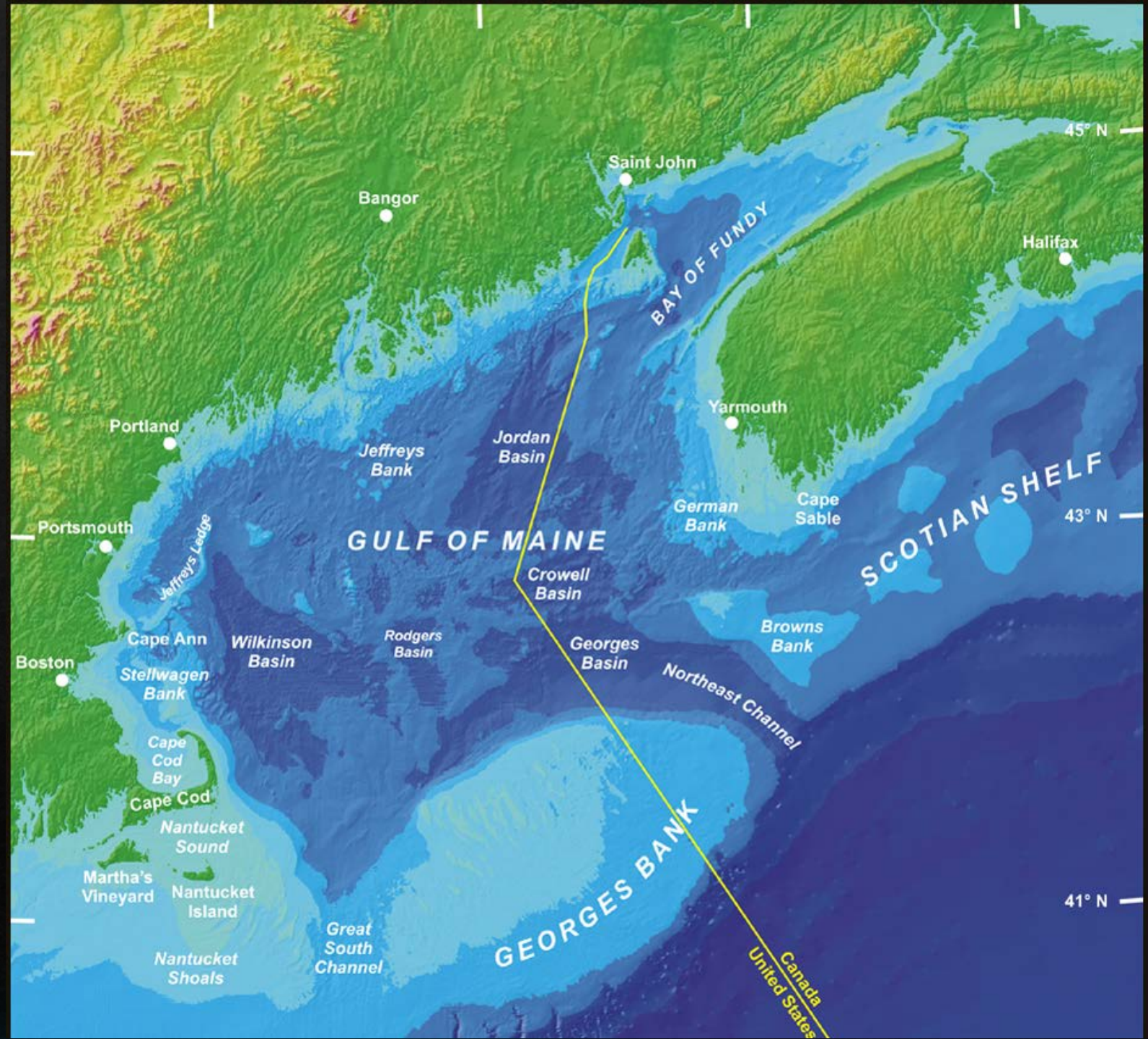


# *EBFM* *Stakeholder* *Communication*

Progress Update

Green Fin Studio

May 4, 2020





# Audience Profile: *Scientists* (N= 15)

## ENCAPSULATING QUOTES



“We're ready for EBFM and the science can support it”

“**Need clear definitions- a playbook for everyone to use and share definitions.** If EBFM is just seen as an additional constraint on harvest, fishermen will never support it. Has to be a grass roots effort that fishermen become cheerleaders for. “

“The way we currently manage is outside the ecology of the ecosystem. Our understanding of the ecosystem is evolving but our management is not. Managing for MSY has meant we are managing to the edge of sustainability.”

“**Lack of a common understanding of what people can expect from an EBFM approach**”

“Be clear that EBFM won't solve all the problems that exist.”

## BARRIERS



- Overcoming institutional inertia
- Fear of change, the unknown, and individual objectives aren't represented
- Legal/regulatory/management hurdles
- Need success stories and industry support
- **To overcome barriers, we heard:** Need clear communication across outreach media types, present EBFM 101, tell stories around what EBFM can do for you, include fishermen at every step

## BENEFITS



- Maximizing catch, minimizing impacts
- **Ecosystem and fishery stability**
- Clear applications for their science
- Increased engagement and trust between all parties involved
- **More reflective of a changing ecosystem**

# Audience Profile: *Managers* (N= 8)

## ENCAPSULATING QUOTES



“Moving to EBFM would be a big lift, difficult but not impossible.”

“I have mixed feelings. **The example is very academic and complex. Scientists will understand but industry will not.**”

“Concerns over definitions are stalling tactics. **We need to show industry the benefits of EBFM.**”

## BARRIERS



- Establishing a **baseline understanding of the terms and the overall concept**
- Fear of objectives being overlooked
- **Catch is likely to go down, or at least system will be managed more conservatively**
- Some fisheries are very profitable now, changes to permitting will be a big hurdle
- “In the eFEP, “Technical Measures” are **key issues of permitting, access rights, jurisdictions, etc.** Those will dictate losses and gains and we can’t answer those questions now.”

## BENEFITS



- More **reflective and responsive to a changing ecosystem**
- Provides opportunity for more stable management
- Increased efficiencies for management and industry
- **Capitalize on abundant, under-utilized species and open new markets for fishermen**
- **Transparency in trade-offs**

# Audience Profile: *Groundfishermen* (N= 8)

## ENCAPSULATING QUOTES



“My idea of EBFM is an acknowledgement that its important to keep bait in the ocean to feed other species.”

“I’m imagining the dogfish guy, tuna guy, groundfish guy, etc. all sitting at the table and trying to figure out the whole ecosystem.”

“I’m hoping that we will be able to better understand the natural balance and not blame everything on overfishing.”

“We have enough information, most of the fishermen just don’t understand it.”

## BARRIERS



- Data and a **shared understanding** of what EBFM means
- Ecosystem and stock boundary issues
- Need better data, particularly through collaborative research, and the funding to get it
- **Can’t be seen as an effort pushed by NGOs to reduce catch**
- **Need to engage and really listen to fishermen**

## BENEFITS



- Better understanding of predator/prey interactions
- Healthier ecosystem
- **Potential for more collaborative research**
- **Being able to catch abundant species, e.g., haddock and avoid stocks with lower numbers**

# Audience Profile: *Pelagic Fishermen* (N= 5)

## ENCAPSULATING QUOTES



“Need more carrots for fishermen, so far it’s been all sticks.”

“If allowed, I’d **restructure my business model to handle haddock**, redfish- all abundant but I don’t have a permit for those now. **Would EBFM allow us to make decisions like that?**”

“There seems to be a lot of negativity toward fishermen. **They act like we are criminals. I want to protect the ecosystem as much as, if not more, than the next person.** “

## BARRIERS



- **Gear conflicts** is going to be the barrier. Opening an area for all gear types is going to change that ecosystem immediately. As soon as you drop a dredge or trawl on the bottom you can destroy a habitat and that changes what lives there.
- **Understanding and managing jurisdictional overlaps**

## BENEFITS



- A healthy ecosystem = healthy fisheries
- **Flexibility** of targeting different species
- **Including and listening to fishermen in the process**



# Audience Profile: *Scallop Fishermen* (N= 8)

## ENCAPSULATING QUOTES



“The scallop fishery is a love fest now- everyone is happy. We’ve seen monumental changes over the last couple of decades.”

“Scallop fishery benefits from some of the best data any fishery has.”

“Frustrated that it seems we’re managing the future by looking in the rear-view mirror. Data is out of date before it is applied, and the system is changing rapidly.”

“Not sure how you’d manage across all ecosystem components. I am **happy with the current process and feel respected and heard.**”

## BARRIERS



- How to weigh factors in the model and making those decisions transparent
- Legal/regulatory/management hurdles
- **Fear of the unknown and losing/restructuring permits and/or allocation**
- Concern over how **choke species** are handled
- Concern that **climate change** is driving species north

## BENEFITS



- **Having other fisheries managed as well as scallops**
- More reflective of a **changing ecosystem and existing interactions**
- Considering **market economics** in fishing decisions

# Audience Profile: *Lobster Fishermen* (N= 4)

## ENCAPSULATING QUOTES



“We want to see more **accountability** from regulators. One person stole a lot of quota for ~25 years and the rest of us paid for him. We still haven’t seen quota restored.”

“We have kind of pigeonholed fishermen to limited fisheries. Based on permits. Ideally, **if we wanted EBFM we would let the fishermen fish with the ecosystem but that flexibility is gone for the majority of the fleet because of limited access programs.** “

## BARRIERS



- Rapidly **changing system**, hard to understand or predict
- **Offshore user conflicts**- gear interactions and off-limit areas due to wind energy are driving them out of some areas and into others
- Understanding and managing **jurisdictional overlaps**

## BENEFITS



- Potential for more **stable fisheries and ecosystem**
- **Flexibility** to fish for multiple species
- **Increased quotas** in some cases
- Including **economic considerations** into decision making around fisheries

# Audience Profile: *Environmental NGOs* (N= 8)

## ENCAPSULATING QUOTES



- “EBFM in theory could be powerful but suffering from still being **an abstract concept.**”
- “Need to understand what EBFM is and what it isn’t and **a clear roadmap on how to get there.** What’s waiting when we get there? Those answers would be an incentive to do the work and everyone needs to know what the benefits are, and the costs will be.”

## BARRIERS



- Need **concrete examples-** case studies.
- The **larger barrier is the politics and dynamics of winners and losers. The expectation of stability.**
- Need to be able to help fishermen understand **what catch levels look like under different scenarios.**
- Legal/regulatory interactions

## BENEFITS



- Managing for **ecosystem functionality** over dollars harvested
- Accounting for **non-harvested species and habitats** and recognizing their importance
- Addressing **interactions and being explicit** about them in decision making.



# Audience Profile: *Recreational Fishermen* (N= 3)

## ENCAPSULATING QUOTES



“I think we have some of the best scientists on planet earth. But I think that the data inputs that we use for some of the science sometimes has faults.”

“I like the fishery management process that we have.”

“As a charter boat captain, my **job depends on healthy ecosystems** and that will allow for my business to be more stable. “

## BARRIERS



- How will the **permit structure** work?
- Lack of trust in the science that informs the models
- **Information is hard to understand**, include more graphics and communicate across different channels, including online and through fishing associations
- **Keep it high level but allow for deep dives**
- **Offer case studies or examples of how this would look**

## BENEFITS



- **Better management decisions**
- **Remove pressure from overfished species**
- **Healthy ecosystems and healthier fisheries**
- **Economic stability**

# Audience Profile: *Community/Public* (N= 5)

## ENCAPSULATING QUOTES



“I have a **positive opinion** about **fisheries scientists**. They don't get enough credit, but they do really cool stuff. Its important to listen to them and invest in science.”

“It's exciting to do more collaborative research.”

“We need more dollars into fisheries science because with development of offshore renewable energy and climate change, **we need much more data and one way to get that is through collaboration with fishermen.**”

“...as long as we are practicing adaptative management and we are moving towards getting better we should proceed”

## BARRIERS



- **Fear of the unknown** and implications to livelihoods
- **Lack of trust in the science that informs the models**
- Due to the **complexities, hard to understand**
- Want to see **multiple channels and media types used to communicate information**

## BENEFITS



- More **sustainable ecosystem**
- **Better understanding of the big picture.** Including large scale issues like climate change
- Remove pressure from **overfished species**
- Could remove stigma of fishermen carrying blame for decreasing stocks
- Better predictive capabilities

# Audience Profile: *Other Interests*\* (N= 5)

## ENCAPSULATING QUOTES



“Looking forward to how this rolls out.”

“It takes everyone to get the full picture of what’s happening out there.”

## BARRIERS



- **Regulatory and legal authorities**
- **Data availability, and funding** for needed research, across all the gaps

## BENEFITS



- In offshore wind areas, may see new benefits for species but could present constraints for fishermen.
- More **flexibility** to roll over quota into other fisheries if one species isn’t available
- Providing insight into future conditions to inform other offshore developments.

\* Other interests included were ocean planning, offshore wind energy, energy sector offshore research



# Audience Profile: *Dealer & Processors* (N= 6)

## ENCAPSULATING QUOTES



“I honestly think that managers take their jobs very seriously.”

“The table needs to have all the stakeholders and needs to be level.”

“I think creating **allowable bycatch and opportunities for guys to be able to bring fish in instead of throwing fish away.** “

“You can’t replace cod with scup in terms of markets.”

“We need **great science to have great management.** But I feel like currently its missing fishermen’s input.”

“**I think my role is to also introduce the public to these other local species.... Harvesting a little bit of everything from an ecosystem is so much better in my chef’s opinion it’s key.**”

## BARRIERS



- Need **better science**
- Existing permit portfolios
- **Fear of the unknown**

## BENEFITS



- More **flexibility** for fishermen
- **Holistic ecosystem approach will lead to smarter management**
- More appealing to consumers; sustainable fish
- Management will be **more nimble to adapt to change**

# *Common Themes*

- ◆ Model outputs are difficult for many to understand so they don't know what a change really means for them personally, or how a new management system would impact competition, permit structures, jurisdictional and ecosystem boundaries, or legal implications with MSA.
- ◆ Stakeholders want to collaborate on management decisions, but fear having voice minimized or lost in new process
- ◆ Questions over how choke species will be handled and multiple gear impacts to ecosystem
- ◆ Across the spectrum, stakeholders asked for a “playbook” to develop a common understanding of terms and establish a how-to guide
- ◆ Establishing data baselines and supporting collaborative research
- ◆ How will impacts from climate change impacts and offshore developments be accounted for?

## *Key Benefits to Communicate*

- ◇ Provides more stability to the industry and the ecosystem
- ◇ Provides transparency in objectives from the decision-making process
- ◇ More reflective and responsive to a changing ecosystem
- ◇ Allows industry flexibility to make business decisions



# Communication Thoughts

## **Processes to build support**

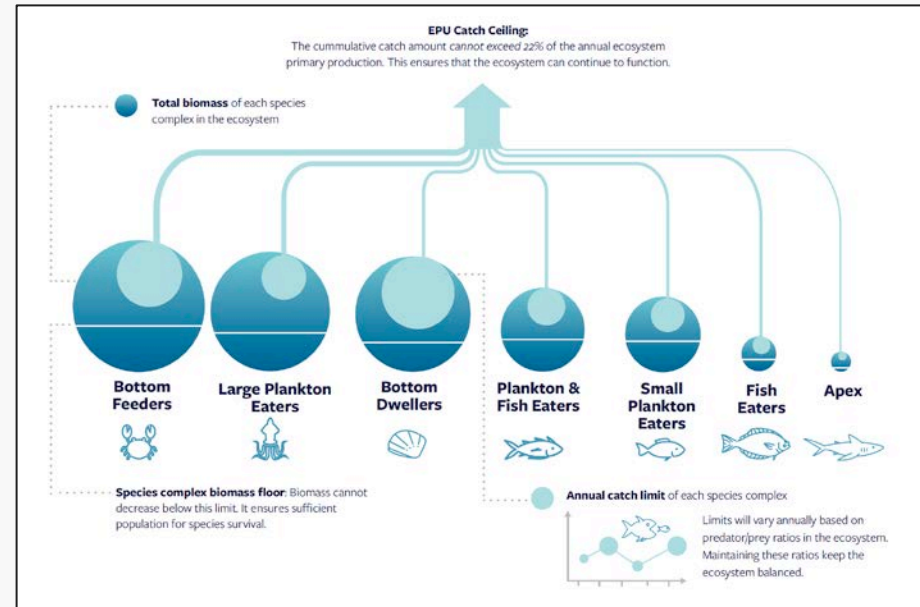
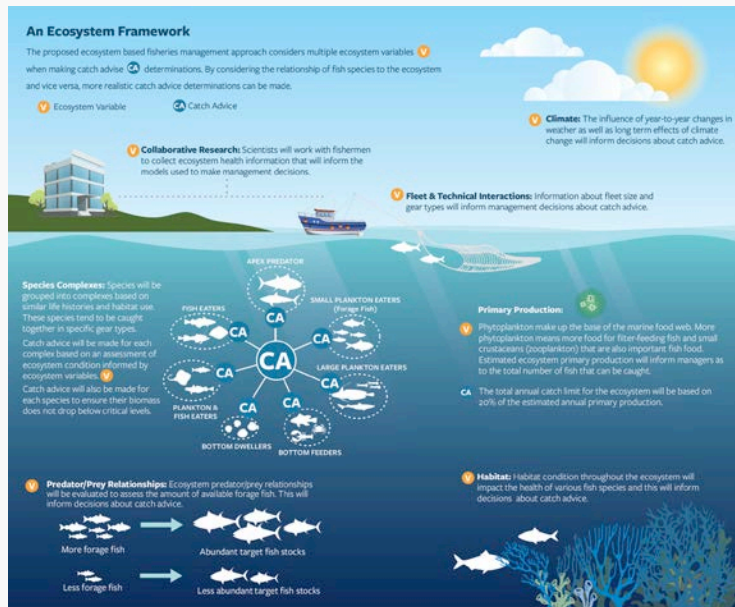
- Collaborative, very inclusive, forums created just for information sharing and discussion purposes, not decision making
- Create materials that establish a baseline understanding of terms and concepts
- Reaching out to diverse audiences
- Tell stories around what EBFM might look like, these provide concrete examples requested by stakeholders
- Stakeholders have made it clear that they want to engage and be part of the process
- Possibly hold a collaborative modeling workshop/roundtable series with stakeholders. Let everyone look at the model variables and assumptions.

## **Outreach mechanisms**

- Use existing information means (e.g., NOAA mailings) to share information and announcements
- Provide visual and frequent communication materials
- Consider social media channels, particularly Facebook and Twitter

# Feedback Needed

- Does the ecosystem graphic capture all of the relevant variables that will be used to make management decisions?
- Is it understandable?
- Does the biomass graphic convey the concept of catch ceiling, biomass floors, and annual Species Complex catch limits?
- Input is needed to make the biomasses, catch limits, and floors realistic and representative.



# What topic could benefit from an infographic?

- Ecological production units
- Management strategy evaluation
- Prototype Ecosystem-based Management strategy for Georges Bank
- The Georges Bank ecosystem
- How the models work
- An outline of the steps to ensure that the FEP is legal
- ??



# Input on next deliverables

**In Phase 2 of this project, we are to develop brochures and Power Point presentations. The details are:**

- Stakeholder groups are to be consolidated into five logical groups and we will develop one brochure for each group. The purpose is to engage EBFM stakeholders on the eFEP and EBFM.
- Four stakeholder workshop presentations are to be developed. Three should focus on distinct stakeholder groups and address core aspects of the eFEP and the fourth should be an introductory presentation for a large audience.

**What are the key topics that must be included in the brochures and presentations?**

**Any thoughts on how the stakeholders should be grouped?**