



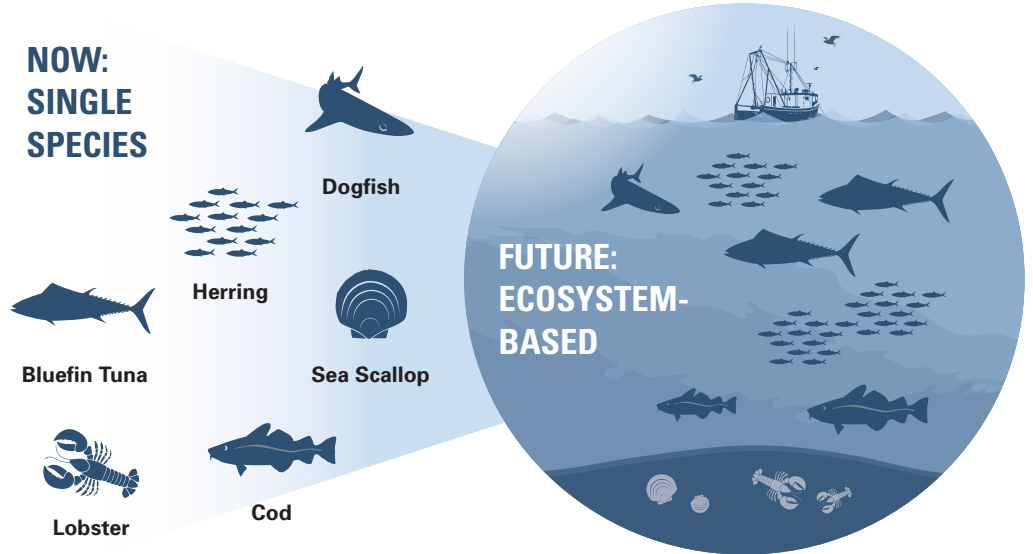
# Ecosystem-Based Fisheries Management

## INTRODUCING A NEW WAY OF THINKING

Historically, single fish populations have been managed in isolation. Soon, the ecosystem can be managed as a whole, including all species of fish within it and taking into consideration environmental factors.

**For decades, fishermen have observed cycles and interactions in the marine environment. They know fisheries are part of a larger ecosystem, fish interact with fish and other marine life, and the ocean has changed. All of this can now be factored in when making management decisions.**

### NOW: SINGLE SPECIES



## THERE ARE OPPORTUNITIES AND ADVANTAGES TO ECOSYSTEM-BASED FISHERIES MANAGEMENT:

### Protect bait fish

Instead of single species plans that inevitably leave some species out, making those populations vulnerable when they are taken as unaccounted-for bycatch, ecosystem-based fisheries management will look at all the fish in the sea. This will support the rebuilding of other commercially important fish populations.

### Confront predation

Current Fishery Management Plans do not account for changes in inter-species interactions. Ecosystem-based fisheries management will be able to gauge the quantified impact of predators, such as seals, on our marine environment.

### Factor in oceanographic conditions

Changes in the ocean (temperature, acidification, water quality, etc.) are already impacting fish populations in New England. This new approach will incorporate them.

### Create freedom to diversify

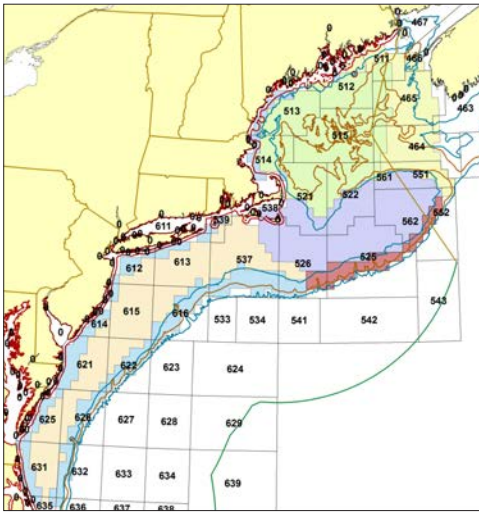
We are seeing new and different species in our waters, and now we have the chance to effectively manage them within a broader system. This builds new business opportunities for fishermen and has the potential to ensure a robust fishing future in New England.

### Become leaders

Because ecosystem-based fisheries management is so new, it presents an opportunity for fishermen to spearhead the process. Their vast knowledge of the marine ecosystem will be instrumental in developing this new system.

**“We are fortunate to have several highly productive fishing areas very close to the Cape. These areas need to be managed with an eye toward supporting our local fishing community over the long term. So rebuilding key stocks like cod and preventing wholesale removals of baitfish like herring are essential. Recognizing the impacts of huge seal and dogfish populations are also important. An ecosystem approach is the only way to ensure productive fishing for the long haul.”**

Eric Hesse, F/V Tenacious II  
West Barnstable, MA



## The future of New England fisheries

Ecosystem-based fisheries management will be implemented in geographically separate Fishery Ecosystem Plans (FEPs). The areas will be selected based on most similar ecosystem components (southern New England, Gulf of Maine, Georges Bank, etc.).

## NOAA Fisheries Service Goals:

- I. Optimize Food Provision
- II. Optimize Employment
- III. Optimize Recreational Opportunity
- IV. Optimize Intrinsic (Existence) values
- V. Optimize Profitability
- VI. Encourage stability in both biological and social systems

## Addressing concerns

**Will it mean less quota, more restrictions?** There are many potential outcomes in terms of overall fisheries regulations, so it is vital for fishermen to bring their decades of experience to the process.

**Can the science be trusted?** Ecosystem management will look at more than just the science from the past. It will now be able to include more environmental and climate trend data from other sources. This could actually improve the science that is used. It will also encourage collaboration with fishermen as research partners, because no one knows more about how the ocean works than fishermen.

**Will it put a strain on the science center?** The key is collaboration, so that data currently collected but not utilized is now made available. Streamlining the research process will alleviate the burden.

**It seems hard to implement - where is the guidance?** Luckily, there are examples from around the country—such as California and Chesapeake Bay—where ecosystem-based fisheries management has already been implemented. New England can take inspiration and guidance from these successful programs.

**We've been doing it the same way for 40 plus years. Why change?** We need a new system that will make sure that fishery and ocean observations make their way to the decision-making table more quickly. Plus, it is time to try something comprehensive that factors in everything that impacts fish populations.

**What good will it do now?** Just because one species has declined doesn't mean we should let it happen to the next species. It's never too late to try something new that incorporates a broader set of information and observations, especially from fishing fleets.

## What will be taken into consideration?

**It is important for managers to hear from fishermen what should be managed in the ecosystem under ecosystem-based fisheries management.**



PHOTOS (FROM LEFT): FISHERMEN: DAVID HILLS, WWW.FISHYPICTURES.COM; GRAY SEAL: RICHARD L. BECKER, WWW.SONGSTAR.ORG; COD: DIETER CRAASMAN; HERRING: JACOB BØTTER.



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# GET INVOLVED!

**Help frame the way ecosystem-based fisheries management is developed.**

Participate in the process. We're here to help keep you plugged in. We'll let you know opportunities to attend council meetings, write letters and share your knowledge. Let's get out there and help plan this right.

Contact the Fishermen's Alliance about upcoming meetings, opportunities for comments and public hearings at 508.945.2432 or info@capecodfishermen.org