

Green Fin Studio



CONNECT. EDUCATE.
EFFECT CHANGE.

Northeast Fisheries Management
Council EBFM | March 31, 2020





WHO WE ARE

- Environmental communications & marketing firm. Based in Richmond, VA but work everywhere.
- Why: Big issues require a change in status quo, yet scientific training rarely includes communications
- How: Combine scientists, communicators, graphic designers, programmers, and digital media specialists
- Who: We work across multiple sectors and current/recent clients include the following:



PROJECT SCOPE

Through competitive bid process, New England Fishery Management Council (NEFMC) contracted with us to prepare visually rich and understandable materials for distribution and presentation during public information workshops about Ecosystem-Based Fishery Management (EBFM). The workshops are an opportunity for the Council to meet and communicate with stakeholders¹ about EBFM and how it might be applied to the Georges Bank region. The objectives of the workshops are to:

- Build greater understanding of EBFM as a tool to assess and manage fisheries;
- Identify potential opportunities and concerns that different stakeholders see in EBFM.

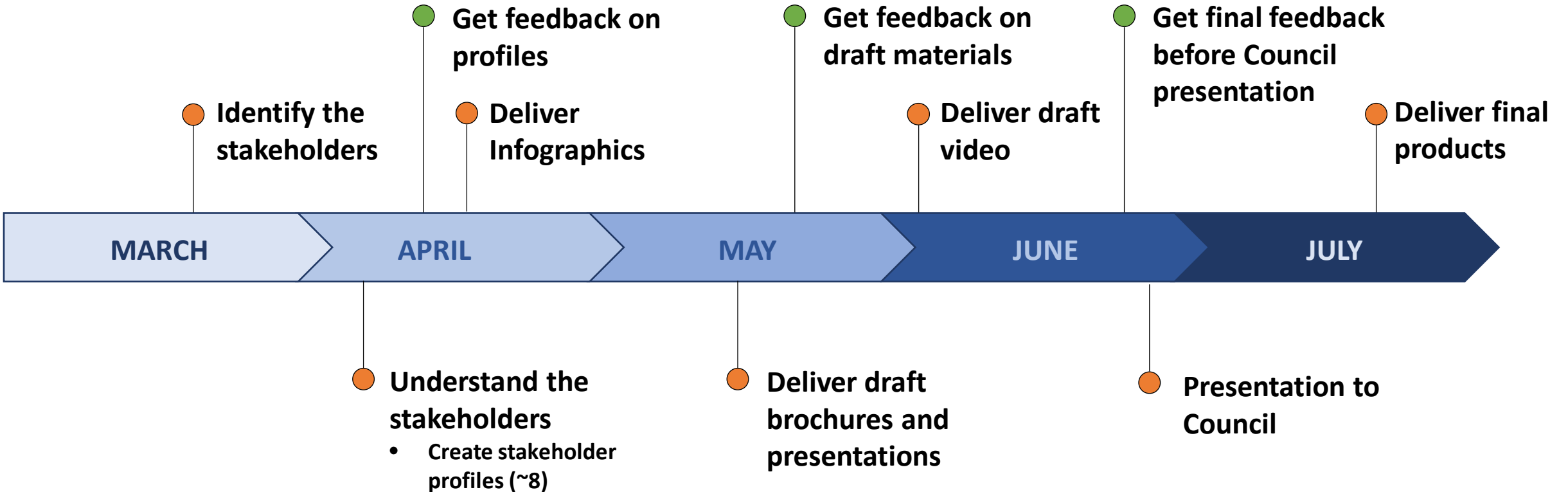
Examples of questions we would ask are:

- What opportunities do you see to use EBFM to improve existing assessment and management systems?
- What do we stand to gain or lose in shifting towards an EBFM approach?
- Provide an opportunity for stakeholders to help define next steps and build a willingness to continue participation in the process.

PROJECT DELIVERABLES

- **Early March** - Project Kickoff
- **Mid April** - Completion of up to 8 Stakeholder Profiles, with support from EWTE
- **Late April** - Delivery of of draft infographics to the EBFM Committee
- **Mid May** - Delivery of of draft brochures to the EBFM Committee
- **Mid May** - Delivery of of draft workshop presentations to the EBFM Committee
- **Early June** - Delivery of of draft 3-4 minute video to the EBFM Committee
- **Late June** - Presentation to the Full Council
- **July 25** - Delivery of finalized work products, incorporating council feedback

PROJECT TIMELINE



SUMMARY OF COMMENTS RECEIVED ON INITIAL STAKEHOLDER CATEGORIES

Stakeholder Group	General descriptions	Example Representatives (organizations and individuals)	Changes
1. Scientists and modelers	Fisheries scientists, modelers, state wildlife biologists who contribute science and science-based tools to the process.	WHOI URI SMAST University of Maine GMRI NEFSC Government scientists	Just call this group scientists. Range from academic institutions to independent groups (non-profits), government scientists, and multiple disciplines (e.g., stock assessment scientists vs. economist vs. biologist). May want sub-groups to capture distinctions between perspectives/objectives. Fish passage experts not relevant to GB. Don't list this group first to avoid perception of this having first priority.
2. Commercial fishers	Active harvesters across gear type and species	Individual fishermen, commercial fishing associations, Cape Cod Commercial Fishermen's Alliance	Subdivide to denote distinctions between different gear-types/fisheries (e.g., groundfish trawl vs. scallop fleet).
3. Recreational fishers	Charter boat companies, individuals, state agency reps who oversee and license them.	CCA Mass. Dept. of Marine Fisheries R.I. Saltwater Angler Association RI Charter Boat Association Viking Fleet Helen H Deep Sea Fishing Thin Blue Line Fishing	Separate regulating agencies from fishers and businesses, and private anglers from for-hire groups. Different expectations of management stemming from different objectives.

SUMMARY OF COMMENTS RECEIVED ON INITIAL STAKEHOLDER CATEGORIES

Stakeholder Group	General descriptions	Example Representatives (organizations and individuals)	Changes
4. Recreational users	The public that uses both the nearshore and offshore areas for enjoyment (e.g., swimmers, beach goers, whale watchers) and may be impacted by shifting habitats and predator/prey relationships	State and local tourism centers Maritime museums/Aquaria	Not sure this needs its own designation. Consider creating a “General Public” group to combine with NGO and consumer groups. Include other users, whale watchers, ocean-dependent businesses, ocean recreation, etc.
5. Managers and local/state/federal Elected Officials	Fisheries managers and elected officials at all levels	NEFMC and ASMFC council members, state and federal managers, regulators	Separate these groups. Regulatory agencies could be its own category and another for elected officials/public figures.
6. Consumers and Consumer Education Groups	Those who educate consumers on local seafood. They play a role in shaping market demand.	Sea Grants State/Collaborative Seafood Marketing Groups	No comments

SUMMARY OF COMMENTS RECEIVED ON INITIAL STAKEHOLDER CATEGORIES

Stakeholder Group	General descriptions	Example Representatives (organizations and individuals)	Changes
7. Dealers, processors, seafood auction, restaurants/retail markets	Those buying catch from fishermen. Including this audience helps to capture economics from the supply side of fisheries.	Portland Fish Exchange	Split to have a Dealer/Auction/Fish Buyer category and a User/Consumer/Restaurant category
8. Shore based environmental groups	Environmental NGOs typically focused on ecosystem health or specific components of the ecosystem (marine mammals, birds, etc.)	The Nature Conservancy Environmental Defense Fund NEA FWA Audubon Conservation Law Foundation	No Comments

REVISED STAKEHOLDER CATEGORIES

Revised Stakeholder Groups	Brief Descriptions	Ex. Representatives	Comments/Questions
1. Resource Management Community	The management and enforcement community	NEFMC and ASMFC council members, state/federal managers & regulators, GARFO, Coast Guard enforcement, and NMFS managers.	Imperative that this group understands and supports EBFM approach. Need a clear playbook in communicating concept and application.
2. Commercial Fishermen			Are these the right groupings?
2a. Commercial Groundfishermen	Trawl, gillnet, longline, and possibly small mesh fisheries	Cape Cod Fishermen's Alliance, Maine Coast Fisherman's Association, Massachusetts Fishermen's Partnership, Gloucester Fishermen's Wives Association (GFWA), Fishing Partnership Support Services, Chatham Harvesters Cooperative, New Hampshire Commercial Fishermen's Association	
2b. Commercial Shellfishermen	Scallops, lobster, red crab	NEFMC Scallop Advisory Panel members, Massachusetts Lobstermen's Association, Maine Lobstermen's Association, Downeast Lobstermen's Association, Atlantic Offshore Lobstermen's Association, New England Red Crab Harvesters' Association	
2c. Commercial Pelagic Fishermen	Swordfish gillnetters, tuna fishers	Atlantic Bluefin Tuna Association	

REVISED STAKEHOLDER CATEGORIES

Revised Stakeholder Groups	Brief Descriptions	Ex. Representatives	Comments/Questions
3. Environmental Groups	Environmental NGOs typically focused on ecosystem health or specific components of the ecosystem (marine mammals, birds, etc.).	The Nature Conservancy, Environmental Defense Fund, Audubon, Conservation Law Foundation, Oceana	“They need reassurance that EBFM is not an end run on approaches that they perceive as “finally making the industry and Council's accountable”.
4. Scientists	Fisheries scientists, modelers, state wildlife biologists who contribute science and science-based tools to the process.	WHOI, URI, SMAST, GMRI NEFSC, University of Maine- Carl Wilson, Eastern Maine Coastal Current Collaborative (EM3C), Fish passage managers/planners.	“I am not sure if scientists are stakeholders, but regardless they should be helping with education, not requiring it. “
5. Recreational fish interests	Charter boat companies, state agency reps who oversee and license them.	ME DMR (staff can be helpful with details), CCA, Mass. Dept. of Marine Fisheries, R.I. Saltwater Angler Association, RI Charter Boat Association, Viking Fleet, Helen H Deep Sea Fishing, Thin Blue Line Fishing, Members of NEFMC Groundfish Recreational Advisory Panel, Atlantic Salmon Fishery Management Plan.	
6. Rec users?			Enough to warrant a category?

REVISED STAKEHOLDER CATEGORIES

Revised Stakeholder Groups	Brief Descriptions	Ex. Representatives	Comments/Questions
7. Dealers, Processors, Seafood Auctions, Restaurants and Retail Markets	Those buying catch from fishermen. Including this audience helps to capture economics from the supply side of fisheries.	Portland Fish Exchange, Port Clyde Fresh Catch, BASE, CASE, Foley Fish, Marder, There are 100's of businesses we could add to this list. MA DMF has a list of all their seafood dealers on their website.	
8. Coastal Communities/General Public	Regional coastal community members & organizations. Includes those who educate consumers on local seafood and play a role in shaping market demand and local fishery-dependent businesses.	Sea Grants, state/collaborative seafood marketing groups, state and local tourism centers, elected officials, maritime museums, aquaria, non-profit groups such as Our Wicked Fish, Eating with the Ecosystem, and GMRI. Gloucester Fishermen Wives Association, New Bedford Seafood, Gloucester Fresh Program.	
9. Other Commercial Interests	Other offshore commercial uses, including offshore wind, aquaculture, and shipping.	BOEM, Cape Wind, state energy agencies and organizations, Deepwater Wind, shipping, Maine Aqua Ventus.	

Resource Management Community

Name: Ron

Persona: Fisheries Management Council Member

Personality: Intelligent and inquisitive; likely has post-graduate degree in science

Age: 40s to 60s

Values: Passionately committed to his role, believes data is key to finding answers

Opinion of fisheries science/scientists: Management decisions are informed based on the findings of the scientists and the scientists. Managers routinely work collaboratively with fisheries scientists.

Frustrations

- Nobody is ever ever truly satisfied with resulting management decisions - industry feels regulations are too restrictive or environmental groups feel they are not protective enough
- Data is either in short supply or not delivered on time
- There is a lack of social and economic impact data on the impact of fisheries management coastal communities and the fishing industry
- Communicating with various stakeholder groups is often difficult

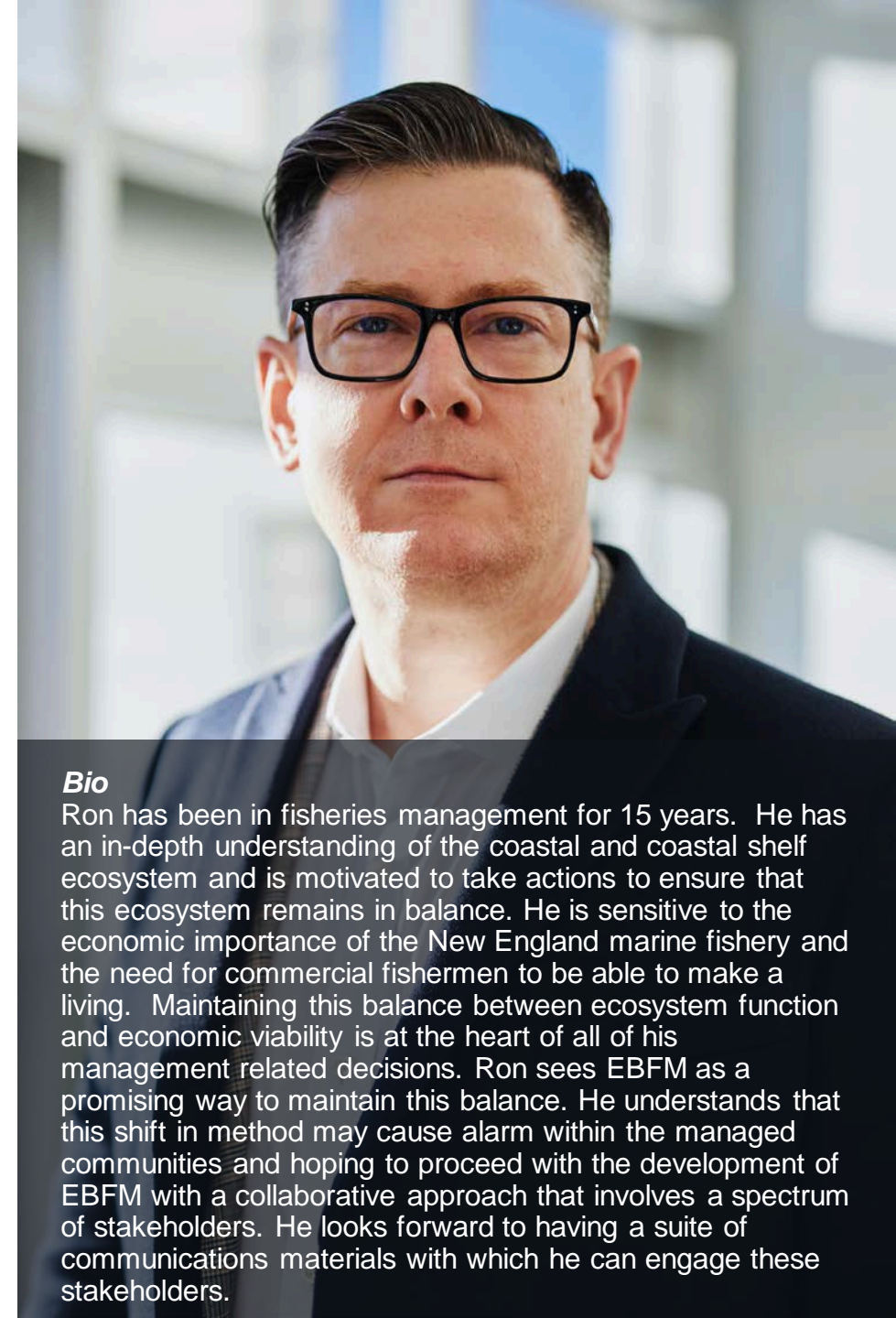
Trusted messengers: Scientific literature, the management community, the scientific community, fishing industry representatives

Opinion of EBFM: Is optimistic about the potential of EBFM however in need of a way to communicate about EBFM across the many stakeholder groups. He understands the importance of working collaboratively with stakeholders on the development of EBFM.

Motivations for seeking to implement EBFM: Has an in-depth understanding of the coastal and coastal shelf ecosystem. Understands that EBFM is a more realistic approach to fisheries management; individual species population dynamics are not independent from other species or external factors.

Motivations for seeking the input and involvement of the broader stakeholder community in EBFM development?: Feels that a collaborative and transparent effort to development fisheries regulations are likely to be:

1. More robust (based on information from a broader knowledge-base)
2. More likely to be accepted by a majority of members of each stakeholder group.



Bio

Ron has been in fisheries management for 15 years. He has an in-depth understanding of the coastal and coastal shelf ecosystem and is motivated to take actions to ensure that this ecosystem remains in balance. He is sensitive to the economic importance of the New England marine fishery and the need for commercial fishermen to be able to make a living. Maintaining this balance between ecosystem function and economic viability is at the heart of all of his management related decisions. Ron sees EBFM as a promising way to maintain this balance. He understands that this shift in method may cause alarm within the managed communities and hoping to proceed with the development of EBFM with a collaborative approach that involves a spectrum of stakeholders. He looks forward to having a suite of communications materials with which he can engage these stakeholders.

Coastal Community - Consumer

Name: Haley

Persona: Consumer (Millennial)

Personality description: enthusiastic, career driven, foodie, undergrad degree

Age: 29

Where they live: Boston

Career: Graphic Designer

Values: Sustainability, liberal, local food

Opinion of fisheries science and scientists? Trusts in science and scientists. Values the work they do.

Opinion of fisheries management: Doesn't pay much attention to fisheries management but cares about sustainability and is supportive of management in general. Prefers MSC seafood.

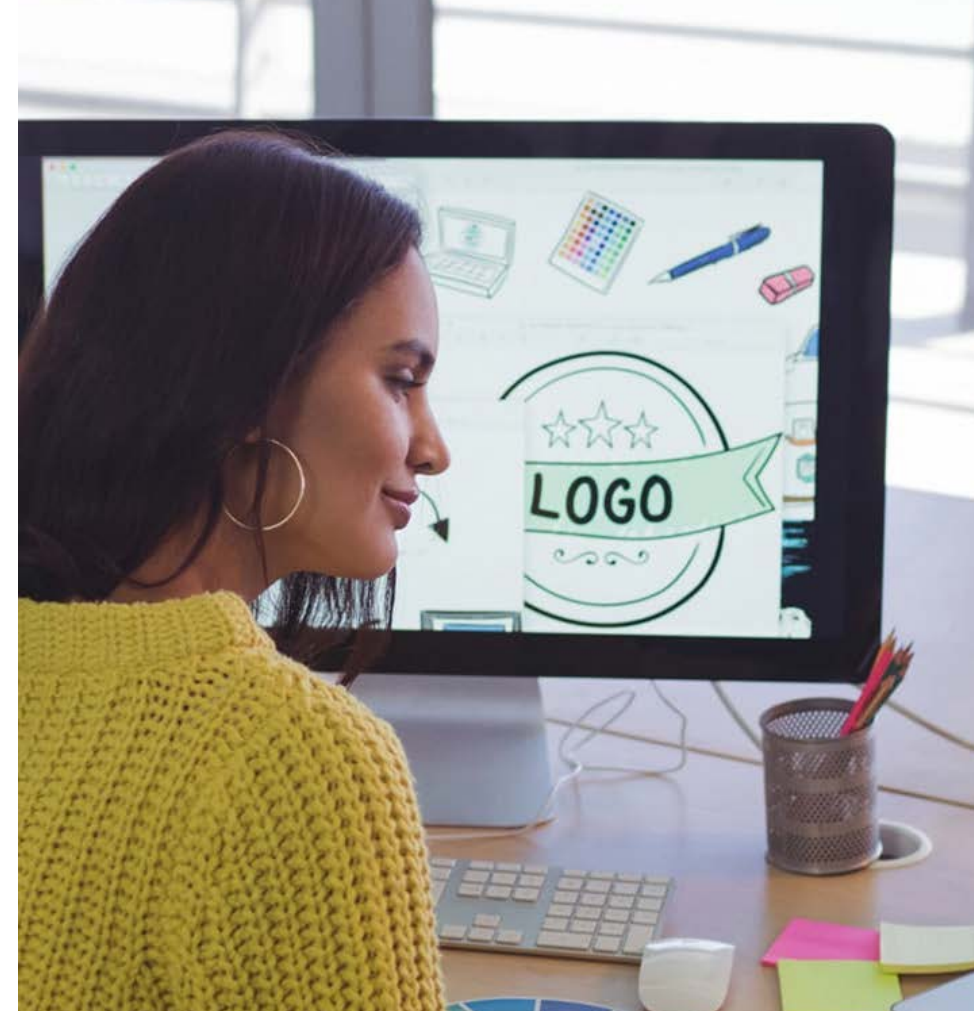
Opinion on the fishing industry: Values local food but doesn't interact with members of the fishing industry very often and has heard about issues such as the codfather story in New Bedford and so has some concerns about the industry.

What do they see their role is in the management and maintenance of a healthy ecosystem and fishing industry: Sees her role as voting for politicians and policies that support healthy ecosystems and fisheries. She also thinks it is important to employ sustainability practices in her own day to day life and "vote with her fork" by purchasing local food as much as possible.

Thoughts on EBFM: Doesn't really know what it means but it sounds like something she would be supportive of.

News & Information Sources: Social media and internet news, NY Times/ Boston Globe (digital), NPR, podcasts, peers, food/ recipe blogs

Frustrations: Doesn't think older generations are doing enough for the climate/ planet. Frustrated by the lack of local seafood available in her local markets, doesn't like farmed fish.



Haley is a foodie who enjoys shopping at farmer's markets, going out to local restaurants, and cooking new dishes at home or with friends. She loves seafood and wants more access to local seafood so she signed up for a CSF. She's an adventurous eater and likes trying different species and is willing to try anything once. She sees the benefits of the George's Bank ecosystem for food production as well as intrinsic value.

Coastal Community – Consumer Education Group

Persona: Consumer Education Group

Description: Group funded by either the state or city to help market the seafood caught in that area. Their goal is to promote their state/ports local seafood and help educate consumers on it.

Business Age: 10 years old

Values: Local fishing industry, local foods, fair prices for fishermen

Opinion of fisheries science and scientists? They value science and scientists. Have always tried to collaborate and work with NOAA and other scientists, particularly at their local university (ex. SMAST). They think there should be more collaborative research with fishermen and wish that management used more of the university science and collaborative research rather than NOAA trawl survey data. There is a feeling that the best science isn't being used.

Opinion of fisheries management: They aren't against management and recognize the importance but feel like it could be improved. Their feelings tend to be in alignment with their local fishermen and they want to see their fisheries succeed. They feel that things in management are very political and bureaucratic and find that frustrating. They feel that the "best science" isn't being used by management and that fishermen aren't being listened to. They have more faith in the local state management than the management at the federal level.

However they also promote "strong management" as pillar of sustainability for the local seafood they promote.

Opinion on the fishing industry: They work for the local fishing industry and want to see them succeed.

What do they see their role is in the management and maintenance of a healthy ecosystem and fishing industry: They see their role as connecting the scientists and managers with the fishermen through round tables to have constructive conversations and have the fishermen's voices be heard. They also feel like their role is to create consumer awareness for local seafood, particularly undervalued species, support international markets, and also support local markets and the local foods network. Their role is to promote their local seafood.

How much influence does this stakeholder yield? (scale of 1-10): 7 they represent a state that is economically important.

Thoughts on EBFM: They have heard of it and have seen a couple presentations on it. However, they don't understand all the details of it. They find it interesting but at the same time are nervous about it. They have heard models used that include scary predictions such as ocean acidification or climate change drastically reducing fish stocks in the near future and are afraid that these models could make fishing allocations even worse for their fishermen.

News & Information Sources: Peers in other education groups, undercurrent news, national fisherman, SMAST, NOAA, Independent reports that seem legit ex. Future of Fish. Have a google alert on groundfish. Institutions. Fisheries Survival Fund.

Frustrations: They side with the fishermen in feeling like the "best available" science isn't always used. They want more collaborative research. They also worry about markets for all of the species, ex no one wants to buy dogfish now, how are they supposed to market more of it with EBFM? They feel that with models, individuals and businesses just become a data point and are concerned about the way the algorithms work. They want to make sure the fishing industry can still fish and make a living.



Description: Funded by either the state to help market the seafood caught in Maine. Their goal is to promote their Maine's local seafood and help educate consumers on it.

Coastal Community – Consumer Education Group

Name: Afishianados (made up group)

Persona: Consumer Education Group

Business Age: 6 years old

Area they serve: New England

Values: Sustainability, community-based fisheries

Opinion of fisheries science and scientists? Trusts in science and scientists. Very much values the work they do.

Opinion of fisheries management: Generally likes and supports fisheries management. Thinks the US has some of the strongest management in the world. Promotes this and the sustainability of local seafood because of this. But does think that there is room for improvement and certain policies could be changed to support the local fishing community more or improve sustainability of the resource.

Opinion on the fishing industry: Works closely with members of the fishing industry and tries to support them. Thinks there are some bad actors but many good ones.

What do they see their role is in the management and maintenance of a healthy ecosystem and fishing industry: Sees their role as educating consumers to eat sustainably and support the local industry by helping to build the awareness and demand for local seafood.

How much influence does this stakeholder yield? (scale of 1-10): 5. Can unite consumers to have a larger voice for a common goal and also works closely with a group of fishermen. However they probably aren't one of the largest stakeholder groups and or the loudest.

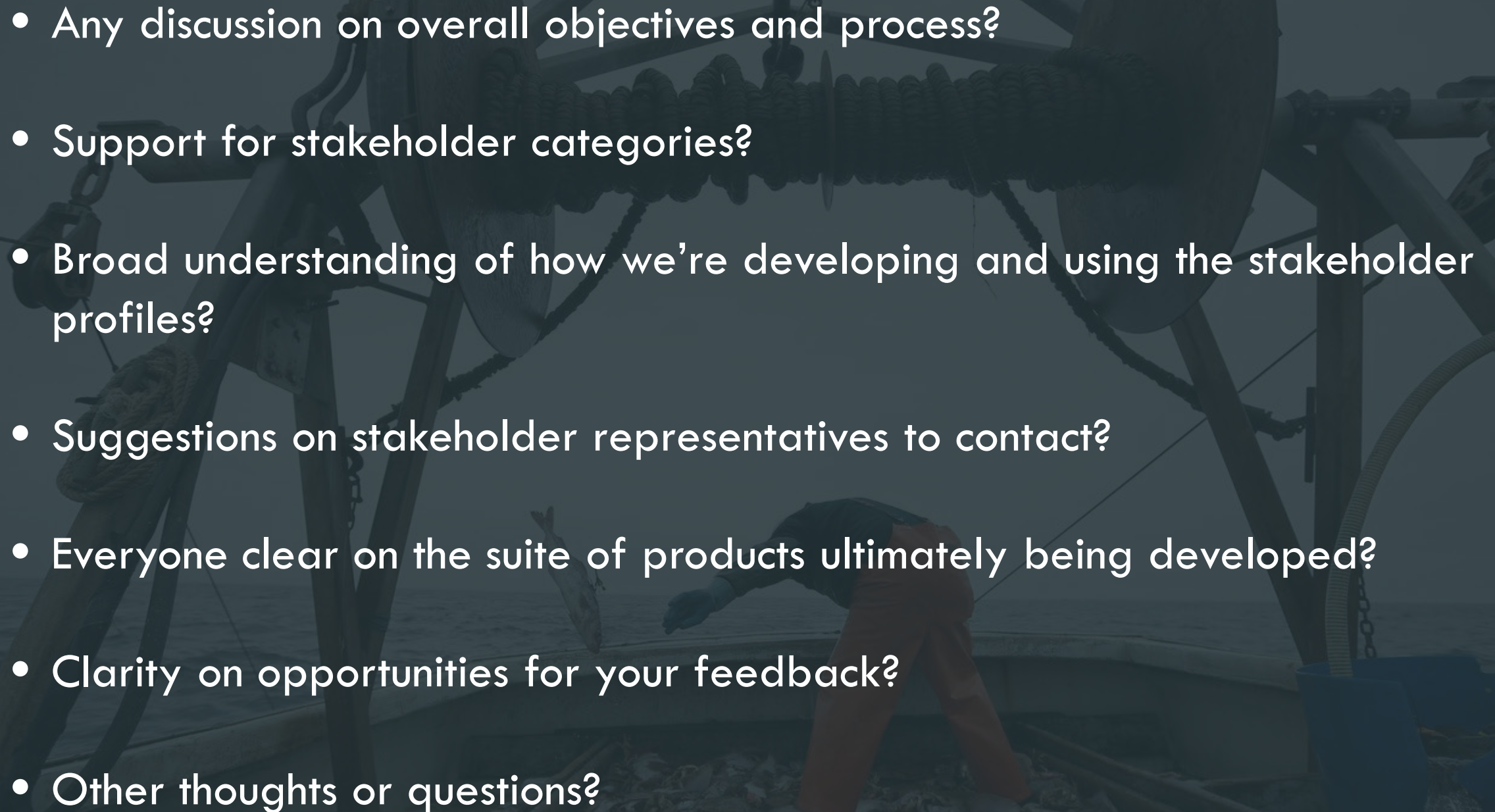
Thoughts on EBFM: Is supportive in theory but wants to know how it will play out in practice. Want to make sure smaller scale fishermen have access.

News & Information Sources: Peers, Saving Seafood (daily email newsletter), Undercurrent News, Seafood Source, NOAA/NMFS, local fishermen, Social media, NPR

Frustrations: Thinks that the current single species system has some flaws such as needing to be more real time. Feels that they get ignored sometimes and are not valued or communicated to. Want to be involved.



Description: Non-profit that teaches consumer about local seafood and fisheries and encourage consumers to eat more local seafood. They run events such as cooking classes or demos, produce handouts, and partner with local fishermen and chefs. They focus a lot on promoting underutilized species.

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- Any discussion on overall objectives and process?
 - Support for stakeholder categories?
 - Broad understanding of how we're developing and using the stakeholder profiles?
 - Suggestions on stakeholder representatives to contact?
 - Everyone clear on the suite of products ultimately being developed?
 - Clarity on opportunities for your feedback?
 - Other thoughts or questions?