be compiled into reports and datasets and distributed to the public, ensuring benefits are available to all industry participants.

Annual Conference: An annual conference will be funded to support information exchange between coalition members and offer a venue to share outcomes and findings from AMC funded activities. The event will also include training sessions, seminars, and networking opportunities. Coalition members Alaska Mariculture Alliance and Alaska Sea Grant's Mariculture and Training Research Center are expected to organize and sponsor the conference. The conference will be open to the public or those individuals interested in getting involved or are currently involved in the industry.

Seaweed Genetic Diversity Analysis: Alaska Department of Fish & Game will be funded to document the degree of adaptive genetic variation within commercially grown seaweed species and populations in Alaska waters. Current seaweed seed acquisition policies are based on limited information and correspondingly conservative approaches. Genetic diversity information is expected to improve regulatory efficiency by identifying areas where seed stock could be shared regionally and/or maintained by hatcheries over multiple years. This will reduce operational costs at seaweed nurseries and address a major potential bottleneck to growth of Alaska's seaweed industry.

De-risk Investments in Aquatic Farming: SEC will contract with researchers to produce and make available to the public region-wide modeling of ocean current and waves at a scale relevant to aquatic farms. This data will increase the chances of success for new aquatic farms by providing the information needed to right-size anchors and reduce gear costs. This information is not currently available when selecting locations for farming consequently increasing risk that the ocean conditions of the selected site may require different equipment than what may have already been invested in or installed. The upfront costs associated with aquatic farming equipment (especially if a season of product is lost or poor due to insufficient or wrong equipment) is a significant barrier to existing and new farmers – the availability of this information reduces that barrier.

SEC will also fund data collection at aquatic farms in Alaska by hiring firms selected through a competitive RFP process. These firms would work with aquatic farmers to develop a site characterization and monitoring plan to optimize that aquatic farm's success. The AMC will then provide matching funds for implementation of the site characterization and monitoring plan in exchange for data on the participating farm's operations and site characteristics. Data collected could include water quality data (nutrient concentration, salinity, light penetration, and temperature), ocean current velocities and directions; and multibeam sonar mapping of the seafloor under an aquatic farm – all information that increases an aquatic farm's likelihood of success. This information will be gathered into a report and made available to the public.

The goals of this effort are to rapidly accelerate understanding of the characteristics of successful aquatic farm sites; increase farming success rates; provide farmers with site selection and monitoring that most farms, especially small businesses, would not have the funding to seek otherwise; and improve aquatic farm site data availability for regulators and researchers.

Carbon sequestration feasibility: There is an emerging international consensus that limiting the increase in average global temperatures to 1.5 degrees Celsius will require large-scale carbon dioxide removal (CDR) from the atmosphere. While the potential CDR benefits of macroalgal cultivation are beginning to be recognized globally, the specific research necessary to support the application in Alaska has not been undertaken. This project will fund an assessment and analysis of the CDR potential for the specific strains of macroalgae cultivated in Alaska. The project will work with cultivators to quantify CDR potential, review life-cycle emissions from operations, assess economics and evaluate the potential for participation in developing carbon offset markets.

2. Regional Industry Assets and Needs

a. Regional Description

The AMC cluster is focused on southern coastal Alaska (Southeast (SE), Prince William Sound (PWS), Kenai Peninsula (KP), Southwest (SW)) where there are waters appropriate for mariculture development as well as the existing seafood industry participants and interested workforce, infrastructure, and vessels that already operate and move across communities to access fishery resources. See attached separate FIPS code spreadsheet as directed by EDA staff.

Alaska comprises more than half of the US coastline, continental shelf, and exclusive economic zone (EEZ) and is a world leader in seafood production; over 60% of the seafood harvested in the US comes from Alaska waters. Therefore, Alaska has the coastline and infrastructure to support growth of its mariculture industry. At the same time, Alaska has over 250 rural coastal communities that are largely inaccessible by road and have limited employment opportunities. Many of these communities have high numbers of Alaska Native residents, who make up 22% of the population of the AMC project area. The communities in these coastal regions have the need and desire to build ocean-related businesses, diversifying opportunities for residents to live and work in their communities in an industry that is beneficial to the environment and complementary to commercial and subsistence fishing.

b. Industry, Employer, and CEDS alignment

Alaska's mariculture industry "is currently oriented around small volumes of seaweed processed into specialty food products" (McKinley Research Group, 2018). The Alaska Mariculture Task Force's Five Year Action Plan (2019) and goal of catalyzing a $100 million/year mariculture industry are the primary strategic drivers for expanding mariculture in Alaska. To support product development as a way of expanding market demand, the Five Year Action Plan specifically identifies "establish a mariculture research center" as a priority recommendation for use in conducting research and development of Alaska mariculture products. Mariculture development is a priority in state and regional development efforts and as well as aligning with the *Alaska Mariculture Development Plan*, this cluster also aligns with the CEDS fo each of the EDDs (SEC - pgs. 2, 11, 24, 41-43, PWSEDD – pgs. 8, 32, 41, 44, 58, KPEDD – pgs. 39-50, SWAMC – pgs. 1, 4, 5, 7), and the State of Alaska (pgs. 2, 11, 24, 41-43). References to supporting the mariculture industry in AMC coalition members' CEDS include:

- KPEDD CEDS: “Objective 4.4, Support emerging sectors with high growth potential: assist mariculture operations in meeting capital and expansion needs” (2021).
- PWSEDD CEDS: supporting the Sound’s Blue Economy is central to its vision statement, and Priority Objective (C.)(1.)(a.) states “attract investment in PWS mariculture by facilitating relationships with prospective kelp and shellfish farmers, buyers and processors” (2021).
- Southeast Conference’s 2025 CEDS identifies Mariculture Development as its top priority in its Seafood and Maritime sector (2020).
- SWAMC 2019 CEDS: “educate, advocate and assist in the development of the mariculture industry to diversify rural economies”.

3. Proposed Solution

Our outreach to kelp farmers, shellfish growers, seafood processors and mariculture industry partners like the nascent Alaska Mariculture Alliance and the Alaska Sea Grant program has raised awareness about some critical gaps that need to be filled to allow Alaska’s mariculture industry to grow into a major statewide economic sector. Interest in mariculture in Alaska has grown considerably in recent years, and yet, of 89 active permits issued, only 29 have reported sales activity for 2021 (e-mail comm., ADF&G, 3/1/2022). Many with seaweed farm permits, for example, have not deployed their farms due to the initial capital costs and uncertain return without commitments from buyers.

This component of the Alaska Mariculture Cluster supports creation of new markets for Alaska seaweed, collection data on mariculture farm site suitability and operational efficiencies, reduction of operational costs at seaweed nurseries, and sharing of knowledge and experiences between industry participants. Several research assets are in place, including the Kodiak Seafood and Marine Science Center (with a postdoctoral fellow starting work on product development in 2022), Alaska Sea Grant’s Mariculture Research and Training Center, the ADF&G Gene Conservation lab, and the State of Alaska’s Plant Materials Center. EDA funding will support numerous applied research projects focused on mariculture product development at these facilities, while also leveraging resources at other entities through joint innovation projects. Public support, through EDA’s funding of this component, will support tackling the initial low-hanging fruit in the vast R&D needs of Alaska’s nascent mariculture industry.

Growing Alaska’s mariculture industry will help diversify its coastal economies, an important step in balancing recent fisheries declines likely tied to changing global ocean conditions. It will also assist with building a more resilient economy and recovering from the stalled investments that resulted from COVID-related cash crunches and business uncertainty. Further, kelp farming is environmentally sustainable, as it absorbs CO_2 making local waters healthier for shellfish, and as a livestock feed additive it helps reduce methane emissions, the largest source of greenhouse gas warming the planet.

4. Partners and Program Outreach

a. Partnerships

- **Alaska Sea Grant (ASG), Kodiak Seafood & Marine Science Center:** critical partner with research and education resources. Will coordinate with Marine Advisory Program

agents in several remote communities, and with development of Mariculture Research and Training Center.

- **Alaska Mariculture Alliance:** growing association that will help coordinate AMC work.
- **Alaska Fisheries Development Foundation:** statewide leader supporting research and cultivating investment in Alaska fisheries and mariculture, supporting growth of capacity at AMA.
- **Alutiiq Pride Marine Institute** located in Seward, serving Cook Inlet and PWS, is a leading statewide shellfish laboratory and also operates kelp seed nursery to provide seed twine to commercial kelp growers. The institute is part of the **Chugach Regional Resources Commission**, a regional coalition of tribes collectively working on various natural resource and economic development issues.

b. Promoting Diversity, Equity, and Inclusion

Broad community outreach to underserved, rural communities is a specific strategic component of the Alaska Mariculture Cluster, addressed in the Coordination and Outreach section. Historically underserved stakeholders such as remote Native villages and Native populations who have been excluded from access to capital and training will specifically be invited to participate in the AMC's annual forum for sharing research and development findings and mariculture farmer experiences. Key education partners for reaching target audiences, holding mariculture trainings, and providing technical assistance include Alaska Sea Grant, University of Alaska campuses in Anchorage and Fairbanks, the Prince William Sound College, and University of Alaska/Southeast's Fisheries Tech program. Beyond the personal expertise developed by a few kelp and shellfish growers, little is widely known about what makes a successful mariculture farm site. This research and development component will address that gap by devoting funding to examine kelp and shellfish farm site characterization. Research on ocean current and nearshore environment conditions and depth analyses will help prospective mariculture farmers in selecting suitable sites for the species they plan to grow and developing those sites at lower costs due to reduced anchor.

5. Measurable Goals and Impacts

Product Development Data Collected:

- Seaweed tissue analysis: chemical, nutritional and flavor profiles of 25 – 30 species,
- conducted in 2023, used in subsequent product development research.
- Number of applied research projects on product development of seaweed and shellfish
- products: agricultural feed, fertilizer, human food products, shellfish by-products.
- Number of new seaweed and shellfish products developed.

Joint Innovation Projects and Product Development Trials: number of projects awarded, number of challenges successfully met, number of product trials held, and the number of new products and/or services relevant to the mariculture sector developed.

Genetic Diversity Data Collected: Any changes to the 50/50 rule for seaweed fertile material collection (50 specimens within 50km of farm site), and resulting reductions in costs to farmers related to fertile material collection and to nurseries related to growing seeded string.

Site Characterization and Monitoring Data Collected: Four years of aquatic farm site data collected, number of partners and researchers using that data to produce publicly available findings, number of aquatic farmers using site selection and characterization program, reductions in aquatic farm capital and operating costs due to use of wave and current data. Funding would be contingent on data collected being made available publicly to aid in cooperative research efforts statewide. Researchers at the University of Alaska have stated that this data is critical to informing ongoing mariculture research priorities.

Annual Conference for Data Sharing: number of mariculture farmers participating, geographic distribution of participants, percentage of participants from underserved communities or populations, distribution in scale of kelp and shellfish farms among participants.

Carbon capture research: progress toward development of a quantifiable figure for the amount of CO_2 sequestered per wet pound of seaweed grown. Number of presentations of project findings and number of follow-on research projects to address the inevitable additional questions related to this potential market for Alaska seaweed.

As a whole, the component projects and complimentary work planned by the Alaska Mariculture Cluster (AMC) coalition is estimated to result in the creation of 318 jobs and $42 million in private investment leveraged by the final year of the grant period. The AMC programs are collectively estimated to move Alaska's mariculture industry from a status quo growth trajectory (annual economic output of $4.7 million at year 4 and $10.8 million in Year 10) to mid-case growth (economic output of $23 million at year 4 and $98 million in Year 10).

6. Sustainability Plan

Beyond EDA support, building up industry coordination and capacity for support of mariculture farmers, market development, and on-going marketing at the Alaska Mariculture Alliance (AMA) is critical to the industry's long-term success. Alaska has very successful models of seafood associations in the Alaska Seafood Marketing Institute and regional seafood associations to which we can look for experience and lessons learned. Growing the mariculture industry will help with creating a revenue source to support future AMA work. The listed organizations are funded in part through a self-assessment tax by industry participants, typically between 0.5% and 1%. With EDA investment, Alaska's mariculture industry is projected to achieve revenues of around $14.1 million by year 4, providing $140,000 annually at the 1% tax rate for project continuation (growing to $600,000 by year 10).

The challenges we see ahead include careful coordination in sharing data on product and market research and a need for strong coordination among AMC project components. This AMC Research & Development project will benefit underserved communities by reaching out specifically to Alaska Native villages to talk about assistance with site selection for kelp farms, workforce development, kelp farm operation training, and assistance with collecting seed for seed twine cultivation. Communities expected to benefit include remote coastal communities from SE to SW Alaska, Metlakatla at the southern border to Akutan in the Aleutian Islands.

Ecological Risk Assessment (ERA): Marbled and Kitlitz's Murrelet Interactions with the Alaska Salmon Gillnet Fishery

ASSESSMENT SUMMARY AS OF 11-08-2022 FOR AFDF BOARD
FINAL REPORT WILL BE COMPLETE 12-05-2022

Glossary of Terms

ADF&G: Alaska Department of Fish and Game
AMMOP: Alaska Mammal Marine Observing Program
AT: MRAG Assessment Team
BRMU: *Brachyramphus* murrelet genus (includes both Kittlitz's and Marbled murrelet)
ERA: Ecological Risk Assessment
IBA: Important Bird Area
KIMU: Kittlitz's murrelet
MAMU: Marbled murrelet
MRAG: private consulting body that assesses fisheries for the MSC
MSC: Marine Stewardship Council
PSA: Productivity, Susceptibility Analysis
SICA: Scale, Intensity, Consequence Analysis
USFWS: US Fish and Wildlife Service

Background

After the 2019 Seabird Workshop, the MRAG AT, who performs audits for the Marine Stewardship Council (MSC) sustainability certifications, suggested that AFDF consider conducting an Ecological Risk Assessment in order to better understand relative risk of murrelet bycatch in the Alaska Salmon gillnet fishery. The ERA report will be provided to the AT in order to help them determine whether or not the condition on seabird bycatch for the Alaska Salmon fishery can be closed or must be continued. The ERA process takes a precautionary approach to uncertainty and is a commonly used methodology for understanding relative risk of impacts for data-poor fisheries. It draws heavily on expert and stakeholder input to reach reasonable conclusions about relative risk. All other scoring rubrics and methodology come from Hobday, et al. (2007 or 2011) with the exception of the PSA scoring guide, which is the new MSC standard specifically for birds as of October 26th, 2022 (Marine Stewardship Council, 2022). Please contact AFDF Development Director if you would like to review scoring rubrics or would like additional information about the ERA methodology or process.

1. Scoping

   The scoping process provides background information relating to the fishery and the potential risks. It allows stakeholders to agree on the scope of the issue and identifies and removes irrelevant components (i.e., regions) from further analysis.

2. Scale, Intensity, Consequence Analysis (SICA)

   The SICA is a qualitative screening process that further helps to remove low risk components while identifying those that need further analysis. The SICA aims to identify which hazards may lead to a significant impact on species or habitat of concern. Where judgments about risk are uncertain, the highest level of risk that is still regarded as plausible is chosen. For this reason, the measures of risk produced during the SICA cannot be regarded as absolute.

3. Productivity, Susceptibility Analysis (PSA)

   The PSA is a semi-quantitative process using available biological and spatial data as well as expert opinion when data is not available to further evaluate potential risk from components identified during the SICA. Where there is no published information and expert opinion cannot make a reliable judgment, a precautionary approach to uncertainty is taken and the highest score (3) is given for that component. Thus, PSA analysis is more likely to result in false positives than in false negatives and the list of high-risk species should not be interpreted as all being at high risk from fishing, rather that these are species that require a more detailed exploration before they can be classified as low risk (Walker et al., 2007a). **Assessment of the actual impact of the fishery on the species is not made. If fisheries are identified as medium or high risk in the PSA, this only indicates a need for further information in order to understand absolute risk.** The final categorization of fisheries as relatively low, moderate, or high risk is calculated from the PSA scores and will occur after the workshop following Hobday, et al. (2007) methodology.

Much of the information used in the following ERA came from the 2019 and 2022 AFDF Seabird Workshops including both verbal and written materials such as PowerPoint presentations, from participants. Other sources include existing research and reference documents identified during the workshop and while conducting research for this Assessment. These sources are included (with links to PowerPoint presentations, which can also be found here) in the References section at the end of this document.

2022 Workshop and Stakeholder Involvement

As part of the ERA process, AFDF hosted a virtual workshop with stakeholders on October 24th, 2022 to review draft scores for the SICA and PSA as well as to receive updates on research progress such as for the Alaska Marine Mammal Observing Program from NOAA Fisheries and about other relevant projects from USFWS. Workshop participants were given the opportunity to comment verbally during the workshop and AFDF staff took notes as well as recording the

meeting in order to capture this feedback. A workshop recording is available upon request. The Workshop Agenda and a list of participants can be found in Appendix 1. Workshop participants were invited to submit further, written feedback about the ERA by November 7th, 2022 to make sure that they had sufficient opportunity to share their thoughts.

Some key stakeholders were unable to attend the workshop, however a survey was sent out to fishermen in Prince William Sound and Southeast Alaska in order to gather more information. The Yakutat Area Biologist also verbally provided answers to the survey questions for Yakutat during a phone conversation with AFDF staff, but was unable to attend the Workshop.

Scoping

Context of the Analysis:

- This ERA focuses solely on drift and set gillnetting, which has been identified in the literature as the primary fishery of concern for seabird entanglement.
- For the purpose of this ERA, the units of analysis are the 13 Commercial Salmon Management Areas for Alaska as laid out by the Alaska Department of Fish and Game (see map, below).
- Both Kittlitz's (KIMU) and Marbled (MAMU) murrelets are of concern. Due to their nearly complete overlap of global populations (see PowerPoint slide below from Kuletz, et al., 2019), very similar life history, difficulty in differentiating the two species, and similar risk from bycatch, this ERA considers the *Brachyramphus* murrelet (BRMU) genus, to which both species belong.

Summary of AMMOP Data

The Alaska Mammal Marine Observing Program (AMMOP) recorded bycatch of seabirds in its studies in several relevant regions, during two-year study periods over 10 years. While the AMMOP data does not specifically fit into any of the scoring categories for the ERA, we believe that it is valuable data to consider as part of the Assessment. A presentation on the results of the AMMOP study was provided during the 2019 workshop and a summary is provided below. Note that the last three columns are based on extrapolated take rather than observed take unless otherwise noted. For example, while there were no BRMU taken in the South Unimak AMMOP, it was extrapolated that 21 BRMU may be taken by the fishery in a season. We provided the table below to summarize the study findings. All data below are from Manley (2006, 2007, 2009, 2015, 2019) and Wynne, et al. (1991 & 1992).

Region	**Year**	**Observed Number of Seabirds taken**	**Observed Number of Murrelets taken**	**Estimated Total Seabird Take**	**Estimated Total Murrelet Take**	**Percentage of Murrelet Take out of total Estimated Take (two year average)**	**Estimated Annual Mortality Rate of MAMU (**Av. annual estimated MAMU take/Kuletz, et al. 2019 pop estimates)	**Notes**

South Unimak	1990	16	0	337	21	6%	No data	Only one year of observer coverage
Kodiak	2002	34	4	529	56	12%	99/10,350=.95%	BRMU all taken in Uganik Bay; no take of any birds in Alitak Bay District
	2005	55	7	1091	142			
Cook Inlet	1999	4	0	272	0	11%	18.5/35,660=.05 % *Note that USFWS biologists said this was not a valid calculation because of low observer coverage and therefore low confidence in mortality numbers.	BRMU observed in proximity to nets on only 4 of 2,194 sets.
	2000	2	2	74	37			
Prince William Sound	1991	53	23	993	260	60% (calculated based on two year averages of observed take due to lack of data on extrapolated BRMU take for 1990).	750/33,745=2.2 %	Because of the low take rates, extrapolation of the observer data is statistically difficult and results in wide confidence intervals. The vast majority of fatalities were in the Copper River District.
	1990	41	31	1468	1110 (calculated by AFDF staff, not provided in AMMOP report)			
Yakutat	2007	19	11	305	176	55%	115/5,980=1.9%	Over both years, 27/29 takes occurred in Yakutat Bay area. Factors that influenced take: 1) late in the season 2) sets hauled between midnight and 6:00 am
	2008	10	5	137	54			
Southeast	2012	12	0	165	0	5%	39/144,180=.03 %	Take tended to occur later in the fishing season, number of birds in areas was best explanation for differences
	2013	92	6	1360	78			

								between two years

Extrapolated Impacts of Gillnet Fishery on Murrelet Population from the Assessment Team 2020 Audit

In their report after the 2019 audit and Seabird Workshop, the AT included the following analyses for MAMU and KIMU.

Marbled Murrelets:
"Applying just the point estimates of bycatch from the AMMOP studies of 1,039 birds per year to the total Alaska marbled murrelet population provides a minimum mortality rate because not all fisheries are represented. The total population of marbled murrelets in Alaska was estimated to be about 271,000 in 2007 (Piatt et al. 2007). Abundance in the area of the AMMOP was estimated at approximately 230,000. A simple comparison of the estimated mortality and abundance yields a mortality rate calculation of 0.5%. **While confidence in any such mortality estimate is low, fishery bycatch mortality would clearly have to be much larger for these fisheries to hinder a rebound to historic population numbers given favorable environmental conditions.**" (Sterns-Pirlot, et al., 2020, p. 51).

Kittlitz's Murrelets:
"The average annual estimated mortality of Kittlitz's murrelets was 122 across all fisheries and years sampled by the AMMOP. The total population of Kittlitz's murrelets in Alaska was estimated to be about 33,600 in 2013 (95 percent CI=25,620–41,546; DOI 2013). A simple comparison of the estimated mortality and abundance yields a mortality rate calculation of 0.4%. This estimate of course does not address possible localized impacts. Since distribution of Kittlitz's murrelet is so clumped and restricted (unlike marbled murrelet), one can also look at take within regions…a rough approximation of take relative to local populations, based on two-year averages for AMMOP sites where estimates were available, varied from zero in Cook Inlet to 0.7% in Yakutat and 3.0% in Prince William Sound/Copper River. This is obviously an underestimate relative to the population in the AMMOP fishery areas…**Based on the available quantitative data we concluded that the salmon gillnet fisheries that overlap the range of the Kittlitz's murrelet in Alaska are likely not a hindrance to an increase in the population should favorable environmental conditions prevail."** (Sterns-Pirlot, et al., 2020, p. 51).

Scoping: Presence or Absence of Risk

The presence or absence assessment in the Scoping process serves to identify and remove from further consideration any areas that clearly have very little to no risk. Regions that receive a 1 are moved forward to the scale, intensity, and consequence analysis (SICA) while regions that receive a 0 are excluded from further analysis.

Region	Presence or Absence of risk 0=no, 1=yes	Rationale
Arctic-Kotzebue	0	Outside MAMU range during fishing season; minimal occurrence of KIMU during fishing season (Kuletz, et al. 2019 and Day, et al., 2011)
Norton Sound - Port Clarence	0	Outside MAMU range during fishing season; minimal occurrence of KIMU during fishing season (Kuletz, et al. 2019 and Day, et al., 2011)
Yukon	0	Outside MAMU range during fishing season; minimal occurrence of KIMU during fishing season; fishery primarily occurs in rivers where murrelets are not foraging (Kuletz, et al. 2019 and Day, et al., 2011)
Kuskokwim	0	Outside MAMU range during fishing season; minimal occurrence of KIMU during fishing season (Kuletz, et al. 2019 and Day, et al., 2011)
Bristol Bay	0	On the edge of MAMU range during fishing season; agreement between biologists that the turbid water, super high density of boat activity, and large tidal swings do not support murrelet foraging and therefore murrelet bycatch is of exceedingly low concern (Stern-Pirlot, et al., 2020, Carter, et al., 1995).
Aleutian Islands	0	Very low proportion of MAMU and KIMU populations; currently no fishery in this region (Madison, et al. 2011 & Kuletz, et al. 2019)
Chignik	0	Purse seine only, not of concern for bycatch of BRMU in this region (Stern-Pirlot, et al., 2020)
Alaska Peninsula	0	Very small part of BRMU population (Madison, et al. 2011 & Kuletz, et al. 2019)
Kodiak	1	Overlap of fishing area with important bird area; BRMU nesting on KI (Audubon, Madison et al., 2011)
Cook Inlet	1	CI is part of region containing 95% of global BRMU population along with high fishing effort in UCI (Kuletz et al., 2019, Gaudet, 2019)
Prince William Sound	1	High populations of BRMU; high fishing effort (Kuletz et al., 2019, Gaudet, 2019)
Yakutat	1	High populations of BRMU overlapping with fishing area (Kuletz et al., 2019, Gaudet, 2019)
Southeast	1	High populations of BRMU; high fishing effort (Kuletz et al., 2019, Gaudet, 2019)

Scale, Intensity, Consequence Analysis (SICA)

The table below is the summary of the SICA scores. Methods for assigning scores as well as scoring rubrics came from Hobday et al. (2007). The scale, intensity, and consequence scores are considered in regard to the Operational Objective. In this case, the Operational Objective

comes from the MSC requirements. In order to receive a passing grade in the certification process:

There must be a reasonable level of confidence that if the birds are depressed, the fishery would not prevent them from recovering given favorable environmental conditions."

Scale of Hazard scores, along with intensity and confidence scores are not directly used in calculating the final SICA score for each region, however, they are used qualitatively to help determine the Consequence score. Any region receiving a Consequence score of 3 or greater is moved forward to the productivity, susceptible analysis (PSA) step.

It is important to reiterate that the ERA is a qualitative process and that while the scoring rubrics are meant to be helpful guides, the Analysis should consider the context of the fishery, be based on available information when possible, and heavily weigh expert opinion from biologists, managers, fishermen, conservationists, and other relevant stakeholders.

SICA Daft Scores

Region	1. Spatial Scale of Hazard (1-6)	2. Temporal Scale of Hazard (1-6)	2a. Effort Scale of Hazard (1-6)	4. Intensity score (1-6)	5. Consequence Score (1-6)	6. Confidence Score (1-2) (low-high)	Rationale
Prince William Sound	X (waiting on information from PWS fishermen, was not received in time to include in this draft)	3	6	3	3	2	The PWS fishery takes place at a relatively large Spatial and Effort Scale and there is a well-documented high population of BRMU in PWS (see Appendix 1); AMMOP data suggests high percentage of BRMU taken versus other seabird species and shows by far the highest actual and estimated number of BRMU takes. However still low mortality rate of 2.2%.
Cook Inlet	5	3	6	2	2	2	Fishery occurs primarily during daylight (lower risk to BRMU), drift fleet gathers primarily as far from shore as possible (according to fishermen during 2019 survey and AMMOP data); minimal overlap with preferred foraging habitat for BRMU, low effort (about 20 permits fished/year) in LCI and where high effort occurs in UCI, much lower bird population. Little overlap of the fishery with IBAs according to AMMOP location data (see maps in Appendix 1). According to AMMOP, even observing BRMU while fishing was very uncommon (only 4 of 2,194 sets); BRMU was only taken during year two of the program; and total bird take was very low (6 birds over 2 seasons). This indicated minor intensity and consequence.

Kodiak	4	3	3	2	2	2	While BRMU were taken in moderate numbers in the AMMOP studies, the intensity of the fishery is relatively low (av. 147 permits). Of those, about 100 fish in the area where any seabird take was recorded (none recorded in Alitak Bay District where approx. 70 permits are fished) (Manly, 2019). BRMU take was all recorded in Uganik Bay, indicating a very small spatial scale of potential risk. According to the Piatt et al. (2006) MAMU distribution map (see Appendix 1 for maps), the highest bird density occurs on the east side of the island, while the fishing effort occurs on the west side in areas with very low murrelet density. Low estimated mortality rate of .95%.
Yakutat	3	3	3	1	2	2	Relatively low effort (10 yr av=117 permits fished/year), low effort also demonstrated by maps of Unique Gillnet Vessel Deliveries per Week hotspot maps (high of 542 for Yakutat versus 28,737 and 24,104 for SE and PWS respectively, see maps in Appendix 1). In AMMOP study, over both years 27/29 takes occurred in Yakutat Bay area signifying a likely very small geographic area of concern. Further, BRMU take accounted for approx. 1.4% of Yakutat Bay estimated population (Schane et al., 2011) or MAMU take of 1.9% according to Kuletz et al. (2019) population estimates. According to ADF&G Yakutat Area Biologist, 2/3rd of permits don't start fishing until August (coho season), fishery almost exclusively occurs in Yakutat Bay (approx. 20 permits, early in season (June, July) and Situk River estuary (most of rest of effort, August, Sep., Oct..) with low to effort at the Alsek River (approx. 10 permits). Low overlap other than one area near Pt. Manby for reported fishing focus and high densities of BRMU (Schane, et al. 2013). See Appendix 1 for maps.
Southeast	5	3	6	3	3	2	High fishing effort and relatively large area fished (10-year av=426 permits fished/year). High, extensively distributed BRMU population (see maps in Appendix 1). However, important to note very low percentage of BRMU bycatch from AMMOP studies with an estimated mortality rate of only .03%.

Productivity-Susceptibility Analysis (PSA)

Prince William Sound and Southeast Alaska were moved forward to the PSA section of the ERA based on the draft scores of 3. Other regions received draft scores of 2 and were therefore not moved forward in the analysis.

PSA Scores for Prince William Sound and Southeast Alaska

From the Marine Stewardship Council MSC Fisheries Standard Toolbox v1.0. Note that at time of this draft, the AFDF team was still collecting information in order to calculate an accurate "Avalability" score for PWS. Therefore a final PSA score is not available yet.

Prince William Sound

Productivity	***Brachyramphus* murrelet (genus)**	
Attribute	**Rationale**	**Score (1-3)**
Average Age of First breeding	2-3 years old (ADF&G). Average is 2.5.	1
Average 'optimal' adult survival probability	We were unable to find a survival probability that was specifically labeled as "optimal", however Boulanger, et al (2001) shared a range of adult survival rates that averaged 0.84 from other studies. The study further stated that murrelets may have lower survival probability than other small alcids.	2
Fecundity	1 chick/year (ADF&G)	2
Susceptibility	**Region: Prince William Sound**	
Attribute	**Rationale**	**Score (1-3), (low-high)**
Availability	In the process of getting this information	TBD
Encounterability	Based on MSC guidelines for air breathing species (MSC, 2022)	3
Selectivity of Gear Type	Based on MSC guidelines for air breathing species (MSC, 2022)	3
Post capture mortality	Majority dead when released	3

Southeast

Productivity	***Brachyramphus* murrelet (genus)**	
Attribute	**Rationale**	**Score (1-3), (low-high)**
Average Age of First breeding	2-3 years old (ADF&G)	1
Average 'optimal' adult survival probability:	We were unable to find a survival probability that was specifically labeled as "optimal", however Boulanger, et al. (2001) shared a range of adult survival rates that averaged 0.84 from other studies. The study further stated that murrelets may have lower survival probability than other small alcids. Because of this and that 0.84 is on the low end of the scoring range for 2, we believe that a score of 1.5 is appropriate.	2
Fecundity	1 chick/year (ADF&G)	2
Susceptibility	**Region: Southeast Alaska**	
Attribute	**Rationale**	**Score (1-3), (low-high)**
Availability	The Southeast Alaska management district measures 13,819 sq miles. The area actually fished by fishermen is approximately 500 sq miles or approximately 3.6% (based on calculations from fishermen's maps, methodology explained in SICA section for Scale scores) of the total area while the area that can be fished by regulation is 1,549 or 11.2% (ADF&G). Of that 11.2%, much isn't fished and there are sections that have not been open for fishing for multiple seasons. Therefore we believe a score of 1 or 10%< is appropriate based on the distribution maps showing murrelets throughout the region. See Appendix 3 for visual representation.	1
Encounterability	Based on MSC guidelines for air breathing species (MSC, 2022)	3
Selectivity of Gear Type	Based on MSC guidelines for air breathing species (MSC, 2022)	3
Post capture mortality	Majority dead when released	3

PSA Scores DRAFT Summary

These scores were calculated using an MSC scoring sheet that automatically calculates each total and the final PSA score, which can then be converted to a Risk Category. Methodology can be found in the MSC Fisheries Standard Toolbox v1.0. 2022.

Region	Productivity Scores			Total (av.)	Susceptibility Scores				Total (multiplicative)	PSA Score	Risk Category Name
Prince William Sound	1	2	2	1.67		3	3	3			
Southeast	1	2	2	1.67	1	3	3	3	1.65	2.35	LOW

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Schedule for RFM & MSC Salmon Fishery Surveillance Audit

The following meetings will fulfill annual surveillance audit requirements for both the RFM and MSC salmon certification programs.

Schedule for Joint RFM/MSC Alaska Salmon Fishery Site Visit
December 12-14, 2022
Anchorage, Alaska and Sitka, Alaska
Join via Zoom:
https://us02web.zoom.us/j/87326852442?pwd=TEtYelFIWk1sYmJ1N3JyZnJjSUc4dz09

Date	Time	Location	Discussion	Meeting Status	Personnel
Sunday December 11 (Anchorage)	Travel to Anchorage				
Monday December 12 (Anchorage)	8:30 am	ADF&G Aerie Conference Room 333 Raspberry Rd Anchorage, AK	Opening Meeting	Closed	AFDF, RFM & MSC ATs
	9:00 am		Hatchery Effects & Information: Prince William Sound & Southeast (Presentation of AHRP Synthesis)	Closed	Presenter TBD, Bill Templin (ADFG), Chris Habicht (ADFG), AFDF, RFM & MSC ATs
	11:00 am		Hatchery Effects and Information: Kodiak	Closed	Tina Fairbanks (KRAA), RFM & MSC ATs, AFDF
	Lunch Break				
	1:00 pm		Hatchery Effects & Information: Lower Cook Inlet & Crawfish	Closed	Dean Day (CIAA), Scott Wagner (NSRAA), RFM & MSC ATs, AFDF

	2:00 pm		Hatchery Effects & Information: Marine Ecosystem	Closed	Katie Howard (ADF&G), Bill Templin (ADF&G), RFM & MSC ATs, AFDF
	3:00 pm		Enforcement	Closed	Captain Aaron Frenzel (AK Wildlife Troopers) RFM & MSC ATs, AFDF
Tuesday December 13 (Anchorage)	8:30 am	William Jack Hernandez Hatchery 941 N Reeve Blvd Anchorage, AK	Budget, Research, Staffing at ADF&G	Closed	Bill Templin (ADFG), Britteny Cioni-Haywood (ADFG), AFDF, RFM & MSC ATs
	9:00 am		Orca ESA Issue Update	Closed	Dani Evanson (ADFG), AFDF, RFM & MSC ATs
	11:00 am		SE AK Troll Fishery Description	Closed	Dani Evanson (ADFG), other, AFDF, RFM & MSC ATs
	12:30 pm		Lunch		

	1:30 pm		Statewide Chinook Downturn	Closed	Ed Jones (ADFG), AFDF, RFM & MSC ATs
	2:30 pm		Stock Status - Management Issue Updates by Region	Closed	Andrew Munro (ADFG), AFDF, RFM & MSC ATs
	3:30		Anchorage Stakeholder Meetings	Open to Stakeholders	RFM & MSC ATs, Stakeholders
	7:45 pm		Flight to Sitka (Flight 70)		
Wednesday December 14 (Sitka)	9:00 am	Harrigan Centennial Hall (TENTATIVE) Sitka, AK	Fishery-Seabird Interactions	Closed	AFDF, RFM & MSC ATs, Jennifer Ferdinand (NOAA), Liz Lubunski, (USFWS)
	10:30		Stakeholder Meetings	Open to stakeholders	RFM & MSC ATs, Stakeholders
	12:00		Lunch Break		
	1:00		Implications of 2020 & 2021 Salmon Fisheries Disaster Determination	Closed	Karla Bush (ADFG), AFDF, RFM & MSC ATs
	2:00		Stakeholder Meetings	Open to stakeholders	RFM & MSC ATs, stakeholders

	3:30 Note: can reschedule based on stakeholder meeting needs		Closing Meeting: Client Action Plans, conditions, and timeline review	Closed	AFDF, RFM & MSC ATs
Thursday December 15 (Sitka)	Travel Home Flights to Seattle leave 6:00 am (Flight 73) or 11:56 am (Flight 62)				

*****HW has 3 other docs to add, they are PDFs in the meeting folder (SK Grant Budget Narrative, SK Grant Narrative, Draft ERA)*****

Organization: Alaska Fisheries Development Foundation (AFDF)
Principle Investigator (PI): Julie Decker, Executive Director, jdecker@afdf.org
Co-PI: Robb Kaler, Seabird Specialist/Wildlife Biologist, U.S. Fish and Wildlife Service, robert_kaler@fws.gov
Title: Using technology to fulfill research needs related to seabird interactions in the Alaska salmon fishery
Location: Southeast and Prince William Sound regions of coastal Alaska
Requested Project Period: October 1, 2023 - Sept. 30, 2025
Federal Funding Requested: $287,364.00
Priority Addressed: Priority #2 – Science or Technology that Promotes Sustainable U.S. Seafood Production and Harvesting

Partners:
Dr. Lauren Divine, Director of Ecosystem Conservation, Aleut Community of St Paul Island, lmdivine@aleut.com
Hannah-Marie Garcia, ISN Coordinator, Aleut Community of St Paul Island, hgarcia@aleut.com
Bruce Robson, ISN Technical Director, Community and Ecology Resources, LLC., mandybruce@co-eco.com
Aaron Poe, Network Program Officer, Aleutian Bering Sea Initiative, apoe@alaskaconservation.org
Lindsey Bloom, Program Coordinator, Salmon Habitat Information Program, SalmonState, lindsey@bloominalaska.net

Abstract:
The Alaska Fisheries Development Foundation is the client for the Marine Stewardship Council (MSC) sustainability certification program for the Alaska salmon fishery. The MSC certification allows Alaskans to benefit in the marketplace from verification of sustainable fisheries management. One of the conditions of certification for Alaska salmon is to increase understanding of interactions between fishermen and Endangered, Threatened, or Protected species to reduce potential bycatch mortality. This includes the International Union for the Conservation of Nature red-listed seabirds, which for Alaska includes Marbled and Kittlitz's murrelets interacting with the gillnet salmon fishery.

SkipperScience, an extension of the Indigenous Sentinels Network, is a citizen science project involving many public, private, and tribal organizations. Observations and data are recorded in an app that provides non-scientists in remote locations a way to systematically record and share environmental and biological data. Data standards and protocols have been built in so that this data can be shared with scientists and managers. These organizations are partnering to create an app for gillnet fishermen to log murrelet observations, interactions and bycatch to continue sustainable harvest of Alaska seafood and access to markets requiring sustainability verification.

Summary of potential commercial benefits to the fishing community of the research results: This project will help to secure continued MSC certification of Alaska salmon, and provide valuable data about potential bycatch issues while educating and involving fishermen in the monitoring. This project can fulfill priority #2 of the SK Grant Program by addressing a need of Alaskan salmon fishermen, processors and marketers to maintain MSC certification. MSC certification is already a successful marketing tool for Alaska salmon, and provides consumers with verification that the salmon they buy is sustainably managed. This project will help maintain certification by meeting MSC best practice requirements for protected species, letting Alaskan fishermen benefit in the marketplace. Additionally, this project will serve to educate commercial fishermen about seabirds and conservation mitigation measures. Finally, this project can serve as a demonstration of the effectiveness of new technologies, such as the SkipperScience app, to provide low-cost data collection solutions that will open the door for future uses of such tools to achieve important sustainable management objectives.

Proposed Activities:

Goal and Objectives: ***The overall goal of this project is to demonstrate an example of the potential for community observations and monitoring to help meet research needs in targeted, data deficient situations.*** This goal will be accomplished through the following objectives:

- **Objective #1:** Develop a version of the SkipperScience app specific to gillnet-murrelet interactions, with input from seabird researchers and industry.
- **Objective #2:** Build an industry team willing to log their observations on the SkipperScience app by utilizing existing relationships with Alaska fishermen (gillnetters) to build buy-in and awareness of the tool.
- **Objective #3:** Use a risk-analysis framework to synthesize data collected from fishermen each season into a report and corresponding outreach materials.
- **Objective #4:** Share findings with fishermen and other partners through social media, newsletters, and industry meetings.
- **Objective #5:** Provide the data to seabird researchers and the MSC Assessment Team and seabird scientists as one component of meeting the MSC ETP species condition in order to ensure continued certification of Alaska salmon.
- **Objective #6**: Provide project management

Federal Funding Requested: $287,364.00

BACKGROUND

The Alaska Fisheries Development Foundation (AFDF) is the client for the Marine Stewardship Council (MSC) sustainability certification program for the Alaska salmon fishery. Alaskans benefit in the marketplace from the assurance that MSC certification provides to consumers that the Alaska salmon fishery is managed responsibly and sustainably. Sustainability certification has become a requirement to access certain seafood markets, particularly in the U.S. and Europe; without it, access to those markets is restricted. The MSC "theory of change" stipulates that where certified fisheries have not achieved the best practice level as defined by performance indicators under the MSC fishery standard, conditions for improvement are set by a third-party auditor or Conformity Assessment Body (CAB) that must be met in a specified time period. One of the conditions of the MSC certification for Alaska salmon, as set out by the assessment team from MRAG Americas, the CAB for the Alaska salmon fishery, is to build a better understanding of interactions between gillnet fishermen and Marbled and Kittlitz's murrelets, in order to minimize mortality rates from incidental catch. The current version of the MSC fishery standard requires assessment teams to consider a larger range of Endangered, Threatened, or Protected species (ETPs) species than previously. ETP designation now also applies to the International Union for the Conservation of Nature (IUCN) red-listed seabirds, even if they are not already protected by a given region or jurisdiction. Marbled and Kittlitz's murrelets have been added to that list, triggering this condition for improvement that must be met in order to retain the MSC certification of the Alaska salmon fishery. As a component of our Client Action Plan to meet this condition, AFDF plans to use the SkipperScience app to collect information on murrelet interactions in the Alaska salmon fishery that can be used to minimize seabird mortality.

SkipperScience is a citizen science project that allows observations and data to be recorded by fishermen using a mobile smartphone app, providing non-scientists in remote locations a way to systematically record and share environmental and biological data from their vessels in real-time while fishing. Data standards and protocols have been built in so that information participants collect can be communicated in a confidential way with scientists and managers. SkipperScience is a collaboration of public, private, and tribal organizations and is an extension of the Indigenous Sentinels Network (ISN) developed by the Tribal Government of the Aleut Community of St. Paul Island. ISN has been operating for over 20 years in remote Alaskan communities. SkipperScience was designed to accommodate changing industry and community needs, and has the technological capacity to provide an avenue for fishermen to securely record fishery-dependent data, such as seabird observations, habitat overlap with fishing activity, and potential bycatch.

STATEMENT OF NEED

The Alaska Fisheries Development foundation serves as the Client for the Marine Stewardship Council (MSC) Alaska Salmon Client Group. The current version of the MSC Standard (version 2.01) requires third party assessment teams to consider bycatch of endangered, threatened, or protected (ETP) species. ETP designation applies to the International Union for the Conservation of Nature (IUCN) red listed seabirds which include Kittlitz's Murrelets and Marbled Murrelets for Alaska. The IUCN lists these two species as near threatened and endangered, respectively. However, neither Kittlitz's or Marbled murrelets in Alaska are formally designated as an endangered, threatened or sensitive species under the US Endangered Species Act or the State of Alaska. In response to this update to the MSC standard, ***a condition was given to the certification of the Alaska salmon fishery regarding seabird-gillnet interactions and the potential for bycatch. The performance indicator for the condition requires that AFDF, as the client, lead efforts to better understand the potential impacts of bycatch on murrelets*** (Stern-Pirlot, et al., 2020). The condition set for the ETP species Management Performance Indicator states: "By the 4th annual audit, the client must demonstrate that there is a process in place to ensure a regular review of the potential effectiveness and practicality of alternative measures to minimize UoA and enhancement related mortality of ETP seabirds (particularly murrelet species), and they are implemented as appropriate."

Currently, very little data is available on seabird interactions with gillnets in Alaska, the potential risk of bycatch, or accurate mortality rate estimates. While the Alaska Marine Mammal Observing Program (AMMOP) run by NOAA Fisheries recorded limited data on bycatch of seabirds on gillnets in previous efforts (2012-14 in Southeast and 1991-92 in Prince William Sound), due to limited observer coverage, a maximum of two seasons of observations per relevant region, and relatively low levels of bycatch leading to large confidence intervals on the data, there continues to be inadequate information to fully understand any potential risk to seabirds from gillnetting, particularly for murrelet species.

At the same time, many regions that are of potential concern for bycatch also do not have recent, accurate murrelet population estimates. This leads to further difficulty in estimating mortality rates and understanding the impact the fishery may or may not be having on populations that are depressed, due to other impacts such as ocean warming, loss of habitat, changes in prey availability, and other factors (Piatt & Nasuland, 1995). The primary reason given by researchers and agency staff for lack of recent data is lack of funding for the programs that conduct this research, highlighting the need for finding other, creative and more affordable pathways to begin collecting more data on this issue.

In situations where data is deficient for impacted species or fisheries interactions, the MSC Standard has an established Risk-Based Framework (RBF) which is used when limited data is available to score relevant MSC performance indicators. The RBF includes a Productivity/Susceptibility Analysis (PSA) which is used to assess impacts on data deficient species, including ETP species. As a part of the 2018-2022 MSC Standard Review the PSA evaluation criteria were updated and improved for ETP species, including for seabirds such as murrelets. Under the proposed project the AFDF project team will ensure that the information collected is relevant for scoring MSC RBF indicators, or any other risk-analysis framework that may be used.

PROJECT DESCRIPTION

1) PROJECT GOALS AND OBJECTIVES

The overall goal of this project is to demonstrate an example of the potential for community observations and monitoring to help meet research needs in targeted, data deficient situations. This goal will be accomplished through the following objectives and tasks:

Objective #1: Develop a version of the SkipperScience app specific to gillnet-murrelet interactions, with input from seabird researchers and industry.

- Task 1-1: Identify key researchers and key industry partners.
- Task 1-2: Convene app development team, researchers, and industry.
- Task 1-3: Identify information needs from researchers and industry in order to make sure the data collected is as useful as possible and consistent with MSC best practice requirements while being reasonable for fishermen to log when at sea.
- Task 1-4: Develop Beta version of the app and begin testing.
- Task 1-5: Make the app available for download on download on iOS and Android mobile devices.

Objective #2: Build an industry team willing to log their observations on the SkipperScience app by utilizing existing relationships with Alaska fishermen (gillnetters) to build buy-in and awareness of the tool.

- Task 2-1: Work with key industry partners identified in objective #1 to further build out an industry team.
- Task 2-2: Work with industry team to develop an incentives program to compensate fishermen for their observations logged in the app.
- Task 2-3: Provide presentations to industry groups about the program and incentives program.
- Task 2-4: Provide training opportunities for participants in order to ensure data quality.
- Task 2-5: Fishermen log observations during gillnet seasons 2024 and 2025.

- Task 2-6: Distribute compensation to fishermen according to compliance with the incentives program.

Objective #3: Use a risk-analysis framework to synthesize data collected from fishermen each season into a report and corresponding outreach materials.

- Task 3-1: Identify the most relevant risk-analysis framework and methodology for data synthesis.
- Task 3-2: Produce an annual synthesis of each season's data as a report available to stakeholders and MRAG Americas Assessment Team.
- Task 3-3: At end of project, create final report with findings, including suggestions for reduction of incidental catch, for distribution and outreach in objective #4.

Objective #4: Share findings with fishermen and other partners through social media, newsletters, and industry meetings.

- Task 4-1: Hold a workshop to disseminate information to interested stakeholders and receive feedback on the project.
- Task 4-2: Create outreach materials for social media platforms, websites, and newsletters and disseminate information to partner organization networks.
- Task 4-3: Present results at industry group meetings as invited.

Objective #5: Provide the data to seabird researchers and the MSC Assessment Team and seabird scientists as one component of meeting the MSC ETP species condition in order to ensure continued certification of Alaska salmon.

- Task 5-1: Provide verbal updates on the project to the Assessment Team during each annual surveillance audit.
- Task 5-2: Synthesize results into a risk assessment framework and provide a report to the MSC Assessment Team.
- Task 5-3: Provide both raw data and a synthesis report to interested biologists engaged in seabird management for the US Fish and Wildlife Service and Alaska Dept. of Fish and Game.

Objective #6 - Provide project management

- Task 6-1: Hold monthly teleconferences with partners as part of project management.
- Task 6-2: Provide financial management.
- Task 6-3: Write grant progress reports and final report.

2) PROJECT IMPACTS

Short-term impacts/outcomes: This project will not only help to retain MSC certification of Alaska salmon, but it will also provide valuable data about potential bycatch issues relevant to the management Alaska salmon fishery, while directly educating and involving fishermen in the

monitoring. This project is extremely well positioned to fulfill the objective of the SK Grant Program by addressing a need of the Alaska salmon fishing industry from fishermen to processors and marketers to maintain MSC certification by taking action to meet the condition set forward by third party auditors of the fishery. MSC certification is already a successful marketing tool for Alaska salmon, and provides consumers with verification that the salmon they buy is coming from a sustainably managed fishery. AFDF and SkipperScience believe that the quality of data gathered will be sufficient for a risk-based analysis of relative risk of gillnet-murrelet interactions in areas of concern, which could lead to more informed management decisions as well as relevant information for the MSC Assessment Team to objectively verify that efforts are being made to better understand and minimize any potential impacts to murrelets from the Alaska salmon gillnet fishery.

Long-term impacts/outcomes: Demonstration of the effectiveness of new technologies, such as the SkipperScience app, to provide low-cost data collection solutions will open the door for future uses of such tools to achieve important conservation and management objectives. Because the MSC is a global standard for sustainable fisheries certification, this pilot project has the potential to provide an innovative model for evaluating ETP species impacts in data-deficient fisheries worldwide.

3) EVALUATION OF PROJECT

The project will be evaluated using performance measures for each of its objectives as follows.

Objective #1: Develop a version of the SkipperScience app specific to gillnet-murrelet interactions, with input from seabird researchers and industry
We will evaluate success of this objective using the following performance measures:

1. Seabird researcher(s) identified and included in the app design process.
2. Key industry representatives identified and included in the app design process.
3. Seabird interaction component of the SkipperScience app developed and available for download and use on iOS and Android mobile devices.

Objective #2: Build an industry team willing to log their observations using existing relationships with Alaska gillnetters to build buy-in and awareness of the tool.
We will evaluate success of this objective using the following performance measures:

1. List of industry participants willing to log observations.
2. Relevant metrics to evaluate the number of fishermen logging observations and number of observations uploaded during the 2024 and 2025 fishing seasons.
3. Successful distribution of promised incentives to fishermen upon completion of information logging requirements.

Objective #3: Use of a risk-analysis framework to synthesize data collected from gillnetters each season into a report and corresponding outreach materials
We will evaluate success of this objective using the following performance measures:

1. Annual report for stakeholders and the MSC Assessment Team synthesizing data collected and the relevance to potential risk-analysis frameworks.
2. Outreach materials (flyers, newsletters, social media posts) with easy-to-understand explanations of the data collected and its relevance to the minimization of ETP species bycatch.

Objective #4: Share findings with fishermen and other partners through social media, newsletters, and industry meetings
We will evaluate success of this objective using the following performance measures:

1. At least one social media post per month on each partner's platform sharing findings.
2. AFDF newsletter story about findings.
3. Attend at least one industry group meeting to present results.

Objective #5: Provide the data to seabird researchers and the MSC Assessment Team as one component of meeting the MSC seabird condition in order to ensure continued certification of Alaska salmon.
We will evaluate success of this objective using the following performance measures:

1. Presentation of synthesis to MSC Assessment Team at annual audits both during at and the end of the project.
2. A final written report synthesizing the data within a relevant risk-analysis framework.
3. Copy of all data and the synthesis report sent to seabird researchers.

Objective #6: Provide project management
We will evaluate success of this objective using the following performance measures:

1. All grant project financial and progress reports are completed.
2. All invoices and expenditures are tracked and paid on time.

4) NEED FOR GOVERNMENT FINANCIAL ASSISTANCE

While the SkipperScience app is currently in use for other applications, financial assistance is needed in order to make targeted improvements to enhance the app's effectiveness for collecting data to evaluate management risk in data-limited situations such as this, and to incentivize fishermen to use it in a fashion that develops consistency and standardization of data collection in order to remove barriers to future use for fishermen to continue collecting information for these species into the future. This project will also provide critical information to achieve the goal and strengthen relationships between researchers, industry, and other organizations in order to successfully address data deficient management questions.

5) FEDERAL, STATE, AND LOCAL GOVERNMENT ACTIVITIES OR PERMITS

No federal permits (i.e. ESA, MMPA) are required.

6) STATEMENT OF WORK

a) PROJECT DESIGN - METHODS

Overall Goal - demonstrate an example of the potential for community observations and monitoring to help meet research needs in targeted, data deficient situations.

Objective #1: Develop a version of the SkipperScience app specific to gillnet-murrelet interactions, with input from seabird researchers and industry.

- Task 1-1: Identify key researchers and key industry partners.
- Task 1-2: Convene app development team, researchers, and industry.
- Task 1-3: Identify data collection requirements for the SkipperScience app with assistance from researchers and industry in order to make sure the data collected is as useful as possible while being reasonable for fishermen to log when at sea.
- Task 1-4: Develop Beta version of the app and begin testing.
- Task 1-5: Make the SkipperScience bycatch app available for download on iOS and Android mobile devices.

In Quarters 1 and 2 of this project, the Aleut Community of Saint Paul Island and SalmonState will collaborate with AFDF to convene a design advisory team comprised of agency seabird and marine mammal biologists, bycatch experts, and engaged members of the fishing industry and other stakeholders to design a field data collection app to collect information on protected species bycatch in the AFDF MSC certified Alaska salmon fishery.

In Quarter 2, the team will develop the app. In Quarter 3, Following the development stage, the ISN SkipperScience bycatch app will be made available on iOS and Android mobile devices for offline data collection and synchronization with the ISN online database and data output as customizable spreadsheet reports for further analysis by AFDF.

Objective #2: Build an industry team willing to log their observations on the app by utilizing existing relationships with Alaska fishermen (gillnetters) to build buy-in and awareness of the tool.

- Task 2-1: Work with key industry partners identified in objective #1 to further build out an industry team.
- Task 2-2: Work with industry team to develop an incentives program to compensate fishermen for their logged observations in the app.

- Task 2-3: Provide presentations to industry groups about the program and incentives program.
- Task 2-4: Provide training opportunities for participants in order to ensure data quality.
- Task 2-5: Fishermen log observations during gillnet seasons 2024 and 2025
- Task 2-6: Distribute compensation to fishermen according to compliance with the incentives program.

In concurrence with many of the tasks in Objective #1, during Quarters 1-3 of year 1 the Project Partners will use existing relationships and credibility within the fishing industry to identify and connect with fishermen who are able to use the SkipperScience tool reliably while on the water. This will be done via word of mouth, traveling to communities to speak with key fishermen, and reaching out to key groups via social media, radio ads, newsletters, and other outreach platforms as identified by the Project Partners.

During Quarter 2 of the project, the Project Partners will work with key industry leaders to develop an incentives program that is compelling to fishermen and builds on best practices in the literature and from incentive programs that have occurred in other fisheries. Starting in Quarter 3 and continuing through the project as needed, Project Partners will provide in person or virtual training opportunities for participating fishermen about how to use the app to help ensure high-quality data collection. Partners may travel to communities to provide these training sessions if participants wish, as well as being accessible via phone for one-on-one help as needed.

The ASCPI/Skipper Science team will provide ongoing support for the duration of the project including modifications and upgrades to the Beta version of the SkipperScience bycatch app as lessons are learned from initial deployments.

Objective #3: Use a risk-analysis framework to synthesize data collected from fishermen each season into a report and corresponding outreach materials.

- Task 3-1: Identify the most relevant risk-analysis framework and methodology for data synthesis.
- Task 3-2: Produce an annual synthesis of season's data as a report available to stakeholders and the MSC Assessment Team.
- Task 3-3: At end of project, create final report with findings, including suggestions for reduction of incidental catch, for distribution and outreach in objective #4.

Starting in Quarter 3, AFDF will review fisheries management literature and speak with the MSC Assessment Team to identify the most relevant risk-analysis framework such as an Ecological Risk Assessment or MSC Risk-Based Framework. After completion of the first season of data collection (Quarter 5), Project Partners will work together to synthesize the data using the excel sheet outputs of the SkipperScience app and partners will create a report detailing first year

results and share out with stakeholders and the Assessment Team via email. In Quarter 8, a final analysis of all collected data will occur using methodologies identified in Task 3-1.

Objective #4: Share findings with fishermen and other partners through social media, newsletters, and industry meetings.

- Task 4-1: Hold a workshop to disseminate information to interested stakeholders and receive feedback on the project.
- Task 4-2: Create outreach materials for social media platforms, websites, and newsletters and disseminate information to partner organization networks.
- Task 4-3: Present results at industry group meetings as invited.

In Quarter 6, once the first season of data has been collected and synthesized, Project Partners will host a workshop with fishermen, biologists, NGOs and other stakeholders to share initial project findings and receive feedback and answer questions on the project. Starting in Quarter 5, outreach materials in a variety of digital, print, and audio formats will be produced and shared throughout the remainder of the project and presentations will be made to industry groups if invited.

Objective #5: Provide the data to seabird researchers and the MSC Assessment Team and seabird scientists as one component of meeting the MSC ETP seabird condition in order to ensure continued certification of Alaska salmon.

- Task 5-1: Provide verbal updates on the project to the Assessment Team during each annual surveillance audit.
- Task 5-2: Synthesize results into a risk assessment framework and provide a report to the MSC Assessment Team.
- Task 5-3: Provide both raw data and a synthesis report to interested biologists at US Fish and Wildlife Service and Alaska Dept. of Fish and Game.

In Quarters 1 and 5, a comprehensive verbal report will be given to the Assessment Team. In Quarter 1, AFDF will introduce the team to the project and in Quarter 5, an update on the project and results to date will be provided. A final report on the project will be provided to the Assessment Team in 2025, after the funding period has ended. AFDF will also provide a written report to the MSC Assessment Team using the risk assessment framework analysis at the end of the project and both the project raw data, as well as a synthesis report to the US Fish and Wildlife Service and the Alaska Dept. of Fish and Game.

Objective #6 - Provide project management

- Task 6-1: Hold monthly teleconferences with partners as part of project management.
- Task 6-2: Provide financial management.
- Task 6-3: Write grant progress reports and final report.

AFDF will organize monthly (or as needed) teleconferences with Project Partners and other relevant parties in order to stay on the project schedule, and provide financial management throughout the project. AFDF will also write grant progress reports and the final report.

b) RESPONSIBLE PARTIES

See the initials of the names for each person responsible for the tasks listed in the Timeline spreadsheet included in the Supporting Documents (also below).

Alaska Fisheries Development Foundation
Using technology to fulfill research needs related to seabird interactions in the Alaska salmon fishery

Timeline: October 1, 2023 - Sept. 30, 2025

Description of Goals/Objectives/Tasks	2023 Q1	2024 Q2	2024 Q3	2024 Q4	2024 Q5	2025 Q6	2025 Q7	2025 Q8	Responsible Party (initials)
GOAL: Demonstrate an example of the potential for community observations and monitoring to meet research needs in targeted, data deficient situations									
Objective #1: Develop a version of the SkipperScience app specific to gillnet-murrelet interactions, with input from seabird researchers and industry									
Task 1-1: Identify key researchers and key industry partners.	■	■							JD, RK, HW, LB
Task 1-2: Convene app development team, researchers, and industry.	■	■							JD, HW
Task 1-3: Identify information needs from researchers and industry in order to make sure the data collected is useful.	■	■							BR, HMG, LD
Task 1-4: Develop Beta version of the app and begin testing.		■							BR, HMG, LD
Task 1-5: Make app available for download on iOS and Android mobile devices.			■						BR, HMG, LD
Objective #2: Build an industry team willing to log their observations on the SkipperScience app using existing relationships with Alaska gillnetters to build buy-in and awareness of the tool									
Task 2-1: Work with key industry partners IDed in objective #1 to further build out an industry team.	■	■							JD, HW, LB
Task 2-2: Work with industry team to develop an incentives program to compensate fishermen.		■							JD, HW, LB
Task 2-3: Provide presentations to industry groups about the program and incentives program.	■	■	■						JD, HW, LB, HMG
Task 2-4: Provide training opportunities for participants in order to ensure data quality.		■	■	■	■	■	■		JD, HW, LB, HMG
Task 2-5: Fishermen log observations during gillnet seasons 2024 and 2025.		■	■	■	■	■	■		BR, HMG, LB
Task 2-6: Distribute compensation to fishermen according to compliance with incentives program.		■	■	■	■	■	■		JD, HW, ER
Objective #3: Use a risk-analysis framework to synthesize data collected from gillnetters each season into a report and corresponding outreach materials									
Task 3-1: Identify the most relevant risk-analysis framework and methodology for data synthesis.			■	■					JD, HW
Task 3-2: Produce annual synthesize of season's data as a report available to stakeholders and the Assessment Team.					■	■			JD, HW, LD, HMG, LB
Task 3-3: At end of project, create final report with findings, including suggestions for reduction of incidental catch								■	JD, HW, LD, HMG, LB
Objective #4: Share findings with fishermen and other partners through social media, newsletters, and industry meetings									
Task 4-1: Hold a workshop to disseminate information to interested stakeholders and receive feedback on the project.						■			JD, RK, HW, LD, HMG, LB
Task 4-2: Create outreach materials for social media platforms, websites, and newsletters and disseminate information.					■	■	■	■	HW, HMG, LB
Task 4-3: Present results at industry group meetings as invited.					■	■	■	■	JD, HW, HMG, LB
Objective #5: Provide the data to seabird researchers and the MSC auditors as one component of meeting the MSC ETP seabird condition in order to ensure continued certification of Alaska salmon fishery									
Task 5-1: Provide verbal updates on the project to the Assessment Team during each annual surveillance audit.	■				■				JD, HW
Task 5-2: Synthesize results into a risk assessment framework and provide report to MSC Assessment Team								■	JD, HW
Task 5-3: Provide both raw data and a synthesis report to interested biologists at USFWS and ADF&G								■	JD, RK, HW
Objective #6: Provide Project Management									
Task 6-1: Hold monthly teleconferences with partners as part of project management	■	■	■	■	■	■	■	■	JD, HW
Task 6-2: Provide financial management.	■	■	■	■	■	■	■	■	ER
Task 6-3: Write grant progress reports and final report.	■	■		■		■		■	JD, HW

JD=Julie Decker, RK=Robb Kaler, ER=Ekaterina Ratzlaff, HW=Hannah Wilson, LD=Lauren Divine, HMG=Hannah-Marie Garcia, BR=Bruce Robson, LB=Lindsey Bloom

c) PROJECT MILESTONES

See the Timeline spreadsheet included in the Supporting Documents (also above).

6) PROJECT MANAGEMENT

General: Assignment of duties to each group/individual is addressed under Statement of Work and project Timeline. Also, Letters of Collaboration are included in the Supporting Documents on behalf of all organizations. The project team includes participation of USFWS seabird biologists, ENGOs, for maximum application of the SkipperScience tool to collect relevant and useful data. The project team will meet monthly via teleconference to communicate project progress.

AFDF
Since its creation in 1978, AFDF has been dedicated to identifying problems common to the Alaska seafood industry and developing efficient, sustainable solutions that provide benefits to the economy, environment and communities. AFDF has a long and successful history of receiving funding from NOAA to work with the seafood industry and researchers to develop Alaska's fisheries for the broader public benefit. Of particular note, Section 2(a)1 of the S-K Act, defines a "person" who is eligible to apply for the funds as including, "(B) any fishery development foundation or other private nonprofit corporation in Alaska". By calling out fishery development foundations in Alaska, the S-K Act clearly shows the original intention to support the work of organizations like AFDF to "promote and develop" US fisheries.

AFDF Board of Directors
The AFDF Board of Directors is composed of 13 members: 5 harvesters, 5 processors, and 3 support sector representatives. This structure gives the organization a broad representation of the seafood industry which is a strength in understanding and connecting to the industry as a whole. The AFDF Board manages the Executive Director and provides oversight, direction, and feedback on projects when required.

Principle Investigator: Julie Decker, Executive Director, AFDF
Decker has over 25 years of experience working in the Alaska seafood industry and is currently the Executive Director for AFDF. Her family owns and operates a commercial fishing vessel (gillnet) in Southeast Alaska. Decker has a bachelor degree (BA) from Northwestern University and a Master of Public Administration (MPA) with a concentration in natural resource policy from the University of Alaska Southeast. Decker was appointed by Governor Walker to the Alaska Mariculture Task Force and elected to serve as its Chair. On this project, Decker will be responsible for general oversight and management of the project, and outreach efforts to the industry and other stakeholders. See resumé in Supporting Documents.

Robb Kaler, Seabird Specialist/Wildlife Biologist, U.S. Fish and Wildlife Service,
Kaler received his MSc degree at Kansas State University in 2007 where he studied the population demography of reintroduced island ptarmigan at Agattu Island, western Aleutian Islands, Alaska. After several more summers studying breeding Kittlitz's murrelets at Agattu, he joined the U.S. Fish and Wildlife Service in 2010 and works as a seabird specialist in the Division of Migratory Bird Management in Anchorage.

Ekaterina Ratzlaff, Finance Director, AFDF - Ratzlaff has over 15 years of analytical, financial and operations management experience. She is responsible for financial management of AFDF such as accounting, budgeting, grant financial management, annual reviews of financial statements, and IRS reporting. . Ratzlaff has managed approximately $5,000,000 in grants for AFDF to date. She will provide financial oversight of this grant, including payments to all subcontractors and financial reporting to NOAA.

Hannah Wilson, Development Director, AFDF - Wilson holds a BA in Geology-Environmental Studies from Whitman College and an MS in Resource Conservation from the University of Montana. At AFDF, Wilson works on research related to mariculture and ALaska Salmon and cod sustainability certifications, outreach and communications. On this project, Wilson will be the AFDF lead in accomplishing tasks, including grant management, the development of final deliverables and outreach materials, grant reporting, drafting subcontracts, and outreach efforts to the industry and other stakeholders.

Dr. Lauren Divine, Director of Ecosystem Conservation, Aleut Community of St Paul Island, lmdivine@aleut.com
Lauren Divine is the Director for the Ecosystem Conservation Office for the Aleut Community of St. Paul Island, a Federally recognized Tribe in the Pribilof Islands, Alaska. She is from Savannah, Georgia and has lived in Alaska (Seward, Fairbanks, Anchorage, St. Paul Island) since 2011. She enjoys hunting reindeer on St. Paul, fishing for salmon in southcentral, and hiking and rock climbing. As part of her position with the Tribal Government, she seeks to span the boundaries across western sciences; local and traditional knowledge; tribal, federal and state management; and stakeholder engagement through community-based and citizen science programs. Lauren seeks to strengthen relationships across these boundaries in order to better serve the community, wildlife, and overall marine and terrestrial ecosystems of St. Paul, the Bering Sea, and pan-Arctic.

Hannah-Marie Garcia, ISN Coordinator, Aleut Community of St Paul Island, hgarcia@aleut.com
Hannah-Marie Garcia is from Charleston, South Carolina but has lived in five other states before finally finding her home here in Alaska. She is currently the Indigenous Sentinels Network (ISN) Coordinator for the Aleut Community of St. Paul Island Tribal Government (ACSPI). Prior to her current position, she was a 2021-2022 Alaska Sea Grant Fellow. She holds a B.A. in Environmental Studies & Sustainability and Anthropology from the University of the South, Sewanee. Her Master's in Marine Policy is from the University of Delaware and focused on improving the engagement of Native American Tribes in the development of offshore wind power in the Mid-Atlantic. Hannah-Marie has 7+ years of experience in scientific data collection, analysis, and science communication; experience with tribal engagement and facilitating collaboration between diverse audiences.

Bruce Robson, ISN Technical Director, Community and Ecology Resources, LLC., mandybruce@co-eco.com
Bruce Robson is Co-director of Community and Ecology Resources, LLC (CoEco), an independent consultancy serving clients globally by providing technical consulting in marine wildlife and fisheries conservation. Mr. Robson holds an MS in Fisheries Science from the University of Washington. Prior to founding CoEco in 2004 he worked for 14 years as a research biologist in

the Alaska Ecosystem Program at the NOAA Marine Mammal Laboratory in Seattle. As Technical Director of the Indigenous Sentinel Network (ISN) Bruce leads the on the design and maintenance of mobile data collection apps for iOS and Android platforms and assists Indigenous and community-based organizations with implementing citizen science programs. CoEco has also worked with WWF and other international NGO clients on all aspects of stakeholder engagement in dozens of Marine Stewardship Council certifications. Robson has been a lead NGO consultant for WWF on the last two 5-year reviews of the MSC Standard. In 2022 he consulted directly with the MSC on revisions to the MSC Risk-Based Framework. On this project Robson will lead the development of a new component of the ISN SkipperScience app for fishers to record seabird bycatch information in a context that is relevant and applicable to MSC sustainability certification requirements.

Aaron Poe, Network Program Officer, Aleutian Bering Sea Initiative (ABSI),
apoe@alaskaconservation.org
Aaron Poe has worked in Alaska for almost 20 years specializing in natural resource management as well as partnership development and community engagement. His efforts have largely focused on helping agencies better understand risks to species and habitats as well as the value that these natural resources have for the communities who depend on them. In his current position as the Coordinator for the Aleutian and Bering Sea Islands Landscape Conservation Cooperative, he is focused on building partnerships between agency managers, tribes, researchers, industry and communities to address large-scale issues like climate change and marine vessel traffic in the Aleutian Islands and Bering Sea.

Lindsey Bloom, Program Coordinator, Salmon Habitat Information Program,
lindsey@bloominalaska.net
Born and raised in Juneau, Alaska, Bloom is a second generation Bristol Bay gillnet captain. She fished there for over a decade before anchoring down in Southeast Alaska with her husband and two young children to continue their salmon fishing business in a more family-friendly fishery. With an M.A. in Management and Sustainable Development, Lindsey has worked with Alaska fishermen, fishing organizations, tribal organizations, businesses, and nonprofits. Her focus has been on young fishermen and fish habitat policy.

8) PARTICIPATION BY PERSONS OR GROUPS OTHER THAN THE APPLICANT

Other participants in this grant will include industry representatives from the Alaska salmon gillnet fishery. Biologists other than the USFWS project partner listed above may also be invited to provide feedback on development of the app and will be contacted when results and data are disseminated.

9) OUTREACH AND EDUCATION

Outreach and education is a backbone of this project, as laid out in Objectives #1-#5 and key to meeting project goals. Outreach to and collaboration with seabird biologists as necessary in order to make sure that data collected is as useful as possible and seen as legitimate by researchers. Successful outreach to fishermen in order to create by-in and willingness to use the SkipperScience app is required to collect data along with educating fishermen about how to use the app and the relevance of the project to the industry. Education components will also cover seabird identification, the importance of seabird conservation, and facilitated group discussion about potential mitigation efforts. Consistent reporting back to industry groups about results of the project will build and maintain trust between project partners, industry groups, and researchers. Finally, successful dissemination of information to the Assessment Team is key to addressing the MSC condition on the fishery and maintaining certification.

As laid out in the Project Evaluation section, outreach and education activities will include a variety of platforms and methods. Regular meetings with both project partners and other key participants such as key fishermen and biologists will occur in order to provide ongoing feedback. Project partners will make frequent use of their social media and newsletter platforms to provide project updates and recruit participants. Partners will also attend industry group meetings and other relevant industry events to provide information about the project. Virtual or in-person training events will occur in order to familiarize fishermen with the app ahead of fishing season.

10) DISSEMINATION OF RESULTS

See Project Design: Methods section, as well as Objective 4. Results will be disseminated through presentations to stakeholders, a stakeholder workshop, social media, and newsletter platforms. The results provided to the MSC Assessment Team in fulfillment of the ETP seabird condition will also be summarized in the MSC Surveillance Audit reports which are publically available on the MSC Track a Fishery website for the Alaska salmon fishery.

11) DATA-SHARING PLAN

All data will be collected on vessels using iOS or Android mobile devices and archived as appropriate in the internal ACSPI ISN/BeringWatch database. Approved data summaries will be posted to the AFDF website. Environmental data and information collected or created under this grant agreement will be made discoverable by and accessible to the general public within two years, free of charge or at no more than the cost of reproduction. This information will be available on the ACSPI and AFDF websites in downloadable excel format along with appropriate metadata based on ACSPI's data management standards. Any synthesis and analysis reports will also be made publicly available. Data made available to the public will be presented in such a way that protects the anonymity of individual fishermen. Data will be presented in aggregate form only.

The SkipperScience program includes the rigorous quality control assurance system that has a proven success in maintaining a high level of quality assurance in the ISN/BeringWatch database. The quality control and data validation procedures are part of the SkipperScience training and involve spot checks and data verification by the project team and agency representatives. Data correction occurs initially in the online database using the Quality Control and Corrective Action Reporting (QCCAR) module. When data are missing, an email is sent to the observer indicating the missing information with a request to complete necessary fields or details of the observation. The project team may contact the fishermen to obtain and correct or amend information as needed.

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Alaska Fisheries Development Foundation
Using technology to fulfill research needs related to seabird interactions in the Alaska salmon fishery
Budget - 2022-10-31
October 1, 2023 - September 30, 2025

Expense	# of Units	Unit Cost	Total	Request from NOAA	In-Kind Match	Project Total	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Total
Personnel															
AFDF PI (hours)	80.0	$ 47.17	$ 3,962	$ 3,962	$ -	**$ 3,962**	$ 472	$ 472	$ 472	$ 472	$ 519	$ 519	$ 519	$ 519	**$ 3,962**
AFDF Finance Director(hours)	160.0	$ 34.69	$ 5,829	$ 5,829	$ -	**$ 5,829**	$ 694	$ 694	$ 694	$ 694	$ 763	$ 763	$ 763	$ 763	**$ 5,829**
AFDF Development Director (hours)	480.0	$ 34.38	$ 17,325	$ 17,325	$ -	**$ 17,325**	$ 2,063	$ 2,063	$ 2,063	$ 2,063	$ 2,269	$ 2,269	$ 2,269	$ 2,269	**$ 17,325**
Subtotal Personnel			**$ 27,116**	**$ 27,116**	**$ -**	**$ 27,116**	$ 3,389	$ 3,389	$ 3,389	$ 3,389	$ 3,389	$ 3,389	$ 3,389	$ 3,389	**$ 27,116**
Fringe benefits															**$ -**
Fringe - AFDF PI		28.53%	$ 1,130	$ 1,130	$ -	**$ 1,130**	$ 141	$ 141	$ 141	$ 141	$ 141	$ 141	$ 141	$ 141	**$ 1,130**
Fringe - AFDF Finance Director		28.18%	$ 1,642	$ 1,642	$ -	**$ 1,642**	$ 205	$ 205	$ 205	$ 205	$ 205	$ 205	$ 205	$ 205	**$ 1,642**
Fringe - AFDF Dev. Director		27.06%	$ 4,688	$ 4,688	$ -	**$ 4,688**	$ 586	$ 586	$ 586	$ 586	$ 586	$ 586	$ 586	$ 586	**$ 4,688**
Subtotal Fringe Benefits			**$ 7,461**	**$ 7,461**	**$ -**	**$ 7,461**	$ 933	$ 933	$ 933	$ 933	$ 933	$ 933	$ 933	$ 933	**$ 7,461**
Travel															**$ -**
Travel - in-state round trips	4	$ 1,500	$ 6,000	$ 6,000	$ -	**$ 6,000**	$ 1,500	$ -	$ 1,500	$ -	$ 1,500	$ -	$ 1,500	$ -	**$ 6,000**
Subtotal Travel			**$ 6,000**	**$ 6,000**	**$ -**	**$ 6,000**	$ 1,500	$ -	$ 1,500	$ -	$ 1,500	$ -	$ 1,500	$ -	**$ 6,000**
Equipment															**$ -**
NA			$ -	$ -	$ -	**$ -**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ -**
Subtotal Equipment			**$ -**	**$ -**	**$ -**	**$ -**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ -**
Supplies															**$ -**
Commercial printing (pages)	1000	$ 2	$ 2,000	$ 2,000	$ -	**$ 2,000**	$ -	$ -	$ 1,000	$ -	$ -		$ 1,000	$ -	**$ 2,000**
Subtotal Supplies			**$ 2,000**	**$ 2,000**	**$ -**	**$ 2,000**	$ -	$ -	$ 1,000	$ -	$ -		$ 1,000	$ -	**$ 2,000**
Contractual															**$ -**
SalmonState	1	$ 50,000	$ 50,000	$ 50,000	$ -	**$ 50,000**	$ 6,250	$ 6,250	$ 6,250	$ 6,250	$ 6,250	$ 6,250	$ 6,250	$ 6,250	**$ 50,000**
Aleut Community of St. Paul Island	1	$ 75,000	$ 75,000	$ 75,000	$ -	**$ 75,000**	$ 15,000	$ 15,000	$ 15,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	**$ 75,000**
Commercial fishermen (data collection fee)	25	$ 4,000	$ 100,000	$ 100,000	$ -	**$ 100,000**	$ -	$ -	$ -	$ 50,000	$ -	$ -	$ -	$ 50,000	**$ 100,000**
Subtotal Contracual			**$ 225,000**	**$ 225,000**	**$ -**	**$ 225,000**	$ 21,250	$ 21,250	$ 21,250	$ 62,250	$ 12,250	$ 12,250	$ 12,250	$ 62,250	**$ 225,000**
Other															**$ -**
Communications (Zoom, phones, website)	24	$ 200	$ 4,800	$ 4,800	$ -	**$ 4,800**	$ 600	$ 600	$ 600	$ 600	$ 600	$ 600	$ 600	$ 600	**$ 4,800**
Advertisements	10	$ 250	$ 2,500	$ 2,500	$ -	**$ 2,500**	$ 313	$ 313	$ 313	$ 313	$ 313	$ 313	$ 313	$ 313	**$ 2,500**
Subtotal Other			**$ 7,300**	**$ 7,300**	**$ -**	**$ 7,300**	$ 913	$ 913	$ 913	$ 913	$ 913	$ 913	$ 913	$ 913	**$ 7,300**
Total Direct Charges			**$ 274,877**	**$ 274,877**	**$ -**	**$ 274,877**	**$ 27,985**	**$ 26,485**	**$ 28,985**	**$ 67,485**	**$ 18,985**	**$ 17,485**	**$ 19,985**	**$ 67,485**	**$ 274,877**
Indirect Charges - de minimus 10% of MTDC	**1.0**	**10%**	**$ 12,488**	**$ 12,488**	**$ -**	**$ 12,488**	$ 1,561	$ 1,561	$ 1,561	$ 1,561	$ 1,561	$ 1,561	$ 1,561	$ 1,561	**$ 12,488**
Total Budget			**$ 287,364**	**$ 287,364**	**$ -**	**$ 287,364**	**$ 29,546**	**$ 28,046**	**$ 30,546**	**$ 69,046**	**$ 20,546**	**$ 19,046**	**$ 21,546**	**$ 69,046**	**$ 287,364**

Travel - per in-state round-trip	# nights	unit cost	Subtotal
Airfare	1	$ 600	$ 600
Hotel	3	$ 200	$ 600
Per diem	3	$ 100	$ 300
Car rental	0	$ 50	$ -
Total			**$ 1,500**

This is to certify that the Fishery Management of:

Alaska Pacific Halibut Commercial Fishery

Has been evaluated by Global Trust Certification Limited, INAB Accreditation Number 6002, and the process was found to meet the requirements of the:

Certified Seafood Collaborative (CSC)

Responsible Fisheries Management Certification Program, Fisheries Standard Version 1.3

The client for the fishery is:

Alaska Fisheries Development Foundation

P.O. Box 2223, Wrangell, AK 99929, USA

SCOPE:

Species:	***Hippoglossus stenolepis***
Common Name:	**Pacific halibut**
Geographical Range of Fishing Operation:	**U.S. Federal and State waters within the Gulf of Alaska (GOA) and Bering Sea & Aleutian Islands (BSAI)**
Stock:	**Eastern North Pacific**
Method(s) of Capture:	**Benthic longline, Pots & Troll**
Management System:	**U.S. Federal and State fisheries within the Gulf of Alaska and the Bering Sea & Aleutian Islands managed by:** **▪ International Pacific Halibut Commission (IPHC)** **▪ National Marine Fisheries Service (NMFS)** **▪ North Pacific Fishery Management Council (NPFMC)** **▪ Alaska Department of Fish and Game (ADFG) and Board of Fisheries (BOF)**
Registration No:	**AK/HAL/002/2017**
Certification Date:	**03rd June 2022**
Certificate Issue Date:	**03rd November 2022**
Re-Assessment Due Date:	**To commence by 09th October 2022**
Certificate Expiry Date:	**09th April 2023**

Signed on behalf of Global Trust Certification:

Thomas White

Thomas White

Senior Manager, Supply Chain Food Safety - SEAFOOD

This is to certify that the Fishery Management of:

U.S. Alaska Pacific Sablefish Commercial Fisheries

Has been evaluated by Global Trust Certification Limited, INAB Accreditation Number 6002, and the process was found to meet the requirements of the:

Certified Seafood Collaborative (CSC)

Responsible Fisheries Management Certification Program, Fisheries Standard Version 1.3

The client for the fishery is:

Alaska Fisheries Development Foundation

P.O. Box 2223, Wrangell, AK 99929, USA

SCOPE:	
Species:	***Anoplopoma fimbria***
Common Name:	**Sablefish (black-cod)**
Geographical Range of Fishing Operation:	**U.S. Federal and State fisheries within the Gulf of Alaska (GOA) and the Bering Sea & Aleutian Islands (BSAI)**
Stock:	**Eastern Pacific**
Method(s) of Capture:	**Benthic longline, Pot, Bottom Trawl**
Management System:	**U.S. Federal and State fisheries within the Gulf of Alaska and the Bering Sea & Aleutian Islands managed by:** ▪ **National Marine Fisheries Service (NMFS)** ▪ **North Pacific Fishery Management Council (NPFMC)** ▪ **Alaska Department of Fish and Game (ADFG) and Board of Fisheries (BOF)**
Registration No:	**AK/SAB/002/2017**
Certification Date:	**03rd June 2022**
Certificate Issue Date:	**03rd November 2022**
Re-Assessment Due Date:	**To commence by 09th October 2022**
Certificate Expiry Date:	**09th April 2023**

Signed on behalf of Global Trust Certification:

Thomas White

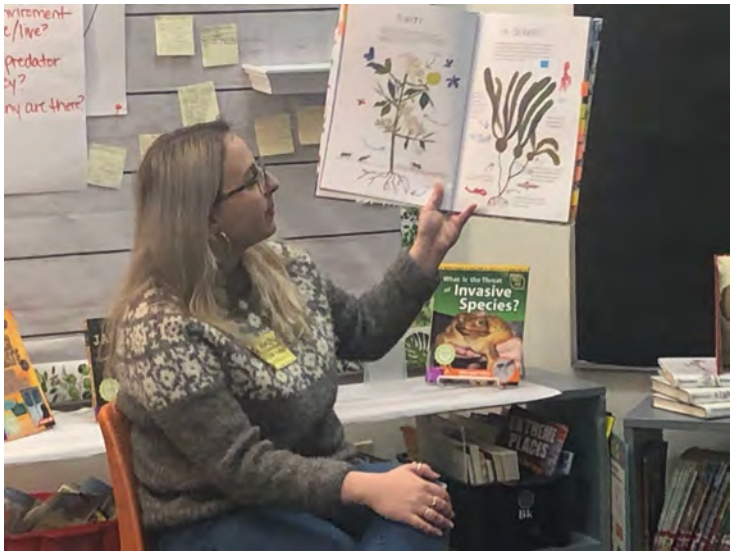
Thomas White

Senior Manager, Supply Chain Food Safety - SEAFOOD

Kodiak November 2022
Robin McKnight, Alaska Sea Grant Fellow
Mariculture Development Coordinator

Pictured top row: *With a Little Kelp From Our Friends* reading program at Main Elementary

Pictured bottom row: assisting MARINER CAT-1 team with outplanting at the Kodiak farm site



Shellfish Farming on Alaska's Coast

Exploring Scaling Up

What do we mean when we talk about scale?

There are many ways to think about and define scale. As it relates to shellfish farming and cultivation in Alaska, scale is a question of appropriate size.

We can see it as a question of defining the maximum amount or maximum density of shellfish at a farm that is possible without causing significant harm to the surrounding ecosystem.

This brings up questions like...

1. What is the appropriate size for shellfish mariculture farms in Alaska?

2. Farmed shellfish like oysters eat phytoplankton just like the native shellfish... will farmed shellfish out-compete the native species?

It's all specific to place...

The point at which cultivated shellfish in an area would drastically change the balance of an ecosystem is very site specific. Characteristics like farm size and ecosystem area size really matter...

Here in Alaska, shellfish mariculture takes place in areas that are relatively small compared to the bays, inlets, straits, and waterbodies they are located so **there is not an immediate concern of resource depletion or outcompeting other organisms that eat phytoplankton.**

What about other places?

There are a some studied locations, such as in Asia, where the size and prevalence of shellfish farming has depleted resources in the surrounding areas. However, the relative scale at which shellfish farming takes place in Alaska is small compared to these locations.

Potential impacts can be identified and prevented under the current permitting requirements, which provide for public comment and agency scrutiny for proposed sites.

Alaska has over 30,000 square miles of shoreline

Currently, authorized aquatic farm leases only make up just over 1,200 acres of area in Alaska's waters, which is roughly 2 square miles.
INSERT MAP or PIC (in progress)

Want to learn more? Visit us:

The Alaska Mariculture Alliance at alaskamariculture.org

Photo Courtesy of Alaska Seafood

Mariculture and Marine Mammal Entanglement

What is marine mammal entanglement?

Entanglement is when a marine mammal becomes wrapped in either marine debris or gear associated with a marine activity, such as fishing line.

This can limit an animal's movement and weigh it down, often resulting in harm to the animal.

While it's not impossible that marine mammal entanglement will happen in mariculture gear in Alaska, it is not likely to occur often.

In Alaska currently, there is no known marine mammal entanglement incident in mariculture gear.

- Alaska has a large area of coastal and marine waters and mariculture gear makes up a small percentage of these spaces.
- The permitting process for an aquatic farm site requires that overlap between potential mariculture sites and marine mammal habitat is examined for impact before a lease is issued.
- There are statutes, regulations, policies, and guidelines in place to protect wildlife or their habitats "from being significantly impacted" by mariculture farms. (Sec. 16.40.105.)

Want to learn more? Visit us:

The Alaska Mariculture Alliance at alaskamariculture.org

Photo Courtesy of Dmitry Kokh

Book Reading Program

With a Little Kelp From Our Friends: The Secret Life of Seaweed
By Mathew Bate

Time: ~1hr.

Materials: *With a Little Kelp From Our Friends* book, paper, drawing utensils, access to whiteboard or visual aid that can be drawn on

Target audience:
4th and 5th grade students in Alaska schools in coastal communities (could also apply to a public library reading program, but audience is self-selecting in this space, requires flexibility and coordination with library staff)

Program narrative:
This program is focused on sharing the important roles that macroalgae species play in our world through a reading from the book *With a Little Kelp From Our Friends: The Secret Life of Seaweed* by Mathew Bate followed by a brief discussion and creative activity. This program explores both the ecological and social significance of seaweed and kelp species through providing a brief overview of what seaweed is, what it needs to grow, and how humans can use it. Finally, this program is focused on generating an understanding that coastal communities are able to utilize seaweed cultivation for economic development and sustainability efforts.

Program learning objectives (AFDF):
- Identify what seaweed and kelp are and what they require to survive
- Identify environmental/ ecological role of seaweed
- Identify how seaweed can be used by humans
- Generate excitement about potential connections between human and ocean resources

Application to K-12 Science Standards for the State of Alaska (as adopted in 2019):
This program addresses several of the learning criteria and standards that are described in the State of Alaska K-12 Science Standards for 4th and 5th graders.
Please see the entire table of learning standards that this program applies to at the end of this document.
https://education.alaska.gov/standards/science

Program Framework
To be altered by a particular presenter or educator, flexible depending on the time allowed for presentation and audience.

Part One: Reading (25-35 min)

1. Read selected pages
    a. See attached photos
2. Questions
    a. Prepare for Q&A from audience (depending on group size and age, limit questions to 10 minutes)

Part Two: Discussion and Activity (25-35 min)

3. Reiterate how seaweed can be used and also what seaweed needs
    a. So many ways we can use the power of seaweed
        i. Food for humans and animals, habitat for other sea creatures, even to help clean our oceans, possibly other fun inventions like plastic or fuel for our cars
        ii. Alaska has farms that grow seaweed- all over the state, even a few in Kodiak
            1. Over 500,000 pounds sold from all over Alaska in 2021 (State of Mariculture, AKSG)
            2. Almost $300,000 in 2021 (State of Mariculture, AKSG)
            3. So not just good for the environment but also could be really good for us too!
    b. What does seaweed need to grow
        i. Not much- seaweed and kelp photosynthesize
            1. Photosynthesis - energy from light! Take carbon dioxide and turn it into water and sugars.
            2. This process also produces oxygen! Have students take two big breaths. Explain that about ½ of the oxygen we breathe (one breath) comes from marine algae!
        ii. Seaweed does need access to sunlight, salt water, and something to hold onto
            1. Different parts of seaweed- blade, thallus (whole body), stipe (stem), holdfast, float
            2. Alaska is perfect environment for many seaweed and kelp species
4. Activity: design your own kelp farm
    a. Framework: allow students to use paper, markers, etc. and take a few minutes to draw out their own seaweed farm designs
        i. Potential framing questions and instructions: now that you know about seaweed and kelp and its ability to be farmed- design your own farm using art supplies! How would you design your seaweed farm to make sure the seaweed gets what it needs to grow? What would you do with the seaweed once it's grown?
        ii. Ask students to share out their ideas and designs

iii. (If time allows) Can you think of any other inventions that we could use seaweed and kelp for?

Table 1. Relevant application to K-12 Science Standards for the State of Alaska (as adopted in 2019):

Grade	Learning Standard	Program relevance
4th	Crosscutting concepts: patterns; cause and effect; energy and matter; systems and system models; interdependence of science, engineering, and technology; and influence of engineering, technology, and science on society and the natural world are called out as organizing concepts for these disciplinary core ideas.	Program addresses the connection between human activity in ocean spaces and the use of natural resources but also addresses some of the physical, biological elements of macroalgae as it relates to marine ecosystems. Finally, this program is able to combine these concepts to look at the nexus of technology/ engineering and society.
4th	4-ESS3-1 Students who demonstrate understanding can: Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.	Program touches on the many ways humans can utilize seaweed/ kelp resources, including the use of seaweed as a potential biofuel source. This addresses the disciplinary core idea that energy and fuels are derived from natural resources, adding another example of energy sources beyond renewable resources and fossil fuels. This also connects with elements of design, engineering, and technology as the exploration of seaweed as biofuel requires understanding how to efficiently produce crops for this purpose on a large scale. This brings up questions of how seaweed might impact marine environments if it is being farmed for this purpose.
4th	4-LS1-1 Students who demonstrate understanding can: Construct an argument that plants and animals have internal and external structures that function to support	This program looks directly at how the structure of macroalgae allows it thrive in Alaska's coastal and marine ecosystems by utilizing a visualization of the different internal and external structures of seaweed. This also engages

	survival, growth, behavior, and reproduction.	the crosscutting concept of “systems and system models” by looking at how seaweed/kelp interacts within species populations and within different ecosystems, taking this one step further to consider how we as humans can amplify the benefits of seaweed to better our oceans.
5th	Crosscutting concepts: patterns; cause and effect; scale, proportion, and quantity; energy and matter; and systems and systems models are called out as organizing concepts for these disciplinary core ideas.	Program addresses the connection between human activity in ocean spaces and the use of natural resources but also addresses some of the physical, biological elements of macroalgae as it relates to marine ecosystems. Finally, this program is able to combine these concepts to look at the nexus of technology/ engineering and society.
5th	5-PS1-1 Students who demonstrate understanding can: Develop and use a model to describe that matter is made of particles too small to be seen.	This learning standard is related to the crosscutting concept that natural objects exist from very small to very large. This program is aligned with this concept, as algae exists from the microscopic to the giant and helps demonstrate both the variance of the natural world while also discussing the connection between tiny, single-celled organisms and the giant species of kelp that live in our oceans.
5th	5-LS1-1 Students who demonstrate understanding can: Support an argument that plants get the materials they need for growth chiefly from air and water.	Partial relationship to the program as marine algae photosynthesize like terrestrial plants, using sunlight, carbon dioxide, and water to grow. Related to the crosscutting concept of how matter is transported in, out, and within systems.
5th	5-LS2-1 Students who demonstrate understanding can: Develop and describe a model that describes the movement of matter among plants, animals, decomposers, and the environment.	Program addresses how macroalgae often plays a significant role in an ecosystem as a food source for other marine species, and can support multiple species in other ways as well (such as habitat). This is tied into the disciplinary core idea of interdependent relationships in nature (an example of this includes the relationship between

		kelp forests, sea otters, and sea urchins).
5th	5-ESS2-2 Students who demonstrate understanding can: Describe and graph the amounts of saltwater and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.	This program is ultimately concerned with sharing the significance of a marine resource, both as it relates to human usage but also to Earth's oceans. The disciplinary core idea of this learning standard is on the roles of water in Earth's surface processes, and although this program is hyper focused on one element of ocean ecosystems, it does address the vastness of the space of the world's oceans.
5th	5-ESS3-1 Students who demonstrate understanding can: Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.	This program is not only interested in sharing the potential of seaweed for human consumption or use, but also how certain places and communities might see seaweed as a solution to help protect the ocean through water filtration, buffering of ocean acidification, habitat creation, etc.
5th	3-5-ETS1-1 Students who demonstrate understanding can: Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.	Program asks students to design their own seaweed farms. Somewhat related to the disciplinary core idea of this learning standard which looks at defining and delimiting engineering problems. For the purpose of this program, the criteria will be limited only to the design aspect of engineering, while constraints will be limited to those associated with what seaweed needs (generally) to grow.
5th	3-5-ETS1-2 Students who demonstrate understanding can: Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.	See above- students will be asked to share their designs with the class to compare different ideas.

AFDF | Industry Advisory Committee
Updated 11/10/2022

This DRAFT document provides an overview of AFDF's Industry Advisory Committee (IAC).

Purpose
The goal of this AFDF committee is to advance Alaska seafood industry priorities by identifying, categorizing, and prioritizing industry challenges/opportunities. The focus will be primarily on technical challenges/opportunities, and ones that affect the industry broadly, although this should not limit the overall identification of challenges/opportunities. In order to guide this process, the IAC proposes to initially focus on: 1) reducing operating expenses, 2) generating new revenue, and 3) reducing existential risk to the industry.

Membership
AFDF is targeting members who can describe specific operational challenges, who have experience researching new technologies or processes, or have a strong understanding of industry operating expenses. The committee may also find it appropriate to invite qualified individuals to meetings periodically, without making these individuals members.

Confirmed members
- Mike Cusak, American Seafoods
- Keith Singleton, Alaskan Leader Seafoods & BB harvester

Candidate members
- Edward Poulsen, Crab
- Eric Deakin, CVRF
- Allen Kimbal, Trident
- Jeff Welbourn, Trident
- Matt Moir, North Pacific Seafoods
- Noelle Yochum, Trident
- Erik Velsko, Harvester
- Bill Webber, PWS drift
- Tim Fitzgerald, American Seafoods
- Bristol Bay/salmon contact?
- Mariculture?

Commitments from IAC and AFDF
IAC members can expect to meet quarterly; meetings will last approximately one hour. A minimum of two AFDF staff will attend; one to lead to discussion and another to take notes.

Confidentiality & Intellectual Property

To be completed

First meeting

The first meeting of the IAC should include a review of the key categories to begin organizing opportunities. The IAC should first decide on priority categories and then decide on priority strategies within each category.

Priority Categories

We suggest the IAC prioritize 5-10 of these categories for AFDF to focus on. This prioritization process should include an explanation as to why the category has been prioritized and ways to measure and track progress.

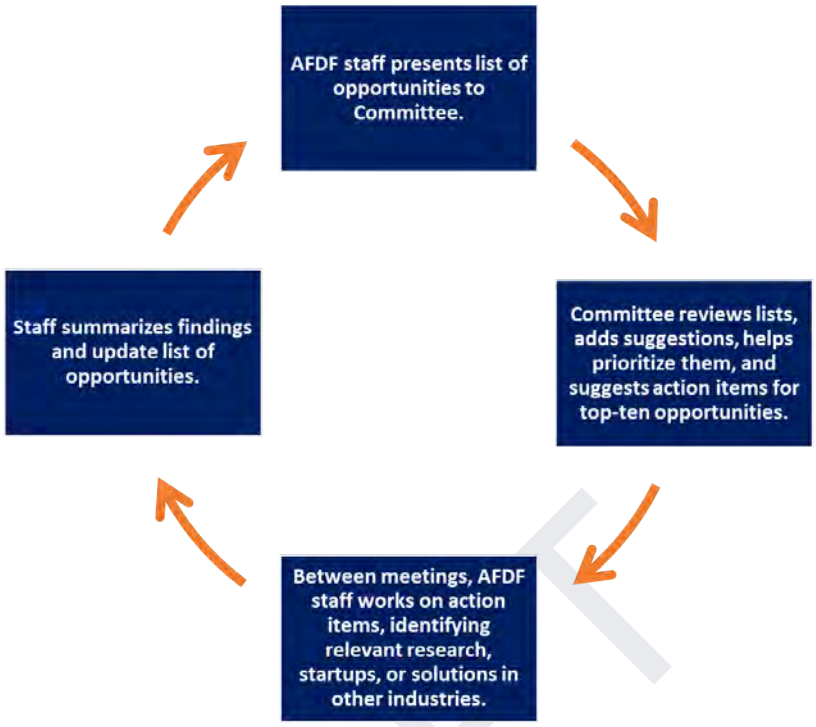
For example, early conversations indicate the topic of processing automation is a priority. A reduction in operating cost and reduced injuries may be reasons why this category has been selected. Specific goals associated with making progress in this category may include completion of a seafood automation technology review, attendance at a food manufacturing conference, and identification of the top five seafood processing transformations likely to be automated within the next five years.

As the IAC assesses different categories, the following should be considered:

- State of technology
- Size of the market
- Is there a customer today?
- Is this the highest use of AFDF's time?

Iterative Process

1. AFDF staff presents a list of opportunities to the IAC. These opportunities can range from broad ideas to specific, defined projects.
2. The IAC reviews this list at the meeting, adds/removes opportunities, prioritizes opportunities, and suggests action items.
3. Between meetings, AFDF staff work on the action items. This may mean developing a briefing paper on a topic, finding a relevant startup, or consulting an expert.
4. AFDF staff summarizes findings and adds any opportunities to be presented to the IAC.



Example Matrix

AFDF staff will maintain a spreadsheet to track IAC priorities and action items, along with market size, possible outcomes, and other descriptors. The following is an example.

Category	Idea	Action Item	Is there a customer today?	Market size	Outcome	Tech. Status
Automation	Development of an auto-feeder for a Badder 190 and 212	Recruit a company to apply for PCCRC funding to conduct feasibility analysis	Yes	More than $20 million	Est. $10 mil annual labor reduction	Developing
Decarbonization	Develop baseline understanding on how the AK fishing fleet can decarbonize	Support exiting BBB Green Energy Research	No	Large	Significant reduction in opex	Underdeveloped

Annual Membership Meeting

ALASKA FISHERIES DEVELOPMENT FOUNDATION

October 7, 2022

Photo credit: alaskaseafood.org

ABOUT US

Mission: to identify common opportunities for the Alaska seafood industry and develop efficient, sustainable outcomes that provide benefits to the economy, environment and communities.

Overview of FY2022

Total members: 48

Total staff: 7

Total projects: 25

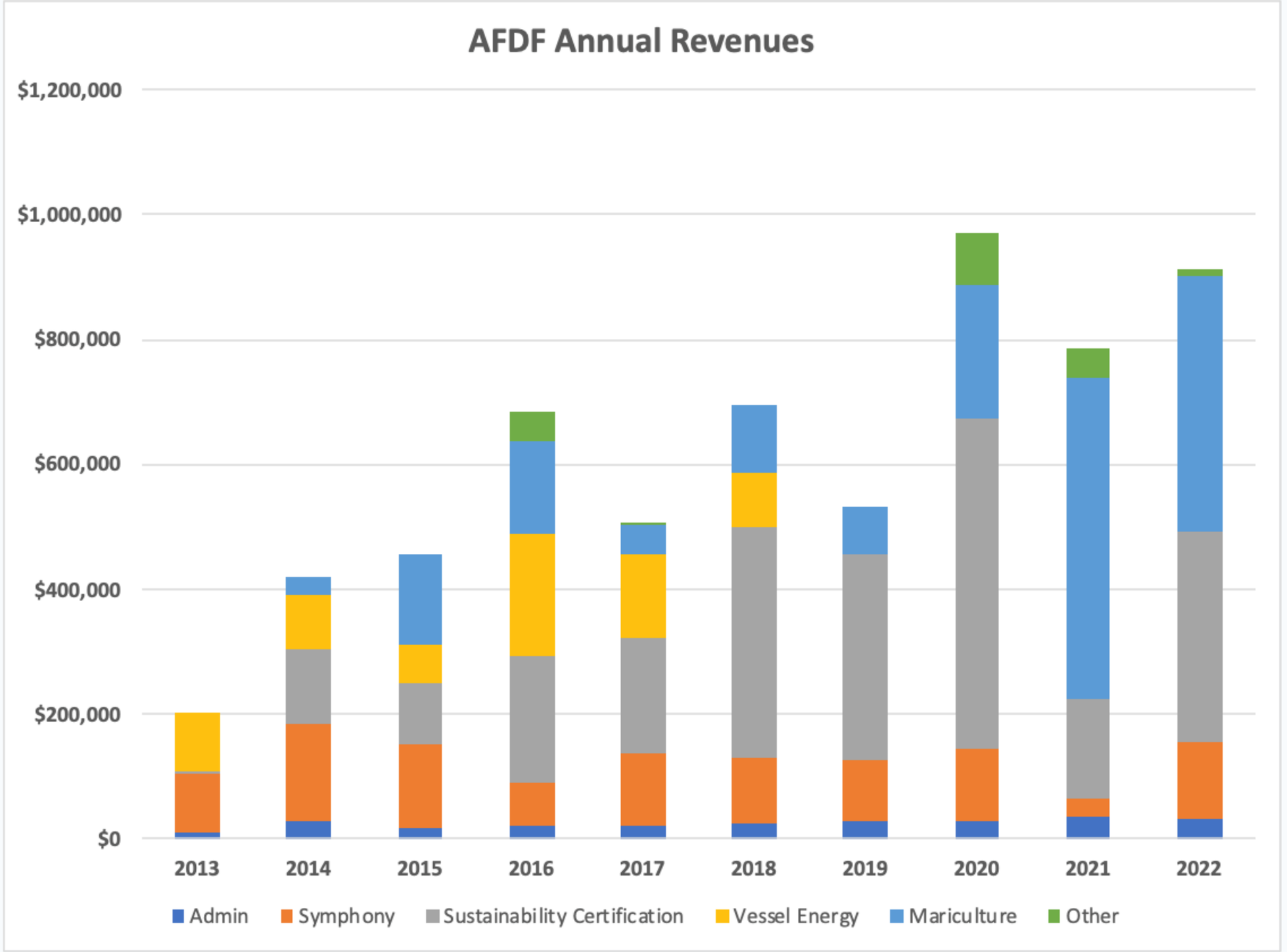
Total revenue: $1,224,805

Cash on hand: $381,300

Areas of improvement: communications (website revamp), ASOS, identifying industry priorities

Areas of Recent Work:

- **Alaska Symphony of Seafood**
- **Sustainability Certifications**
  - **RFM & MSC**
  - **Salmon, cod, halibut (?) & sablefish(?)**
- **Social Responsibility onboard vessels**
- **Vessel Energy Solutions**
- **Alaska Mariculture Initiative**
  - **Alaska Mariculture Cluster (EDA, $49M)**
  - **Mariculture ReCon (EVOS, $25M)**
  - **ARPA-E, WWF, Bigelow, NOAA SK**
- **Startup Accelerator (formerly AOC)**


AFDF Annual Revenues
$1,200,000
$1,000,000
$800,000
$600,000
$400,000
$200,000
$0
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
Admin
Symphony
Sustainability Certification
Vessel Energy
Mariculture
Other

Julie Decker, Executive Director

Background

Since 1996, lived & worked in Wrangell; raised a fishing family

Since 1994, worked in Alaska seafood industry (commercial fishing, processing, executive management, industry trade orgs, special projects, and economic development)

Responsibilities:

- Report to AFDF Board
- Ensure alignment between industry priorities & AFDF work
- Manage AFDF Team & projects
- Develop funding to support industry priorities

Julie Cisco, Executive Administrator

Background

30+ years in Alaska commercial fisheries, both as a harvester and in the processing sector, expertise in operations, logistics and management

Contract and project management in the public and private sector

Projects:

- **Alaska Symphony of Seafood; initiative to expand impact**
  - **grow entrants, benefits, promotions, partners, sponsors**
- **25% Genuine Alaska Pollock Producers (GAPP)**
- Grow AFDF membership
- Grant management

Hannah Wilson, Development Director

Background

From Juneau (originally and currently)

Master's of Science in Resource Conservation from the University of Montana

Former Alaska Sea Grant Mariculture Fellow with NOAA Fisheries, projects included developing the Alaska Aquaculture Permitting Portal

Variety of experience working on natural resource management issues in SE AK

Projects:

- Management of MSC & RFM Salmon and Cod certifications, conditions and Client Groups
  - Ecological Risk Assessment: interactions of seabirds & gillnets
- Mariculture Development: bull kelp cultivation project, Alaska Mariculture Cluster, EVOS Mariculture Recon project
- Funding Procurement (Grant Writing)

Tommy Sheridan, Technical Facilitator (contractor)

Background

Lives in Cordova with Ellen, Celia, and Wesley

20 years Alaskan fisheries experience

Graduate degrees through OSU

Recent relevant service

North Pacific Anadromous Fish Commission

GOAL 2022

Alaska Bycatch Review Task Force

Hurtigruten

UAF Alaska Blue Economy Center

Projects: Technical Facilitator for MSC & RFM salmon and cod* certifications

TELLING ALASKA'S STORY!

Ben Americus, Science Policy Coordinator

Background

Commercial fishing in Cordova 2008-2014

Field technician with Alaska Hatchery Research Project for five years

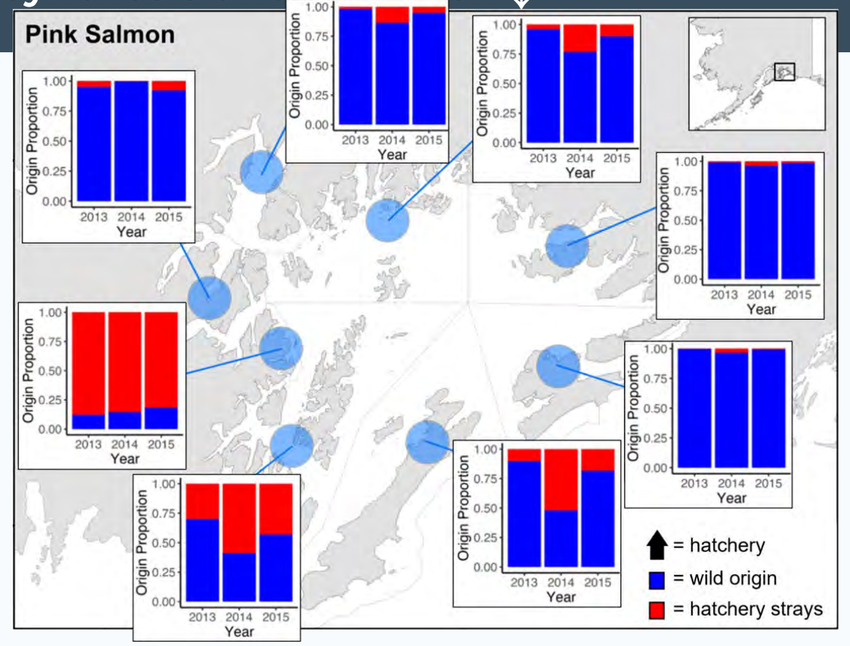
Master's of Science in Microbiology with minor in Data Science at Oregon State University

Current PhD candidate at Oregon State University

Alaska Sea Grant Fellow

Projects:

- Alaska salmon sustainability certification (MSC/RFM)
- Hatchery-wild interactions research synthesis and outreach ↓



Robin McKnight, Mariculture Development Coordinator

Background

Seward local, now in Anchorage

Alaska Sea Grant Fellow

Master's of Natural Resource Management from the University Centre of the Westfjords in Iceland

Experience with Wilderness management and science communication from Kenai Fjords National Park

Projects:

- Public support & acceptance of mariculture
  - *With a Little Kelp From Our Friends* - children's book donated to public libraries
  - FAQs & facts regarding common concerns
  - Coordinate efforts with Alaska Mariculture Alliance (AMA)
- Bull kelp cultivation workshop and stakeholder engagement
- Outreach and communication around AHRP

Garrett Evridge, Director, AFDF Startup Accelerator

Background

Commercial fisherman from Kodiak

Master's of Science in Natural Resource & Applied Economics from University of Alaska Fairbanks

Fisheries consultant for seven years at McKinley Research Group

Managing Director at the Alaska Ocean Cluster

Projects:

- Integration of Alaska Ocean Cluster into AFDF
- Supporting 14 oceans & seafoods startups
- Bering Sea ice edge forecasting
- Pollock scouting with unmanned surface vessels in Bering Sea

AFDF History

Founded in 1978

- Feb., 1978 - AFDF submits first grant proposal to NMFS for $3.5 M SK grant for groundfish developments
- Early work focused on the development of groundfish fisheries through joint ventures, fishing demonstrations, fishing gear experimentation, processing demonstrations, providing processed groundfish to secondary processors for product development
- Next phase of work focused on salmon developments: waste utilization (meal, fish protein, oil), product development, promoting new products
- Promoting new products through contests (starting in 1987)

Common Development Themes:

- new fisheries (source of raw product)
- fishing improvements (gear, quality, bycatch)
- processing onshore (new technology)
- product development
- full utilization (waste)
- promotion of winning new products

Annual Membership Meeting

ALASKA FISHERIES DEVELOPMENT FOUNDATION

October 7, 2022

Photo credit: alaskaseafood.org

BY-LAWS
OF
ALASKA FISHERIES DEVELOPMENT FOUNDATION, INC.
An Alaska Non-Profit Corporation

ARTICLE I

Principal Office

The principal office for the transaction of the business of the corporation, hereinafter, called "Foundation," is located at 900 Fifth Ave, Suite 400, Anchorage, Alaska 99501. The Board of Directors may at any time or from time to time change the location of the principal office within Anchorage, Alaska.

ARTICLE II

Purpose, Activities and Limitations

The purpose, activities and limitations of the Foundation, as set forth in its Articles of Incorporation, are:

1. To identify the research and development needs of the Alaskan seafood/fishing industry, solicit funding for projects and studies which address those needs, oversee those projects, and disseminate the resultant information to the public.

2. To work in cooperation with private citizens and organizations and with public officials and organizations at national, state and local levels to stimulate and encourage the development of programs in furtherance of the Foundation's purposes as stated therein.

3. To provide the industry lead in fisheries development.

4. In general, to exercise such other powers which now are or hereafter may be conferred by law upon a corporation organized for the purposes set forth herein, or necessary or incidental to the powers so conferred, or conducive to the attainment to the attainment of the purposes of the Foundation, subject only to such limitations as are or may be prescribed by state or federal law and the Articles of Incorporation.

The Foundation aims to establish cooperative research and development plans for those fishery resources that the Trustees believe have commercial potential. Thus, while the Foundation is a private, nonprofit corporation, it works closely with state, federal, and private organizations that share similar goods and objectives. This working relationship includes: (a) the identification of problems that require limited development; (b) the establishment of projects that will attempt to solve these problems; and (c) the clarification of each group's role in such efforts.

Foundation contracts are awarded to qualified individuals and organizations who use their expertise to ensure the wisest and most efficient use of time and money. Since 1978, over 600 projects or activities in harvesting, processing and/or marketing, supported all or in part by the Foundation, have been conducted.

The Foundation does not conduct research itself.

A. Purposes of the Foundation

The purposes of the Foundation as described in the Articles of Incorporation are as follows:

The object of incorporation shall be to form a nonprofit educational and scientific research and development organization, the purpose of which organization shall be:

1. To provide a nonpolitical, nonpartisan, industry-wide organization interested in the commercial development of the fisheries of Alaska.

2. To conduct business and plan industry research and development needs, secure financing, administer projects on contract, and disseminate results and conclusions.

ARTICLE III

Membership

The regions recognized by the Foundation are as follows:

Region 1. Dixon Entrance to Yakutat
Region 2. Prince William Sound and Cook Inlet
Region 3. Kodiak to Chignik
Region 4. Aleutian/Pribilof and Bering Sea

Each harvester member applicant may choose or will be assigned a regional affiliation. Processor and support memberships do not have a regional affiliation.

ARTICLE IV

Membership

Section 1. Class of Memberships

There shall be two classes of membership – voting and associate.

Section 2. Voting Membership.

A voting member shall be entitled to vote in membership matters and otherwise fully participate in the affairs of the Foundation. All voting members shall be eligible to serve as directors of the Foundation.

There shall be three categories of voting membership:

1. Commercial seafood harvesters.
2. Commercial seafood processors.
3. Commercial seafood industry support services or consumers, excluding government, research and educational institutions.

An applicant for voting membership shall designate the applicable category of membership for which it is applying and, if a harvester applicant, designate its regional affiliation, if any.

Membership may also be conditioned upon the payment of such single, periodic or special contributions to the Foundation as the Board of Directors shall provide.

Section 3. Associate Membership

An associate member shall not be entitled to vote in membership matters or be eligible to serve as a director of the Foundation. However, an associate member shall otherwise be entitled to fully participate in the affairs of the Foundation.

Section 4. Other Qualifications

(A) Each applicant for membership shall affirmatively demonstrate it has significant operations or participation in the Alaska commercial fishing industry. In this regard members shall provide the Board of Directors with evidence satisfactory to the Board of the applicant's purpose, objectives and operations.

(B) An applicant shall not be eligible for membership in the Foundation if there is a current member of the Foundation representing the same organization, corporation or other entity as the applicant.

Section 5. Application Procedure

(A) Any person, association, corporation or other entity desirous of becoming a member of the Foundation shall complete an application form provided by the Foundation and submit it to the Executive Director.

(B) The Executive Director shall review the application form and, upon finding it complete, shall submit applications for voting memberships for approval at the next regularly scheduled Board meeting at which membership applications are to be acted upon by the Board of Directors. The Executive Director shall approve applications for associate membership.

(C) The Board of Directors shall consider each voting membership applications in good faith and shall approve or reject each application upon a vote of no less than a majority at which a quorum is present.

(D) Any approval of an applicant for membership is conditioned upon that applicant paying Foundation dues in the amount and within the time period provided by the Board of Directors

Section 6. Resignation.

Any member may withdraw from the Foundation either by non-payment of dues or by giving written notice of such intention to the Board of Directors.

Section 7. Suspension.

A member may be suspended for a period or expelled for cause such as violation of any of the By-laws or rules of the Foundation, or for conduct prejudicial to the best interests of the Foundation. Suspension or expulsion shall be by a majority vote of the Board of Directors, provided that a statement of the charges shall have been mailed by registered mail to the member at his last known address at least fifteen (15) days before final action is taken thereon; this statement shall be accompanied by a notice of the time and place of the proposed action of the Board of Directors. The member shall be given an opportunity to be heard at the time and place in the notice.

ARTICLE V

Dues

Section 1. Annual Dues

Voting membership shall be conditioned upon the payment of an annual fee of $450.00, $750.00 for Sustaining members and $1500.00 for Partners. Annual dues will be due and payable fifteen (15) days prior to each annual meeting. Annual dues for associate membership shall be set at $150.00.

Section 2. Default and termination of Membership

When any member shall be in default in the payment of dues for a period of three (3) months from the time such dues become payable, the membership shall be terminated by action of the Board of Directors.

Section 3. In-kind Contributions

The Board of Directs may allow members to make donations of in-kind contributions of goods or services and credit such contributions as determined by the Board. Such in-kind contributions shall be accepted in payment of dues.

ARTICLE VI

Meetings

Section 1. Annual Meetings

The annual meeting of the members shall be held at a time and place within the State of Alaska designated by the Board of Directors no later than 150 days after the end of the fiscal year. The Board shall designate the time and place in a motion/resolution duly made, considered and passed at a regular or special meeting provided that the designated date shall permit the secretary sufficient time to send through the post office, at least twenty days and no more than fifty days before such meeting a notice thereof, addressed to each member at his last known post office address, but at any meeting at which all members shall be present, or at which all members not present have waived notice in writing, the notice required above may be waived.

Section 2. Special Meetings

Special meetings of the members of the Foundation may be called at any time by a majority of the Board of Directors or President of the Foundation or may be called by the Secretary on request of not less than one-fourth of the membership entitled to vote at the meeting. Such a meeting shall be held at such time in the State of Alaska, as shall be specified by the caller or callers of the meeting in the notice thereof. Notice of such special meeting shall be given in the manner stated above or telephonically to each member. Telephone notice need not state all the purposes for which that meeting is to be called but shall state generally the purpose for the meeting.

Section 3. Quorum

At all meetings of members a quorum of the voting members must be represented either in person or by proxy. A number of members which shall be equal to no less than one-fourth of the membership entitled to vote at such meetings shall constitute a quorum.

Section 4. Voting

The delegate of a member entitled to vote may vote in person or by proxy executed in writing by the member or by his attorney-in-fact.

A majority of the votes entitled to be cast on a matter to be voted upon by the members present or represented by proxy at a meeting at which a quorum is present is necessary for adoption of the matter.

Elections for Directors of the Foundation may be conducted by mail.

When the election is held by mail the election of a Director requires that at least one-quarter of the members entitled to vote in that election cast ballots, and that a majority of that quorum is necessary for the election of a Director.

Section 5. Order of Business

The order of business of all annual meetings of the membership shall be as follows:

1. Roll call.
2. Proof of notice of meeting or waiver of notice.
3. Reading of minutes of preceding meeting.
4. Report of officers.
5. Reports of members of Board of Directors.
6. Reports of other committees.
7. Unfinished business.
8. Member comments.
9. New business.

Section 6. Delegates

All member organizations will select a natural person as delegate to the Foundation with no restrictions on the number of terms in office. The delegate will be the voting representative of that organization to the Foundation.

ARTICLE VII

Board of Directors

Section 1. Function and Qualification.

The business affairs and activities of this Foundation shall be managed, conducted and controlled by a Board of Directors consisting of natural

persons who must be United States citizens and of majority age under the laws of the State of Alaska and who are or represent members in good standing. Where not inconsistent with the express provisions of these By-laws, the Board of Directors shall have the rights, powers and privileges prescribed by law for directors of non-profit corporations in the State of Alaska.

Section 2. Number, Term and Composition of Board of Directors.

All Directors shall be elected for a two (2) year term. All terms expire at the conclusion of the annual membership meeting in the year of their expiration.

The composition of the Board of Directors shall be as follows:

(A) Five (5) Directors shall be elected to represent the harvesting sector of the Alaska commercial fishing industry, one each for Regions 1-4 as described in Article III and one at-large representative.

(B) Five (5) Directors shall be elected to represent at-large the processing sector of the Alaska commercial fishing industry.

(C) Three (3) Directors shall be elected to represent commercial seafood industry support services or consumers, excluding government, research and educational institutions.

Section 3. Nominating Committee.

The incumbent Board of Directors shall appoint a nominating committee who shall solicit nominations from the voting members for election of directors at the annual meeting.

Nominations shall be in writing and shall be accompanied by a biographical profile of the proposed candidate. Committee recommendations and back-up data on the proposed candidates will be submitted to the Board of Directors for review and approval not less than ten (10) days prior to the annual meeting.

Section 4. Election.

The Directors shall be elected by delegates of voting members of the Foundation at the annual meeting. The slate of candidates will consist of those individuals recommended by the nominating committee and approved by the Board of Directors as well as nominations accepted from the floor. The latter will require a demonstration of qualifications of fitness of he proposed candidate to serve which is equal to that required of candidates recommended by the nominating committee.

Section 5. Meetings of the Board

A regular meeting of the Board of Directors shall be held immediately following or concurrent with the annual meeting of the members, or any time as shall be called by the President or the Secretary upon the written request of two Directors.

Section 6. Notice of Board Meetings.

Notice of all Board meetings shall be given by mail to each Director and advisor at his last known post office address, no more than fifty (50) days before the date therein designated for such meeting. Notice for a special meeting shall be given in the manner stated above or telephonically to each Director and advisor. Telephonic notice is to be made at least seven (7) days and no more than twenty (20) days before such meeting. Notice for a special meeting either written or telephonic need not state all the purposes for which that meeting is to be called but shall state generally the purpose for the meeting.

Section 7. Executive Committee.

The Board of Directors shall elect an Executive Committee of not less than three (3) members. Said committee shall reflect representation from both the harvesting and processing segments of the Board of Directors. This committee shall have the power and authority to act on behalf of the Board of Directors with a spending limit of $10,000 for any one transaction or project. All actions of the committee will be reviewed and ratified by the Board of Directors at their next meeting. Such delegation of authority shall not relieve any of the Board members of their responsibilities of office.

Section 8. Meetings of the Executive Committee.

The Executive Committee may establish its own rules as to notice, time, place and purposes of meetings. Meeting of the Executive Committee may be conducted telephonically.

Any action required or committed to be taken at any meeting of the Executive Committee may be taken by the majority assent of the members of the Executive Committee. Such assent need not be written in order to be acted upon; however, written assents should be filed with the minutes at the earliest possible time. Such assent shall be treated as a vote for purposes effective as of the date stated therein.

Section 9. Quorum.

At any meeting of the Board of Directors, a presence of seven (7) members of the Board shall constitute a quorum for the transaction of business; but in the event of a quorum not being present, a lesser number may adjourn the meeting to some future time.

Section 10. Voting.

At all meetings of the Board of Directors each eligible Director present is to have one (1) vote.

Section 11. Vacancies.

Whenever any vacancy shall occur in the Board of Directors by death, resignation, removal or otherwise the same shall be filled expeditiously by majority vote at any properly constituted meeting of the Board of Directors, the term of such appointee to expire at the next annual meeting.

Section 12. Removal of Directors.

Unexcused absence from any two regular Board meetings shall be cause for removal of a Director. A Director may be removed for cause shown at any time as violation of any of the By-laws of the Foundation, or for conduct prejudicial to the best interest of the Foundation. Removal shall be by a majority vote of the Board of Directors, provided that a statement of the charges shall have been mailed to the Director at his last known

address at least fifteen (15) days before final action is taken thereon; this statement shall be accompanied by a notice of the time and place given in the notice. Replacement of a Director removed for cause shall be by procedures outlined in Section 11 of the Article.

Section 13. Committees.

The Board of Directors by resolution adopted by a majority at any meeting may designate committees from among its members or advisors and may delegate such powers to said committees as shall be consistent with provisions in the By-laws and Articles of Incorporation. Each committee shall keep minutes of its proceedings and shall submit same to the Board of Directors.

Section 14. Action of Directors by Communications Equipment.

Any action required or which may be taken at a meeting of Directors, or of a committee thereof, may be taken by means of a conference telephone or similar communication equipment means of which all persons participating in the meeting can hear each other at the same time.

Section 15. Action Without Meeting.

Any action required or permitted to be taken by the Board of Directors may be taken without a meeting, provided that a majority of the Directors shall consent in writing to such action. Such written consent shall be filed with the minutes of proceedings of the Board of Directors. Such action by written consent shall have the same force and effect as a vote of the Board of Directors.

Section 16. Ex-officio and Advisory Members.

The Board of Directors may appoint advisors to the Board at their discretion from time to time as they see fit. In addition, the Board may select ex-officio members to represent other industry related organizations.

Section 17. Compensation for Directors.

The Directors may receive compensation for their services as Directors and reimbursement for actual expenses incurred by them in attending meetings or transacting other official and authorized business of the Foundation.

Section 18. Indemnification of Board of Directors

Any Director of the corporation shall not be personally liable for monetary damages for the breach of fiduciary duty as a director. The Corporation shall indemnify a Director, officer or former Director or officer of the corporation, or a person who has served at its request as a Director or officer of another corporation against expenses actually and reasonably incurred by that person in connection with the defense of any action, suit or proceeding, civil or criminal, in which that person is made a party by reason of being or having been a Director or officer, except in relation to matters in which that person adjudged, in the action , suit or proceeding to be liable for negligence or misconduct in the performance of corporate duty; and to make any other indemnification authorized by the Articles of Incorporation or By-laws, or resolution adopted after notice by the members entitled to vote.

ARTICLE VIII

Duties of Directors

Section 1. Management of Business.

The Board of Directors shall have general supervision and control of the business and affairs of the Foundation and shall make all rules and regulations not inconsistent with the Articles of Incorporation and applicable law for the management of the business and the guidance of its officers, employees and agents. It shall be the duty of the Board to ensure that there is an adequate accounting system and to require that proper records be kept of all transactions.

Section 2. Audits.

At least once each year the Board of Directors or its designated representative shall secure the services of a competent and disinterested Certified Public Accountant, who shall make an audit of the books and accounts of the Foundation and render a report in writing therein, which report shall be submitted to the Board of Directors and made available for inspection by the members.

Section 3. Depository.

The Board of Directors shall have the duty to select one of more banks or financial institutions to act as depositories of the funds of the Foundation and to determine the manner of receiving, depositing, and disbursing its funds and the form of checks, and person or persons by whom the same shall be signed, with the power to change such banks and the person or persons signing such checks and the form thereof at will. Any or all of such powers may be delegated by the Board of Directors to the Treasure or other agent.

Section 4. Executive Director.

The Board of Directors shall appoint an Executive Director who shall be the Chief Administrative Officer of the Foundation and have such duties and powers as the Board of Directors may delegate. The Executive Director shall report regularly to the Board of Directors on all business of the Foundation. The Executive Director shall serve as a non-voting ex-officio member of the Board of Directors and all committees of the Foundation. The Board of Directors shall determine the salary of the Executive Director and may terminate the services of the Executive Director by a two-thirds (2/3) vote of the members of the Board of Directors.

Section 5. Execution of Documents.

The Board of Directors may authorize any officer or officers, agent or agents, including the Executive Director, to enter into any contract or execute any instrument in the name of and on behalf of the Foundation and such authority may be general or conditioned to specific instances. Unless so authorized by the Board of Directors, no officer, agent or other person shall have any power or authority to bind the Foundation by any contract or engagement or to pledge its credit or to render it liable for any purposes or for any amount.

Section 6. Bonding.

The Board of Directors may require fidelity bonding of any Director, officer, Executive Director, agent or other person, with the cost of such bonding to be borne by the Foundation.

ARTICLE IX

Officers

Section I. Officers.

The officers of the Foundation shall be a President, Vice-President, Secretary, and Treasurer, and such additional vice-presidents and assistant officers as the Board may elect. The offices of President and Secretary or Treasurer may not be combined; other combinations of offices may be held by the same individual.

Section 2. Qualifications of Officers.

All officers shall be members (or representatives of members) in good standing of the Foundation.

Section 3. Election.

The officers shall be elected by the Board of Directors at the annual meeting of the Board for a one (1) year term. Each officer shall serve until his/hers successor shall be elected and qualified or until he/she resigns or is otherwise disqualified.

Section 4. President.

The president shall preside at all meetings of the Board of Directors and the annual membership meeting, perform all duties usually performed by an executive and presiding officer, and sign such documents and obligations of the Foundation and performs such duties as may be authorized and directed by the Board of Directors.

Section 5. Vice-President

The Vice-President shall perform all the duties of President in the event of absence or inability of the President to serve.

Section 6. Secretary.

The Secretary shall keep at the principal office of the Foundation a book of minutes of all meetings of directors and membership, with the time and place of the meeting, how called or authorized, the notice thereof given, names of those present, and the proceedings thereof.

Section 7. Treasurer.

The Treasurer shall keep or cause to be kept adequate and correct books of account showing the receipts and disbursements of the Foundation, and an account of its cash and other assets. Such books of account shall be open to inspection at reasonable times by any director or member.

Section 8. Removal of Officers.

The Board of Directors may remove any officer with cause, at any time, by a majority two-thirds (2/3) vote of the full Board.

Section 9. Role of the Executive Director.

The Board of Directors appoints an individual to serve as Executive Director of the Foundation who serves at the Board's pleasure and who has such duties and powers as the Executive Committee delegates. The Executive Director regularly reports to the President, Vice President, Secretary and Treasurer on all business of the Foundation. The officers of the Foundation maintain oversight responsibility over the Executive Director. The Executive Director must be bonded and is an ex-officio member of the Board of Trustees and attends its meetings.

III. Political Activity

The Foundation, through its employees, officers and Trustees, shall not directly or indirectly engage in any political activity of any kind or nature involving the use of Federal Funds.

The Foundation, as a recipient of Federal money, is prohibited from using any Federal monies to pay lobbyists to influence executive and congressional decision-making in connection with the awarding and making of any contracts and grants.

The Foundation, as a recipient of Federal money, must disclose the names and amounts paid to lobbyists who influenced the awarding and making of any contracts and grants, even if paid with non-Federal funds.

Director Code of Conduct

Adopted on May 5, 2021

Alaska Fisheries Development Foundation, Inc.

The general duties and responsibilities of the Alaska Fisheries Development Foundation (AFDF) Board of Directors are set forth in the AFDF Articles of Incorporation, Bylaws, Conflict of Interest Policy, and any other policies adopted by the Directors. By signing this Oath, I,

_____

an AFDF Director, agree to abide by and implement the AFDF Articles, Bylaws, Board Policies and to uphold this Code of Conduct.

1. As an AFDF Director, I COMMIT to make best efforts to attend AFDF meetings and participate in meeting discussion. However, if I can't attend a AFDF meeting, I will notify AFDF staff. I further COMMIT to become familiar with AFDF's Articles, Bylaws and Board Policies and to work to ensure that AFDF business is conducted in accordance with these provisions.

2. As an AFDF Director, I PLEDGE to conduct myself in a professional manner when attending AFDF meetings, participating in AFDF videoconferences, and whenever communicating with AFDF staff, and Directors. Professional conduct includes, but is not limited to, acting with honesty and integrity, respecting individuals and alternative points of view, avoiding personal attacks, appropriate use of language, speaking only when recognized, voicing any opposition to a decision the Board is considering clearly and explicitly at the time the decision is being made, and actively working toward decisions and solutions that are in the best interests of AFDF and its mission.

3. As an AFDF Director, I AGREE that I will not disclose confidential information that I obtain solely by serving on the AFDF Board, including any information discussed or disclosed during an executive session of the AFDF Board as well as information regarding organizational strategy, technology development or intellectual property. In addition, I recognize that the AFDF Executive Director and President are the spokespersons for AFDF. I will not presume to speak for AFDF in discussions with media, individuals and entities other than the entity I represent at AFDF.

4. As an AFDF Director, I SUPPORT the motions, and decisions of the AFDF Board. However, if the organization I represent takes a position different from that of the AFDF Board, when representing my organization or myself, I will clarify that my position is not representative of the AFDF Board.

_____

AFDF Director Harvester, Processor, or Support Services Date

Please read, sign, scan and email to jdecker@afdf.org or rsmith@afdf.org.

Conflict of Interest Policy

Adopted on May 5, 2021

Alaska Fisheries Development Foundation, Inc.

Section 1. Purpose

The purpose of this Conflict of Interest Policy is to 1) protect the Alaska Fisheries Development Foundation (AFDF) when it is contemplating entering into a transaction or arrangement that might benefit the private interest of an Officer or Director of the organization, and 2) maintain trust with its members and the public through transparency. This policy is intended to supplement but not replace any applicable state and federal laws governing conflict of interest applicable to nonprofit organizations.

Section 2. Definition

A conflict of interest is a direct or indirect financial interest in an activity, policy, grant award, or financial proposition that could reasonably affect the exercise of fair and independent judgment. In particular, a Director who receives compensation, directly or indirectly, from AFDF for services is precluded from voting on matters pertaining to that Director's compensation (the Director is not prohibited from providing information to the Board or any committee regarding these services).

Section 3. Duty to Disclose

Related to conflicts of interest, a Director has two general duties: 1) to disclose actual, potential and perceived conflicts and, when appropriate, 2) to refrain from participating in votes on matters in which the Director has an individual or family interest.

Section 4. Disclosure During Board Meetings

Directors shall declare an actual, potential or perceived conflict of interest at either the beginning of a Board meeting, or at the beginning of the agenda item of concern.

Section 5. Ruling on Potential and Actual Conflicts

The Board President/Chair shall rule if an actual conflict exists, without objection from the remaining Directors. If the Chair has declared the conflict, then the Vice-President/Vice-Chair shall rule whether an actual conflict exists without objection from the remaining Directors. If a Director objects, a majority vote of the remaining Directors shall determine the ruling.

Section 6. Recusal Upon Actual Conflict of Interest

A Director who has an actual conflict of interest shall recuse themself and shall abstain from voting on that action.

Section 7. Documentation

After ruling and recusal, AFDF shall record in the minutes the name of the Director who disclosed a conflict or potential conflict, the nature of the financial interest, the ruling, and the abstention in the case of an actual conflict.