



CCC Area-Based Management Subcommittee

Composition of the CCC Subcommittee

- Staff from all 8 Councils:
 - Deirdre Boelke (NEFMC)
 - Jessica Coakley (MAFMC)
 - Mark Fitchett (WPFMC)
 - John Froeschke (GMFMC)
 - Kerry Griffin (PFMC)
 - Roger Pugliese (SAFMC)
 - Miguel Rolon (CFMC)
 - Dave Witherell (NPFMC)
- With assistance from NOAA Fisheries:
 - Heather Sagar
 - Tim Haverland
 - Michelle Lennox



The Terms of Reference (TORs)

- 1. Assist CCC in reacting to 30 by 30 initiative.
- 2. Prepare report on Area-based Measures in U.S. EEZ:
 - Evaluate existing EEZ fishery area closures relative to the 30 by 30 initiative.
 - Discuss pros and cons of area-based management.
 - Objectives and expected benefits of area-based management tool for diversity of ecosystems under Councils' jurisdictions.
- 3. Prepare journal article on area-based measures for marine fisheries in U.S.



Meetings of the Subcommittee (since Oct. 2021)

November 1

- Discussed GIS needs and IUCN OECM criteria

November 30

- Discussed evaluation criteria and evaluation templates

January 10

- Discussed draft evaluation tables

March 16

- Reviewed evaluation tables

March 30

- Reviewed final evaluation tables and additional sections for draft report

April 20

- Reviewed final draft of report and discussed CCC presentation and preparation of journal article

Meeting minutes are available in CCC posted materials



What's in the Report?

1. Introduction
2. Identification of Conservation Areas
3. Synthesis of Conservation Areas
4. Pros and Cons of Area-Based Approaches
5. Summary
6. References
7. Preparers
8. Appendices

Appendix A – Regional Profiles of Conservation Areas – text, maps, and tables
Appendix B – Conservation Worksheets by Region (separate, lengthy file)



1. Introduction

- Background on the Council process and US Fisheries
- Summary of Magnuson Stevens Fishery and Conservation Act (MSA) Requirements
- Purpose of the Report
- Crosswalk of Ten National Standards of the MSA and eight key principles for conserving and restoring US lands and waters outlined in the America the Beautiful (ATB) Report (Table 1).
- Very similar goals of science based decisions, strong collaboration, and conservation measures that support job creation and communities.



2. Identification of Conservation Areas (Definition)

Draft Definition (as developed by Subcommittee):

- 1) an established, geographically defined area, with,
- 2) planned management or regulation of environmentally adverse fishing activities, that,
- 3) provides for the maintenance of biological productivity and biodiversity, ecosystem function and services (including providing recreational opportunities and healthy, sustainable seafood to a diverse range of consumers).

Note: This draft definition has been shared with NOAA Fisheries in comments letters from the CCC and individual Councils.



2. Identification of Conservation Areas (Criteria)

- Subcommittee developed criteria for identifying a conservation area per Executive Order 14008 through 4 steps (Table 2 in Report)
- Incorporated characteristics of “other effective area-based conservation measures” (OECMs) as defined by the International Union for Conservation of Nature (IUCN)
- Included steps specific to ATB Report Principles
- If an area meets all 4 steps, then it qualifies as a conservation area



2. Identification of Conservation Areas (Criteria)

- **Step 1:** Does the area meet the working definition of conservation area?
- **Step 2:** Governance Type/Management Entity?
- **Step 3:** Objective of the Area? (3 Categories Identified)



- **Step 4:** Does the area meet some, ideally most of the ATB Principles?

2. Identification of Conservation Areas (Evaluation)

- **The Subcommittee also developed an evaluation process for candidate conservation areas. Two separate tools.**
 1. **Worksheet** – to document how each area qualifies as a conservation area (Table 3)
 2. **Checklist** – to evaluate and monitor the effectiveness of a conservation area (Table 4)
 - Metrics include: enforceability, climate change resiliency, stakeholder participation, research/biological monitoring, and public access.
 - If a specific element is determined not to be effective, actionable strategies should be included to improve effectiveness.



2. Identification of Conservation Areas (Evaluation)

Evaluation of Conservation Areas (Tables 3 and 4) Completed for every area included in report (See App B)

Table 3. ATB Conservation Area Worksheet (template).

General Information	
Area name	
Implementation Action (Year)	
Regulations (with link of geographic area defined, if available)	
Size	
Number of areas (if applicable)	
Step 1 – Conservation Area Definition	
Criteria for Step 1	Detailed explanation
1a. Established, geographically defined area?	
1b. Planned management or regulation?	
1c. Provides for the maintenance of biological productivity and biodiversity, ecosystem function and services?	
Step 2 – Defining Governance	
Criteria for Step 2	Detailed explanation
2a. What is the governance type (federal government, shared or collaborative governance, private governance, or indigenous and local communities)?	
2b. Are the boundaries clear and well understood?	
2c. Who is the lead Agency?	
2d. Are there multiple entities involved in management of the area? If so, which ones?	
2e. Is enforcement of the area adequate?	
Step 3 – Category/Objective	
Criteria for Step 3	Detailed explanation

Table 4. Effectiveness checklist for ATB conservation areas.

ATB Area Name				
ATB Area ID				
Number of areas (if applicable)				
Elements of Effectiveness	Description of Effectiveness Elements	Yes/No/Uncertain	Rationale	If "no" for effectiveness, specific action that could be taken to improve conservation benefits
1. What [fishery] measures support conservation objectives?	Is fishing completely prohibited throughout the area? If not, which fishing gears are prohibited? If some fishing activity is allowed are there any limitations? Are there limits on recreational fishing?			
2. Other activities	Are other activities with potentially negative impacts on conservation prohibited within the area (e.g., mining, dumping, anchoring, oil and gas extraction, offshore energy activity, etc.)? If some are allowed within the area, are they limited? Are any activities anticipated to occur in the area in the near future (i.e., next 5 years) that are important to flag?			
3. Enforceability	Is the overall enforcement of the area effective? What are the enforcement approaches and specific [fishery] monitoring tools used for enforcement, who is responsible for enforcement, are there enforcement partnerships?			
4. Climate Change Resiliency	Can the conservation area adapt, is it resilient to climate change? Is the governance process nimble enough to adapt to uncertainty in an era of climate change? Can the area be modified relatively easily to incorporate new science?			
5. Stakeholder participation / Collaboration	Is there general support for the conservation area by regulated participants, other stakeholders, tribal or local communities, and regulators? Was the area developed in a collaborative way, is there overall support that the conservation area is effective and meeting objectives?			
6. Research/biological monitoring/restoration	Are there any biological monitoring programs in place now or when the area was adopted? Are any research programs planned to evaluate the conservation area in the short-term or long-term? Are there specific restoration efforts taking place or planned for the area?			
7. Public access	Are there opportunities for the public to access the conservation area for recreational opportunities? Are there specific programs in place to promote equitable access to the outdoors?			
8. Other elements of effectiveness	Are there other details about this conservation area that make it more, or less effective in terms of meeting conservation objectives? Are there aspects about the management program in this area that are important to note that are not captured in the topics above?			

3. Synthesis of Conservation Areas (Table 5, # of Areas)

Region	Ecosystem Conservation	Year-round Fishery Management	Seasonal Fishery Closures or Other	Total # (all areas)
New England	16	3	18	37
Mid Atlantic	5	19	6	30
South Atlantic	166	3	3	172
Caribbean	7	0	0	7
Gulf of Mexico	21	4	10	35
Pacific	76	15	9	100
North Pacific	193	19	2	214
Western Pacific	7	12	1	20
Total	491	75	49	615

*Ecosystem Conservation Areas are designed to conserve habitat, biodiversity or special ecosystems, or vulnerable species. Year-round Fishery Management areas are designed to address spatially driven fishery management challenges. Seasonal Fishery Management/Other include areas that seasonally address spatially driven fishery management challenges, or other area-based conservation measures that may not fit in the other 2 categories.

3. Synthesis of Conservation Areas (Table 6, By Objective nm²)

Region	Total area (nm ²) of U.S. EEZ	Ecosystem Conservation	Year-round Fishery Management	Seasonal Fishery Management or Other	Total % (all areas combined; no overlap)
New England	59,990	21,308	3,078	17,242	41,628 (69%)
Mid Atlantic	60,125	33,321	23	27,416	33,344 (55%)**
South Atlantic	143,806	19,763	71,612	19,159	TBD***
Caribbean	59,982	48	N/A	N/A	48
Gulf of Mexico	182,738	691	168	295	1,153 (0.6%)
Pacific	237,677	208,923	14,713	N/A	88%
North Pacific	1,025,770	684,076	984,294	14,955	1,025,770 (100%)
Western Pacific	1,692,082	947,004	218,352	99,931	1,032,825(61%)
Total	3,543,239	1,915,134 (54%)	1,220,628 (34%)	178,998 (5%)	>54%

*Ecosystem Conservation Areas are designed to conserve habitat, biodiversity or special ecosystems, or vulnerable species. Year-round Fishery Management areas are designed to address spatially driven fishery management challenges. Seasonal Fishery Management/Other include areas that seasonally address spatially driven fishery management challenges, or other area-based conservation measures that may not fit in the other 2 categories. **The seasonal/other category is not included in the total. ***Total may include some overlap with other areas.

3. Synthesis of Conservation Areas (Table 6, Coverage year-round, nm²)

Region	Total area (nm ²) of U.S. EEZ	Year-round, Total area (nm ²)			% of Region (no overlap)		
		All bottom tending gears*	Bottom trawl or dredge	Other gears	All bottom tending gears	Bottom trawl or dredge	Other gears
New England	59,990	23,434	N/A	N/A	39.1	N/A	N/A
Mid Atlantic	60,125	33,344	24,130	N/A	56.0	40.1	N/A
South Atlantic	143,806	33,279	19,763	29,899	23.1	13.7	20.8
Caribbean	59,982	48	59,982	N/A	0.1	100.0	N/A
Gulf of Mexico	182,738	858	N/A	N/A	0.5	N/A	N/A
Pacific	237,677	94,373	115,007	N/A	39.7	48.4	N/A
North Pacific	1,025,770	153,832	758,973	984,294	15.0	73.9	95.9
Western Pacific	1,692,082	1,692,082	1,692,082	932,894	100.0	100.0	55.1
Total	3,543,239	2,031,250	2,669,937	1,947,087	57.3%	75.4%	55.0%

*Bottom tending gear means a gear configuration that contacts the seafloor and includes all mobile bottom tending gear (such as bottom trawls and dredges) and fixed gears (such as pots/traps or longlines) that sit on bottom. Bottom trawling means trawl gear designed to contact the seafloor (i.e., not pelagic trawls). Dredge gear includes dredge configurations (e.g., scallop and clam toothed or hydraulic gear) that contact the seafloor. Other gears may include those gears not listed above that may impact components of the ecosystem (e.g., pelagic longlines, pelagic gillnets, rod and reel, spears, etc.).

3. Synthesis of Conservation Areas (Table 6, Coverage seasonally, nm²)

Region	Total area (nm ²) of U.S. EEZ	Seasonal, Total area (nm ²)			% of Region (no overlap)		
		All bottom tending gears	Bottom trawl or dredge	Other gears	All bottom tending gears	Bottom trawl or dredge	Other gears
New England	59,990	N/A	8,737	10,058	N/A	14.6	16.8
Mid Atlantic	60,125	N/A	N/A	3,331	N/A	N/A	6.0
South Atlantic	143,806	9,750	N/A	9,408	6.8	N/A	6.5
Caribbean	59,982	N/A	N/A	32	N/A	N/A	0.1
Gulf of Mexico	182,738	295	N/A	N/A	0.2	N/A	N/A
Pacific	237,677	N/A	N/A	N/A	N/A	N/A	N/A
North Pacific	1,025,770	N/A	7,868	25,438	N/A	0.8	2.5
Western Pacific	1,692,082	N/A	N/A	99,931	N/A	N/A	6.0
Total	3,543,239	10,045	16,605	148,198	0.3%	0.5%	4.2%

*Bottom tending gear means a gear configuration that contacts the seafloor and includes all mobile bottom tending gear (such as bottom trawls and dredges) and fixed gears (such as pots/trans. or longlines) that sit on bottom. Bottom trawling means trawl gear designed to contact the seafloor (i.e., not pelagic trawls). Dredge gear includes dredge configurations (e.g., scallop and clam toothed or hydraulic gear) that contact the seafloor. Other gears may include those gears not listed above that may impact components of the ecosystem (e.g., pelagic longlines, pelagic gillnets, rod and reel, spears, etc.).

4. - 7. Remaining Sections of Report

4. Pros and Cons of Area-Based Approaches

Conservation areas are only one tool. To battle climate change will need to use multiple tools. Area closures may not be flexible enough.

5. Summary

Council process consistent with ATB principles. Sustainable plans are in place that have been developed in a collaborative and transparent way. Broad range of approaches needed to fulfill multiple goals of conservation, while also supporting vibrant fishing communities, and addressing challenges of climate change.

6. References

7. List of Preparers

8. Appendices



- **Appendix A:** Regional Profiles of Conservation areas (summary tables, maps)
- **Appendix B:** Worksheets and Checklists by Region

Appendices (Summary Tables)

Mid Atlantic Region Conservation Areas. Size is for individual areas and does not account for any overlaps, nor does it remove areas that may extend into or overlap with the New England Region.

ID	Type	Focus	Area Names (# subareas)	Size (nm ²)	CFR	Prohibitions/Restrictions	ATB Principles Applied
MA1	Ecosystem Conservation	vulnerable ecosystem (deep-sea corals)	Frank R. Lautenberg Deep-Sea Coral Protection Area	33,321	50 CFR 648.372	Bottom-tending commercial fishing gear.	1,2,5,7,8
MA2	Ecosystem Conservation	habitat	Tilefish Gear Restricted Areas (4)	133	50 CFR 648.297	Bottom-tending mobile fishing gear.	1,2,5,7,8
MA3	Year-round Fishery Mgmt.	habitat	Mackerel, Squid, and Butterfish Bottom Trawling Restricted Areas (2)	124	50 CFR 648.23	No permitted mackerel, squid, or butterfish vessel may fish with bottom trawl gear.	1,2,5,7,8
MA4	Year-round Fishery Mgmt.	habitat	Delaware (4) and New Jersey Special Management Zone Areas for Recreational Fishermen (13)**	23	50 CFR 648.148	No person may fish in the Delaware Special Management Zones except by handline, rod and reel, or spear fishing (including the taking of fish by hand)	1,2,5,7,8
MA5	Seasonal Fishery Mgmt./Other	bycatch	Scup Gear Restricted Areas (2)	3,561	50 CFR 648.124	Prohibits vessels fishing for squid, black sea bass, or silver hake (also known as whiting) from using mesh smaller than the 5.0-inch (12.7-cm) minimum scup mesh size in the areas during certain times of year.	1,5,7,8
MA6	Seasonal Fishery Mgmt./Other	other	Atlantic Surfclaw and Ocean Quahog Closed Areas (4)	28,902***	50 CFR 648.76	Clam dredging gear prohibited; public health closures implemented under RA Authority	5,7,8

*Ecosystem Conservation Areas are year-round to conserve habitat, biodiversity or special ecosystems, or vulnerable species. Year-round Fishery Management areas are designed to address spatially driven fishery management challenges. Seasonal Fishery Management/Other include areas that seasonally address spatially driven fishery management challenges, or other area-based conservation measures that may not fit in the other 2 categories. **

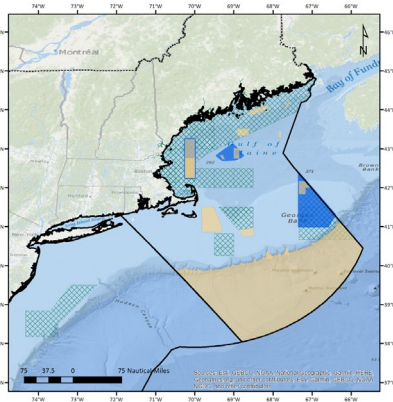
South Atlantic Region Conservation Areas. Size is for individual areas and does not account for any overlaps.

ID	Type*	Focus	Area Names (# subareas)	Size (nm ²)	CFR	Prohibitions/Restrictions	ATB Principle Applied
SA1	Ecosystem Conservation	Deepwater Coral Habitat	Stetson Miami Terrace CHAPC	15,287.70	50/chapter-VI/part-622/subpart-K/section-622.224	Bottom longline, trawl, dredge, pot, or trap, anchor or grapple and chain, fishing for or possession of coral.	1,2,5,7,8
SA2	Ecosystem Conservation	Deepwater Coral Habitat	Cape Lookout CHAPC	80.05	50/chapter-VI/part-622/subpart-K/section-622.224	Bottom longline, trawl, dredge, pot, or trap, anchor or grapple and chain, fishing for or possession of coral.	1,2,5,7,8
SA3	Ecosystem Conservation	Deepwater Coral Habitat	Cape Fear CHAPC	34.12	50/chapter-VI/part-622/subpart-K/section-622.224	Bottom longline, trawl, dredge, pot, or trap, anchor or grapple and chain, fishing for or possession of coral.	1,2,5,7,8
SA4	Ecosystem Conservation	Deepwater Coral Habitat	Blake Ridge Diapir	1.98	50/chapter-VI/part-622/subpart-K/section-622.224	Bottom longline, trawl, dredge, pot, or trap, anchor or grapple and chain, fishing for or possession of coral.	1,2,5,7,8
SA5	Ecosystem Conservation	Deepwater Coral Habitat	Pourtales Terrace	359.59	50/chapter-VI/part-622/subpart-K/section-622.224	Bottom longline, trawl, dredge, pot, or trap, anchor or grapple and chain, fishing for or possession of coral.	1,2,5,7,8
SA6	Ecosystem Conservation	Deepwater Coral Habitat	Oculina Bank HAPC	481.64	50/chapter-VI/part-622/subpart-K/section-622.224	Bottom longline, trawl, dredge, pot, or trap, anchor or grapple and chain, fishing for or possession of coral.	1,2,3,5,7,8
SA7	Ecosystem Conservation	Vulnerable species - Snapper Grouper	Snowy Grouper Wreck MPA	126.67	50/chapter-VI/part-622/subpart-#622.183	No fishing or possession of any snapper grouper species.	1,2,3,5,7,8

Appendices (Maps)

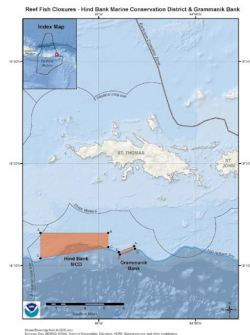
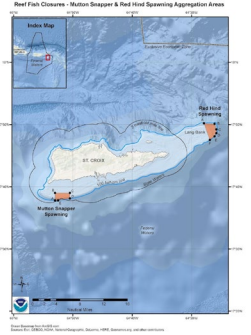
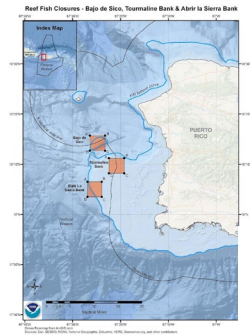
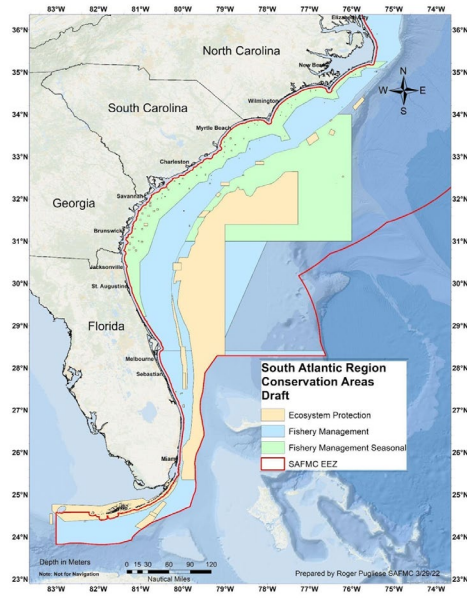
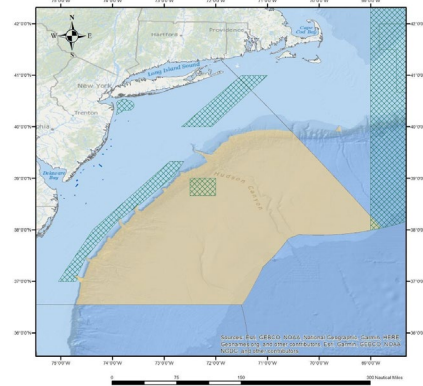
New England Fishery Management Council

Conservation Areas



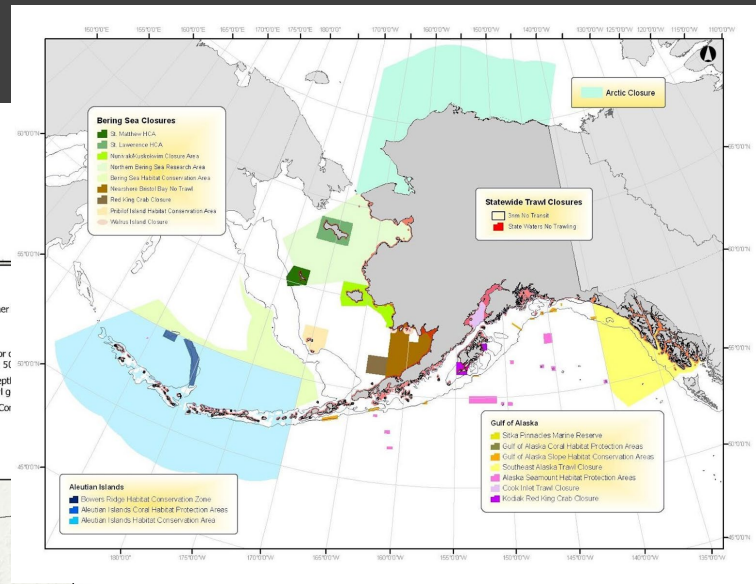
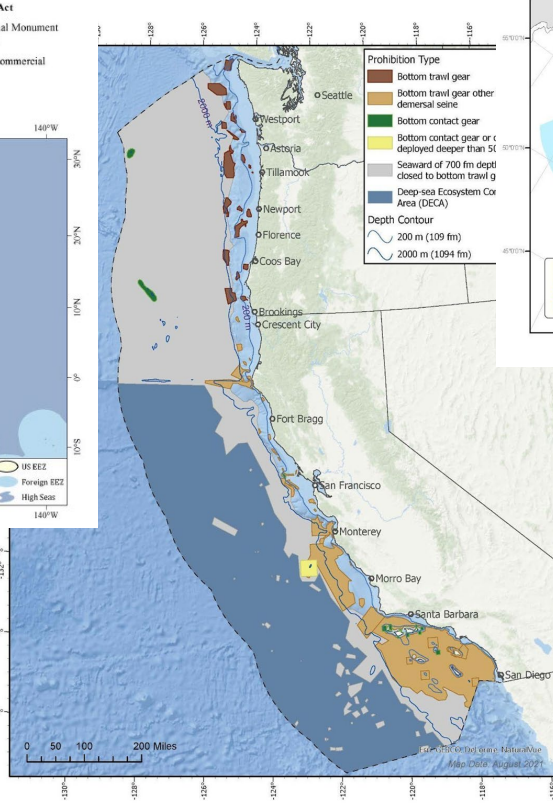
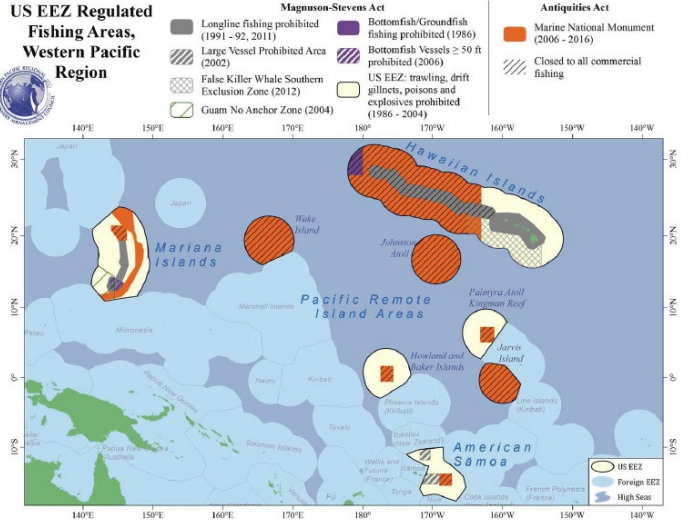
New England Fishery Management Council
U.S. Regional Fishery Management Councils

Mid-Atlantic Fishery Management Council



Appendices (Maps)

US EEZ Regulated Fishing Areas, Western Pacific Region





Next Steps for the ABM Subcommittee

- Complete regional maps and conservation area calculations (additional GIS staff resources needed)
- Continue to coordinate with NOAA Fisheries on Atlas database as needed
- Support the CCC on the development of any position statements on this issue
- Prepare journal article on use of area-based management in US fisheries management and conservation





Questions?