



Making Advances in Fishery Conservation in the Mid-Atlantic

Jessica Coakley

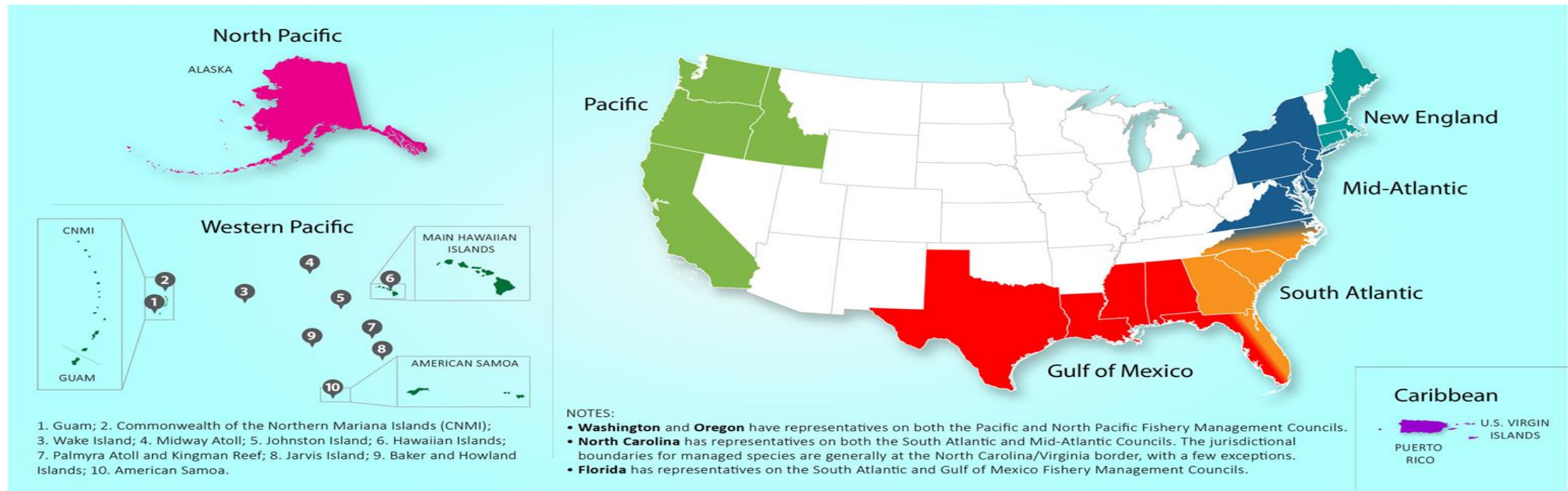
Mid-Atlantic Fishery Management Council

May 18, 2023



U.S. Regional Fishery Management Councils

- Created in 1976 as part of the Magnuson-Stevens Act (MSA) authorization
- Charged with managing the nation's marine fishery resources
- National/centralized statutes under MSA, regulations, and guidance
- MSA intended regional, participatory governance
- Each Council tackle issues differently – as intended!



Mid-Atlantic Council

7 States



64+ Species

7 Fishery Management Plans



Longfin Squid



Shortfin "Illex"
Squid



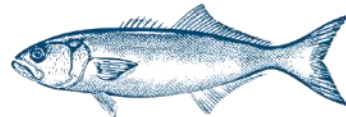
Butterfish



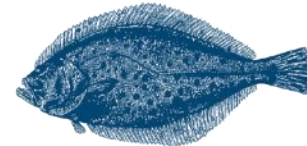
Atlantic Mackerel



Chub Mackerel



Bluefish



Summer Flounder



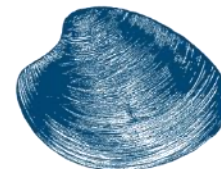
Black Sea Bass



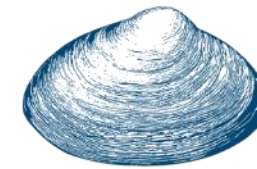
Scup



Golden
Tilefish



Ocean Quahog



Atlantic Surfclam



Blueline Tilefish



Spiny Dogfish



Monkfish

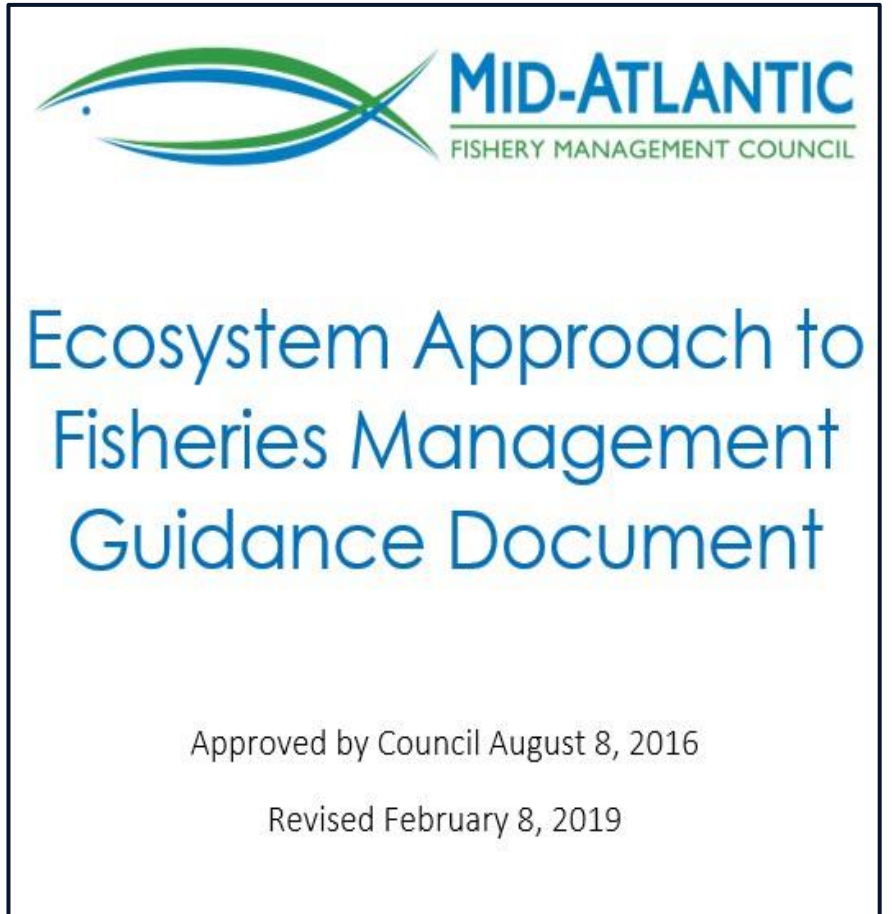
+ 50 species as Ecosystem
Component Species
(Unmanaged Forage)

“The Congress finds and declares....

“A national program for the conservation and management of the fishery resources of the United States....[from page I of the Magnuson-Stevens Fishery Conservation and Management Act]”

- Preventing overfishing
- Rebuilding overfished stocks
- Increase long-term economic and social benefits
- Ensure a safe and sustainable supply of seafood
- Protect habitat that fish need to spawn, breed, feed, and grow to maturity

EAFM Guidance Document



Areas of Focus: Habitat, Forage, Climate Change, Interactions, and Socioeconomics

Unmanaged Forage & Fisheries

- **Unmanaged forage amendment** - goal of proactively protect and conserve currently unmanaged forage species
 - In 2016, designated 16 species and species groups as ecosystem component species (over 50 species in total)
 - Prohibits new, expansion of existing or directed commercial fisheries in Mid-Atlantic
 - Established an incidental possession limit of 1,700 lb for all species combined
- **Chub mackerel amendment** – added to the Atlantic Mackerel, Squid and Butterfish FMP in 2020
 - Allows for commercial fishery with a catch limit and a variety of management and monitoring requirements
 - Recently completed chub mackerel research on importance of species in diet of HMS species (tunas and billfishes)
- **Unmanaged landings report** – annual report and review of trends and landings of unmanaged fisheries



Fisheries Habitat

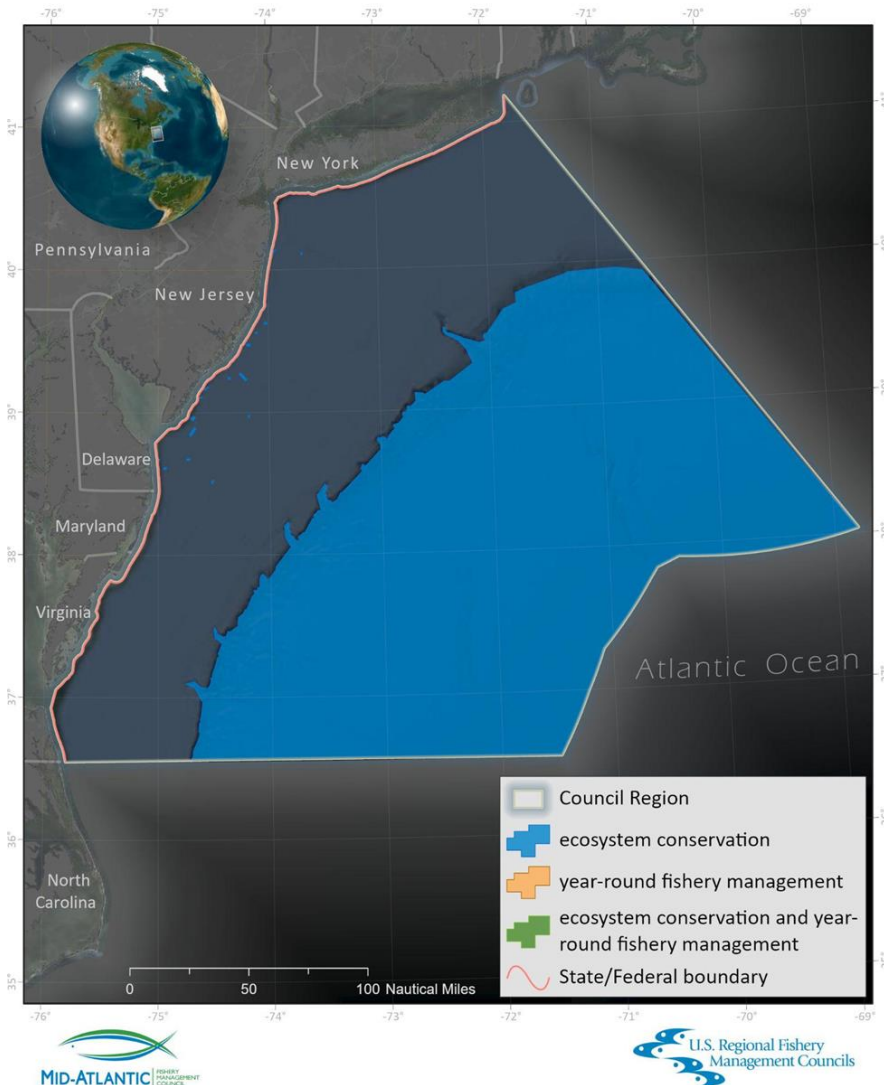
- [Northeast Regional Marine Fish Habitat Assessment \(NRHA\)](#) – a collaborative effort to describe and characterize estuarine, coastal, and offshore fish habitat distribution, abundance, and quality in the Northeast
 - [NRHA Data Explorer](#) – an R-shiny app to explore data on trends in fish species distribution at state and regional scales – survey and model developed. Includes habitat-species vulnerability matrix.
- [Essential Fish Habitat Amendment](#) – using new habitat science information to improve EFH designations and support the Council's fish habitat conservation efforts



Image Source: NOAA Fisheries and [americanocoans.org](http://americanococeans.org)

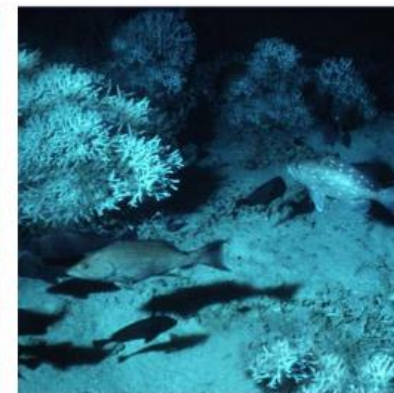
American Conservation and Stewardship Atlas

Mid-Atlantic Fishery Management Council



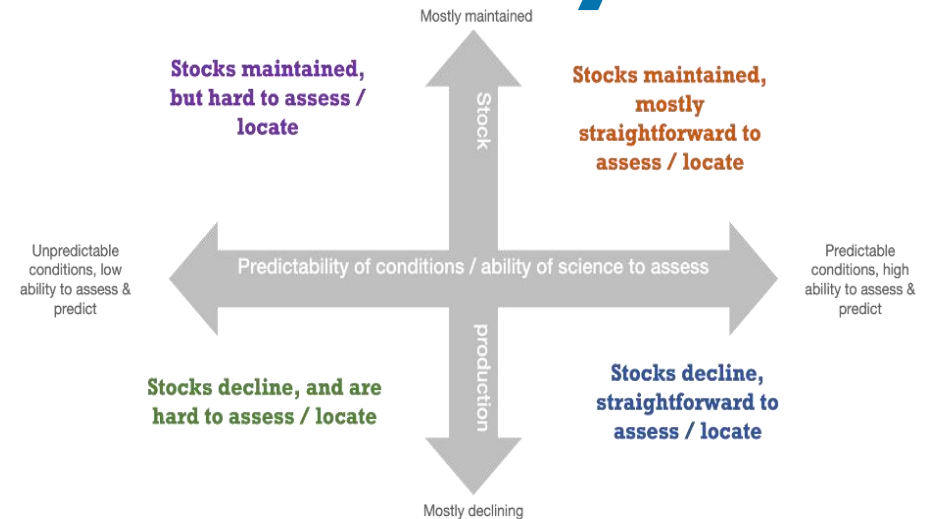
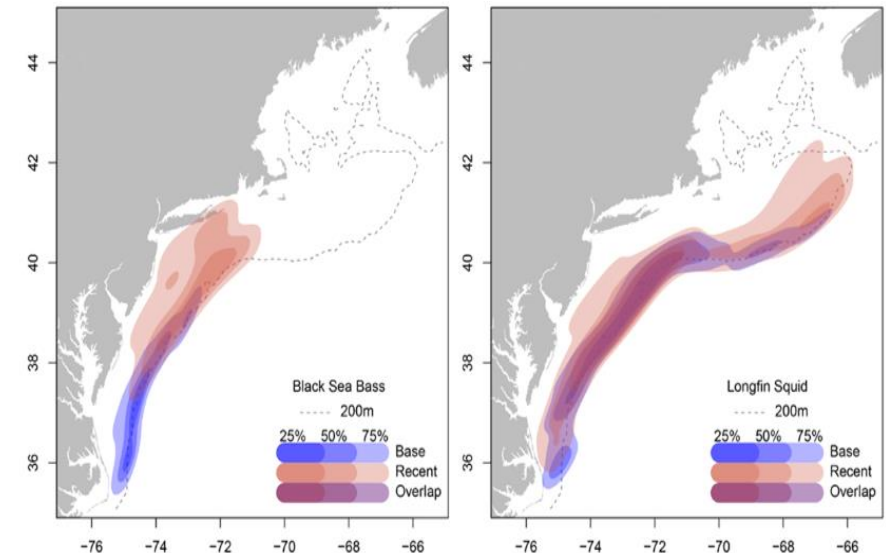
Region	Ecosystem Conservation	Year-round Fishery Management	Seasonal Fishery Closures or Other	Total # (all areas)
New England	17	3	27	47
Mid Atlantic	37	2	6	45
South Atlantic	168	3	3	174
Gulf of Mexico	21	2	1	24
Caribbean	2	1	6	9
Pacific	79	27	0	106
North Pacific	194	20	7	220
Western Pacific	13	9	0	22
Total	531	67	50	648

Deep Sea Coral Protections



Climate Change and Variability

- East Coast Climate Change Scenario Planning – collaborative coastwide process to explore jurisdictional and governance issues related to climate change such as changes in stock distribution and availability
- Project: *Short-term forecasts of species distribution for fisheries management*
 - Collaboration with Rutgers Univ. to develop and test new methods and model to predict short-term (1-10 year) climate induced distribution shifts
 - Focal species: summer flounder, spiny dogfish, *Illex* squid, and grey triggerfish
- Black Sea Bass Commercial Allocation Amendment – changes state allocations based in part on fishing history and in part on current stock biomass distribution



NEFSC State of the Ecosystem Reports



- Overview of ecosystem-level indicators that evaluate the status and trends of ecological, environmental, economic, and social components of the ecosystem
- SOE supported much of the data and analysis for risk assessment
- Provided to Council annually
 - Familiarity with ecosystem concepts and consideration
- Updates/improvements linked with risk assessment

Additional EAFM Applications

- Research Track Stock Assessments
 - Ecosystem Terms of Reference (ToR)
- Ecosystem and Socio-economic Profiles
 - *///ex*, sea bass, bluefish, fluke examples
 - Ecosystem factors influencing changes in distribution, stock productivity and recruitment
 - Temperature/Salinity
 - Primary production
 - Zooplankton abundance
 - Habitat occupancy
 - Diet composition
 - Oceanographic conditions



More ecosystem information: www.mafmc.org/eafm, www.oceanadapt.Rutgers.edu,
and www.integratedecosystemassessment.noaa.gov/

Current Issues

Atlantic Mackerel Rebuilding 2.0 Amendment

Black Sea Bass Commercial State Allocation Amendment

Climate Change Scenario Planning

MSB FMP Goals/Objectives and Illex Permits Amendment

Offshore Wind (Joint MAFMC/NEFMC Page)

Recreational Reform Initiative

Recreational Harvest Control Rule Framework/Addenda

RSA Program Redevelopment

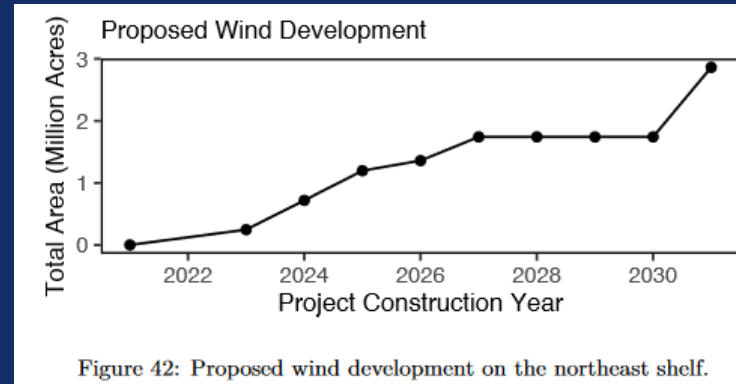
Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment

Summer Flounder Management Strategy Evaluation

Surfclam and Ocean Quahog Species Separation Requirements

Ongoing & Future Challenges

- Offshore wind and other ocean uses
 - Implications for management, economics, science



- Acceptance of scientific findings; trust in process; uncertainty
 - MRIP estimates
 - Recreational management
- Constant change
 - COVID-19
 - Global markets have changed
 - Climate change: shifting fish stocks

Building Resilient Climate Ready Fisheries

- Strengthening partnerships to prepare for governance challenges
- Addressing changing distributions
- Monitoring emerging fisheries
- Implementing an ecosystem approach to fisheries management
- Incorporating climate information in management decisions
- Ensuring healthy fish habitat
- Advancing climate science
- Planning for the future

<https://www.mafmc.org/climate-change>



Photo Credit: John
McMurray

Current Needs for Conservation

- Products that helps us:
 - Understand how things have changed in the ocean space
 - Anticipate how things may be changing (whether data or expert knowledge driven)
 - Connect changing ocean conditions and ocean uses to impacts to our managed species (local, regional, and cumulative impacts)
- Plan and prepare
 - Decision-support tools

Current Needs for Conservation

- Build better partnerships
 - Fishing industry, other ocean use industries, NGOs, academia, gov't
 - Improve understanding and help adaptation
- Build flexibility/adaptability throughout the whole system for:
 - Fishing industry (at-sea and shoreside)
 - Management
 - Data and science
 - Overarching governance





Questions?

Jessica Coakley
jcoakley@mafmc.org