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# UPDATE ON EVALUATION OF MARINE CONSERVATION AREAS

PRESENTATION TO THE ECOSYSTEM COMMITTEE

David Witherell - September 2023



# BACKGROUND

1/27/2021: **Executive Order 14008** – “Tackling the Climate Crisis at Home and Abroad”

- Established a task force to determine steps to achieve goal of conserving at least 30% of land and waters by 2030.

4/16/21: **NPFMC motion for Ecosystem Committee to review areas**

- Assess conservation areas relative to OECM criteria, and potential actions that could be taken to meet criteria. [note: a later council motion delayed this request until more information was available]

5/6/21: **Conserving and Restoring America the Beautiful** (ATB Report)

- The ATB report directs that “NOAA should work closely with the regional fishery management councils to identify areas or networks of areas where their fisheries management efforts would support long-term conservation goals.”
- Established USGS/NOAA Workgroup to measure and track progress towards its conservation goal. Will be done via the **American Conservation and Stewardship Atlas** (Atlas), a tool that will better reflect, among other things, “...the contributions of fishery management councils...”

5/21/21: **CCC established Area-based Management Subcommittee**

- Final report on EEZ fishery conservation areas released on May 5, 2023
- Council releases North Pacific Conservation Areas Summary in March 2023

# STATUS OF ATB, ATLAS, AND FAC

ATB annual updates - see: [www.noaa.gov/America-the-beautiful](http://www.noaa.gov/America-the-beautiful)

The **Atlas Interagency Workgroup** (CEQ, DOI, DOC and USDA), has several subcommittees to complete the work: Engagement and Policy, Wildlife Corridors, Measurements, and Urban and Disadvantaged Communities.

At May 2023 CCC meeting, NMFS leadership said that the ATB/Atlas will not have a single uniform, across-the-board, simple definition of conservation area. Instead agencies working on general attributes or **elements of a conservation area** that apply to marine and land areas.

The decision on what 'counts' as conservation areas towards the ATB 30% goal will likely be made by interagency **Measurements Subcommittee**. Note that ATB goal supports, but is not identical to, 30x30 goals that have been proposed under the Convention on Biological Diversity and promoted by ENGOs.

The initial Atlas is still under development, and going through internal beta testing.

DOI is about to launch a website, [www.conservation.gov](http://www.conservation.gov), which will include the Atlas, as well as other information like grant opportunities, upcoming meetings, etc.

The **Marine and Coastal Area-based Management Federal Advisory Committee** (the FAC) has been formed. The 20 member FAC will provide advice to NOAA on science-based approaches to area-based marine protection, conservation, and restoration, including but not limited to implementation of the ATB Initiative.

# CCC Area-based Management Subcommittee

Established May 2021

## **Members:**

Eric Reid, (NEFMC) Chair  
Michelle Bachman (NEFMC)  
Jessica Coakley (MAFMC)  
Mark Fitchett (WPFMC)  
John Froeschke (GMFMC)  
Kerry Griffin (PFMC)  
Roger Pugliese (SAFMC)  
Miguel Rolon (CFMC)  
Dave Witherell (NPFMC)

## **With assistance:**

Heather Sagar (NMFS)  
Tim Haverland (NMFS)  
Michelle Lennox (NMFS)  
Brett Holycross (PSMFC)

## **Terms of Reference**

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.

# DEFINING CONSERVATION AREA

The ATB report doesn't contain a definition of conservation area, so the first task for the CCC ABM Subcommittee as to develop a definition modeled after the ATB principles, various definitions of conservation, and the definitions of other effective conservation measures (OECM).

- For example, FAO (2022) identified four criteria for marine fisheries OECMs: The area 1) is “not currently recognized as a protected area,” 2) is “governed and managed,” 3) it “achieves sustained and effective contributions to in situ conservation of biodiversity,” and 4) it includes “associated ecosystem functions and services and cultural, spiritual, socioeconomic and other locally relevant values.”

The Subcommittee defined a marine conservation area as *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).*”

# BIODIVERSITY

Biodiversity is all the different kinds of life you'll find in one area—the variety of animals, plants, fungi, and microorganisms that make up our natural world. Each of these species and organisms work together in ecosystems.

Biodiversity can be measured at many different levels including genetic, species, community, and ecosystem.

- Species richness - the total number of distinct species within an area. More species present means higher biodiversity.
- Species evenness - the proportion of each species within an area. Areas with many species that are relatively equal in abundance have the highest values of biodiversity.

Base Evaluation - Does the area effectively contribute to conservation of biodiversity *in that area*? [note: it doesn't take into account that redistribution of effort from the closed area could have impacted biodiversity in other areas].

# CATEGORIES OF CONSERVATION AREAS

The Subcommittee categorized areas based on objective and seasonality.

**Ecosystem Conservation Areas** directly provide in-situ conservation of biodiversity: areas specifically designed to conserve and enhance habitat including essential fish habitat, conserve biodiversity or special ecosystems, or protect vulnerable species, including species protected under ESA and MMPA.

The other two categories provide conservation value, but in-situ conservation of biodiversity may be a secondary objective:

**Year-round Fishery Management Areas** were primarily designed to address spatially driven fishery management challenges: mortality reduction, stock rebuilding, control catch to stay within annual catch limits, minimize bycatch, or for enforcement effectiveness. Regulations are in place continuously.

**Seasonal Fishery Management/Other Areas** were designed to address spatially driven fishery management challenges on a seasonal basis but also provide substantial conservation value by protecting spawning aggregations prior to and during spawning periods, reducing bycatch of certain species during vulnerable times of the year, or prohibiting certain fishing activities in areas when marine mammals may be seasonally present.

# EVALUATION OF AREAS

North Pacific Conservation Areas are described on pages 71-79 of the CCC Area-Based Management Subcommittee Report:

<https://static1.squarespace.com/static/56c65ea3f2b77e3a78d3441e/t/6489c43523c0b1595a5b8d54/1686750280097/Evaluation-of-Conservation-Areas-Report-2023.pdf>

Detailed evaluation of individual areas in Appendix B to the report, with NPFMC evaluations on pages 636-905.

[https://static1.squarespace.com/static/56c65ea3f2b77e3a78d3441e/t/645d4be397a994097c9471f4/1683835904666/2\\_AppendixB\\_ConservationWorksheets\\_ByRegion\\_2023-05-05.pdf](https://static1.squarespace.com/static/56c65ea3f2b77e3a78d3441e/t/645d4be397a994097c9471f4/1683835904666/2_AppendixB_ConservationWorksheets_ByRegion_2023-05-05.pdf)



# APPENDIX B – EVALUATION WORKSHEETS

**Table 1 - ATB Conservation Area Worksheet - Aleutian Islands Habitat Conservation Area**

General Information	
Area name	Aleutian Islands Habitat Conservation Area
Implementation Action (Year)	2006
Regulations (with link of geographic area defined, if available)	50 CFR 679.22(a)(14)
Number of areas (if applicable)	1
Step 1 – Conservation Area Definition	
Criteria for Step 1	Detailed explanation
1a. Established, geographically defined area?	Yes, as detailed in the regulations
1b. Planned management or regulation?	Yes. The area was implemented as Amendment 78 to the Bering Sea and Aleutian Islands Groundfish Fishery Management Plan (FMP)
1c. Provides for the maintenance of biological productivity and biodiversity, ecosystem function and services?	Yes. The area establishes nearly full protection for coral and sponge ecosystems along the Aleutian Islands and deep water basin/trench areas.
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)?	The area is implemented through Federal Government regulations.
2b. Are the boundaries clear and well understood?	This is an irregularly shaped area; boundaries are described in regulations and maps
2c. Who is the lead Agency?	NOAA Fisheries
2d. Are there multiple entities involved in management of the area? If so, which ones?	No
2e. Is enforcement of the area adequate?	Yes. The USCG and NOAA enforce the area, and report on enforcement activities at each council meeting
Step 3 – Category/Objective	
Criteria for Step 3	Detailed explanation
3a. For fishery conservation areas, three categories are recommended; which one best describes the candidate area best? 1) ecosystem conservation; 2) year-round fishery management; or 3) seasonal fishery management / other.	Ecosystem conservation
3b. Which sub-category best describes the candidate area? For ecosystem conservation there are 4 sub-categories (habitat, vulnerable species, vulnerable ecosystem, biodiversity).	Habitat

# EVALUATION WORKSHEETS (CONTINUED)

For year-round/ seasonal fishery management or other areas there are 4 sub-categories (bycatch, spawning, allocation, other).			
<b>Step 4 – America the Beautiful Principles</b>			
<b>Criteria for Step 4</b>		<b>Detailed explanation</b>	
4a. Does the area meet at least 3 of the America the Beautiful principles? Which ones?		Yes. Principles 1,2,5,7,8	
1. Pursue a Collaborative and Inclusive Approach to Conservation		<i>This area fully meets this principle.</i> The area established using collaboration and consensus-building, where people have worked together to conserve the health and productivity of marine resources	
2. Conserve America's Lands and Waters for the Benefit of All People		<i>This area fully meets this principle.</i> The area provides conservation of a relatively undisturbed natural place that yields meaningful benefits to all Americans.	
3. Support Locally Led and Locally Designed Conservation Efforts		Although the area was not developed using locally led or locally designed conservation efforts, it does reflect regional priorities in the North Pacific and seeks to achieve balanced stewardship across the region.	
4. Honor Tribal Sovereignty and Support the Priorities of Tribal Nations		Although the area was not established specifically to honor Tribal sovereignty, treaty and subsistence rights, and religious practices, it does advance the priorities of Alaska Natives (specifically	
			Unangax peoples from the Tribal communities of Atka and Akutan on the Aleutian Islands) regarding the conservation of natural, cultural, and historical resources and enhances subsistence and economic opportunities in the region.
	5. Pursue Conservation and Restoration Approaches that Create Jobs and Support Healthy Communities		<i>This area fully meets this principle.</i> Establishment of this area creates jobs, supports productive fisheries and vibrant working waterfronts for the local communities of Atka and Akutan, and for fishing communities located outside of the area (e.g., Unalaska). Thus, the area enhances the economy, addresses environmental justice, and improves the quality of life for those involved in the fisheries that remain open.
	6. Honor Private Property Rights and Support the Voluntary Stewardship Efforts of Private Landowners and Fishers		While not the focus of the development of this area, voluntary conservation efforts of fishermen were taken into account in designing the area, as all areas that had not received much fishing effort were included in the conservation area.
	7. Use Science as a Guide		<i>This area fully meets this principle.</i> The area was established based on the best available science and informed by the recommendations of scientists at the Alaska Fisheries Science Center and the Scientific and Statistical Committee. All information used to evaluate the area was transparent and accessible to the public through the EIS. Indigenous and Traditional Ecological Knowledge would have been considered if available.
	8. Build on Existing Tools and Strategies with an Emphasis on Flexibility and Adaptive Approaches		<i>This area fully meets this principle.</i> The area developed using the regional fishery management council stakeholder-driven processes. Because the area is developed by the Council and implemented through the NOAA Fisheries regulatory process, the area is flexible, innovative in its approach, and can be readily adaptive to adjust to a changing climate, shifting pressures, and new science.

# EVALUATION WORKSHEETS (CONTINUED)

Table 2 – Effectiveness checklist for ATB conservation areas - Aleutian Islands Habitat Conservation Area

<b>ATB Area Name</b>	Aleutian Islands Habitat Conservation Area			
<b>ATB Area ID</b>	NP1			
<b>Number of areas (if applicable)</b>				
<b>Elements of Effectiveness</b>	<b>Description of Effectiveness Elements</b>	<b>Yes/ No/ Uncertain</b>	<b>Rationale</b>	<b>If “no” for effectiveness, specific action that could be taken to improve conservation benefits</b>
1. What supports conservation?	Are there limitations or prohibitions on fishing activities or gear use in this area that support conservation objectives? Describe how these measures apply.	YES	Bottom trawling is prohibited in this area. The use of this gear in the area was fully evaluated through an Environmental Impact Statement, and a prohibition on this gear type was determined to have the greatest positive effects on biodiversity and benthic habitats in the AI, as this area supports relatively high densities of deep-sea corals, sponges,	

			other epifauna, and associated ecosystem components. The prohibition would also prevent impacts to the undisturbed sediments and ecosystems of the deeper basin areas. There is a very limited amount of fishing with pot gear for golden king crab and a limited amount of longlining for Pacific cod, halibut, and sablefish (and potentially a very limited amount of pelagic trawling for pollock) in the area. At these low harvest levels, the fisheries that remain open would not be expected to have any significant impact on biodiversity.	
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?	NO	The only other activity with potentially negative impacts on conservation that occurs in the area is cargo shipping. As one of the shortest routes between North American and Asian ports, the North Pacific Great Circle Route crosses through the Aleutian Islands.	
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	YES	The area is enforced by the USCG and NOAA. All vessels fishing for cod or pollock have VMS, and all vessels have observer coverage that collect location data to detect violations.	

# EVALUATION WORKSHEETS (CONTINUED)

	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?	YES	The area can be readily adaptive to climate change and new science through the relatively nimble Council process. The Council slightly adjusted the boundaries of this area once (Amendment 88) to incorporate new information. The regulations to adjust the boundaries became effective in 2008.	
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?	YES	This area was developed with input from regulated participants and had the full support from fishing and environmental organizations. There is strong buy-in that the conservation area is effective at protecting vulnerable habitats and ecosystems.	
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?	YES	NOAA Fisheries regularly surveys the area to understand changes in habitat and fish composition and productivity. The AI region is fully evaluated annually through the AI Ecosystem Status Report - <a href="https://apps-afsc.fisheries.noaa.gov/Plan_Team/2021/Alecosys.pdf">https://apps-afsc.fisheries.noaa.gov/Plan_Team/2021/Alecosys.pdf</a>	
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?	NO	The Aleutian Islands area is expansive and very remote, and extremely costly for the public to get to. And once there (assuming one flies into Adak), there are no boat rental facilities to access the area.	
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?	MORE	This conservation area lies along the remote and expansive Archipelago, and receives only very minor fishing effort from vessels using pots or longlines. The Aleutian Islands are also part of the Alaska Maritime National Wildlife Refuge.	

## NP AREAS NOT MEETING THE DEFINITION

For the North Pacific evaluation, several areas did not meet the conservation area definition and were excluded from the results. These areas included:

- Chinook Salmon Savings Area
- Chum Salmon Savings Area
- *C. opilio* Bycatch Limitation Zone (COBLZ)
- Tanner Crab PSC Bycatch Limitation Zone
- Catcher Vessel Operations Area (CVOA)
- Herring Savings Areas
- Kodiak Island, Trawls Other Than Pelagic Trawls-Type III Areas
- IPHC Closed Area
- Skate Nursery HAPC Areas

# NPFMC AREAS

**North Pacific Conservation Areas.** Includes State of Alaska closures for scallop, rockfish, and herring. Federally regulated areas that were fully evaluated but did not meet the criteria of a conservation area included: the Halibut Fishery Closed Area, the Chum Salmon Savings Area, the Catcher Vessel Operational Area. Areas that are closed when bycatch amounts are met (i.e., trigger closures), and areas that prohibit fishing for a particular species throughout a management area (e.g., Bering Sea and GOA Atka mackerel fishing prohibitions) were not considered.

ID	Type	Focus	Area Names (# subareas)	CFR	Prohibitions/Restrictions	ATB Principles Applied
NP1	Ecosystem Conservation	Habitat	Aleutian Islands Habitat Conservation Area	50 CFR 679.22(a)(14) and Table 24 to Part 679; 5 AAC 39.167(3)	Bottom trawls	1,2,5,7,8
NP2	Ecosystem Conservation	Habitat	Bering Sea Habitat Conservation Area	50 CFR 679.22(a)(16) and Table 42 and Figure 16 to 50 CFR Part 679	Bottom trawls	1,2,5,7,8
NP3	Ecosystem Conservation	Habitat	Bowers Ridge Habitat Conservation Zones (2)	50 CFR 679.22(a)(15) and Table 25 to Part 679; 5 AAC 39.167(3)	Bottom trawls, dredges	1,2,5,7,8
NP4	Ecosystem Conservation	Habitat	Gulf of Alaska Coral Habitat Protection Areas (5)	50 CFR §§ 679.22(b)(9) and 679.7(a)(20), Table 26 to 50 CFR Part 679; 5 AAC 39.167(4)	Bottom trawls, dredges, dinglebar, pot, and longline gear.	1,2,5,7,8
NP5	Ecosystem Conservation	Habitat	Gulf of Alaska Slope Habitat Conservation Areas (9)	50 CFR 679.22(b)(10) and Table 27 to 50 CFR Part 679	Bottom trawls	1,2,5,7,8
NP6	Ecosystem Conservation	Habitat	Northern Bering Sea Research Area	50 CFR 679.22(a)(17) and Figure 17 and Table 43 to Part 679; 5 AAC 39.164(b)(9)	Bottom trawls	1,2,5,7,8
NP7	Ecosystem Conservation	Habitat	Nunivak Island, Etolin Strait, and Kuskokwim Bay Habitat Conservation Area	50 CFR 679.22(a)(18) and Table 44 and Figure 21 to 50 CFR Part 679; 5 AAC 39.164(b)(10)	Bottom trawls	1,2,3,4,5,7,8

There are 37 North Pacific conservation area groups, representing 220 individual areas

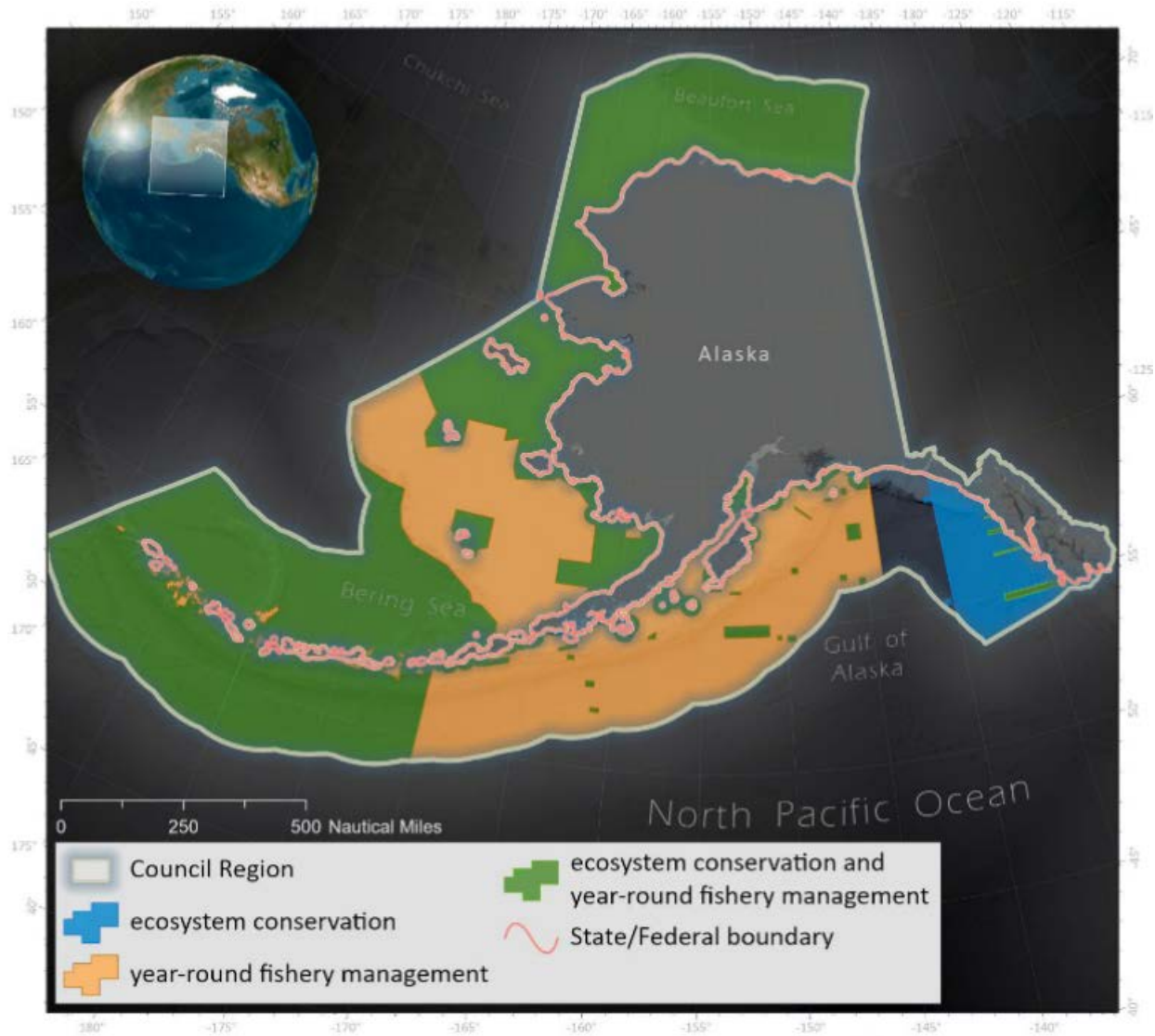
# FINAL REPORT - Number of conservation areas

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
<b>Total</b>	<b>531</b>	<b>67</b>	<b>50</b>	<b>648</b>

# FINAL REPORT - Coverage in nm<sup>2</sup> (Table 6). EEZ portion only.

Region	Total area (nm <sup>2</sup> ) of U.S. EEZ	Ecosystem Conservation	Year-round Fishery Management	Seasonal Fishery Management or Other	Total area (all areas combined; no overlap)	Total % (all areas combined; no overlap)
New England	55,947	21,945	3,202	44,185	48,390	86.5%
Mid Atlantic	53,307	31,100	0	5,720	36,276	68.1%
South Atlantic	143,768	20,217	56,416	41,918	78,946	54.9%
Gulf of Mexico	182,752	1,022	222	390	43	0.1%
Caribbean	57,651	5	13	25	1,634	0.9%
Pacific	231,748	208,718	15,927	0	219,231	94.6%
North Pacific	1,026,771	654,633	946,589	28,777	996,454	97.0%
Western Pacific	1,686,328	973,787	255,621	0	1,097,494	65.1%
<b>Total</b>	<b>3,438,272</b>	<b>1,911,428 (56%)</b>	<b>1,277,991 (37%)</b>	<b>121,015 (4%)</b>	<b>2,478,466</b>	<b>72.1%</b>





# FINAL REPORT - Year-round coverage in nm<sup>2</sup>, by gear (table 7). EEZ portion only.

Region	Total area (nm <sup>2</sup> ) of U.S. EEZ	Year-round, Total area (nm <sup>2</sup> )					% of Region (no overlap)				
		All bottom tending gears	Mobile bottom tending gears	Bottom trawl	Dredge	Other gears	All bottom tending gears	Mobile bottom tending gears	Bottom trawl	Dredge	Other gears
<b>New England</b>	55,947	3,703	21,915	24,041	34,009	22,778	6.6%	39.2%	43.0%	60.8%	40.7%
<b>Mid-Atlantic</b>	53,307	23	31,100	31,100	31,282	31,100	0.0%	58.3%	58.3%	58.7%	58.3%
<b>South Atlantic</b>	143,768	19,268	19,268	19,273	58,721	37,896	13.4%	13.4%	13.4%	40.8%	26.4%
<b>Gulf of Mexico</b>	182,752	945	1,038	1,038	1,244	1,150	0.5%	0.6%	0.6%	0.7%	0.6%
<b>Caribbean</b>	57,651	0	0	0	5	43	0.0%	0.0%	0.0%	0.0%	0.1%
<b>Pacific</b>	231,748	3,865	7,642	104,046	208,726	15,622	1.7%	3.3%	44.9%	90.1%	6.7%
<b>North Pacific</b>	1,026,771	148,165	224,633	625,852	192,426	947,557	14.4%	21.9%	61.0%	18.7%	92.3%
<b>Western Pacific</b>	1,686,328	1,014,403	1,014,403	1,014,403	1,014,403	1,014,403	60.2%	60.2%	60.2%	60.2%	60.2%
<b>Total</b>	<b>3,438,272</b>	<b>1,190,342</b>	<b>1,319,970</b>	<b>1,819,753</b>	<b>1,540,787</b>	<b>2,070,548</b>	<b>34.6%</b>	<b>38.4%</b>	<b>52.9%</b>	<b>44.8%</b>	<b>60.2%</b>

# FINAL REPORT - Seasonal coverage in nm<sup>2</sup>, by gear (table 8). EEZ portion only.

Region	Total area (nm <sup>2</sup> ) of U.S. EEZ	Seasonal, Total area (nm <sup>2</sup> )					% of Region (no overlap)				
		All bottom tending gears	Mobile bottom tending gears	Bottom trawl	Dredge	Other gears	All bottom tending gears	Mobile bottom tending gears	Bottom trawl	Dredge	Other gears
New England	55,947	0	0	2,807	1,904	15,841	0.0%	0.0%	5.0%	3.4%	28.3%
Mid-Atlantic	53,307	0	0	0	1,543	3,450	0.0%	0.0%	0.0%	2.9%	6.5%
South Atlantic	143,768	0	0	29,627	15,680	29,627	0.0%	0.0%	20.6%	10.9%	20.6%
Gulf of Mexico	182,752	390	390	390	390	390	0.2%	0.2%	0.2%	0.2%	0.2%
Caribbean	57,651	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Pacific**	231,748	0	0	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%
North Pacific	1,026,771	795	40	3,399	40	0	0.1%	0.0%	0.3%	0.0%	0.0%
Western Pacific	1,686,328	83,092	83,092	83,092	83,092	83,092	4.9%	4.9%	4.9%	4.9%	4.9%
<b>Total</b>	<b>3,438,272</b>	<b>84,277</b>	<b>83,522</b>	<b>119,315</b>	<b>102,649</b>	<b>132,400</b>	<b>2.5%</b>	<b>2.4%</b>	<b>3.5%</b>	<b>3.0%</b>	<b>3.9%</b>

## REPORT FINDINGS

In total, 648 conservation areas cover >72% of the total U.S. EEZ.

Nearly a third of the U.S. EEZ includes prohibitions on all mobile bottom tending gears, with prohibitions on bottom trawling in about half of the EEZ.

The biggest long-term threats to marine biodiversity in the U.S. are a warming ocean, increasing ocean acidity, invasive species, overexploitation, and pollution from land runoff (Fautin et al. 2010). Conservation areas in the US will not likely be an effective tool to protect biodiversity, or increase resilience to climate change in the face of these threats (Bates et al. 2019; Bruno et al. 2019; Johnson et al 2022; Smith et al. 2023). Addressing these problems will require reduced carbon emissions and other environmental stressors on a global scale, and a flexible regional approach to adaptively manage and mitigate direct and indirect human impacts on marine ecosystems.

Conserving marine biodiversity requires more than just conserving some pre-determine percentage of the ocean. Other effective fishery management measures, including limits on harvests, provide for conservation of marine biodiversity in 100% of the EEZ (Free et al. 2022).

The Council process is in clear alignment with the ATB principles, and conservation areas identified in the report should be considered in the Atlas.

## CCC ABM SUBCOMMITTEE: Summary and conclusions

Work to date represents an inventory of conservation areas in the EEZ, classified by management objective and gear type restrictions, and an evaluation of each area relative to the ATB criteria and degree of conservation provided.

- The overall objective was to assess “the contributions of fishery management councils” towards the 30x30 objective as specified by the ATB report (i.e., provide data for inclusion in the Atlas). Because the ATB goal for 30% are not the same as International CBD 30% goal, a full OECM evaluation was unnecessary and not undertaken.
- PSMFC is hosting the RFMC GIS data, and is currently working on an ArcGIS Online Experience, including a webmap, with interaction capabilities that has multiple tabs containing supplemental information. This ArcGIS data and webmap will be publicly available.
- Waiting to see how conservation area elements are ‘defined’, and to the extent RFMC areas are included in the Atlas.

# EXTRA BACKGROUND SLIDES



# OECM Identification guidelines

2018 - Center for Biological Diversity (CBD) establishes definition of “other effective area-based conservation measures” and criteria for identification.

2019 – International Union for Conservation of Nature and Natural Resources (IUCN) releases guidelines on identifying OECMs.

- Most fishery closure areas excluded, unless they protect ecosystems in entirety and effective against fishery *and* non-fishery threats.
- Excludes areas that allow “industrial fishing” (defined as vessels > 39 m long and catch over 110 lbs per trip).

2022 – Food and Agriculture Organization of the UN (FAO) releases a handbook for identifying and evaluating OECMs for marine fisheries.

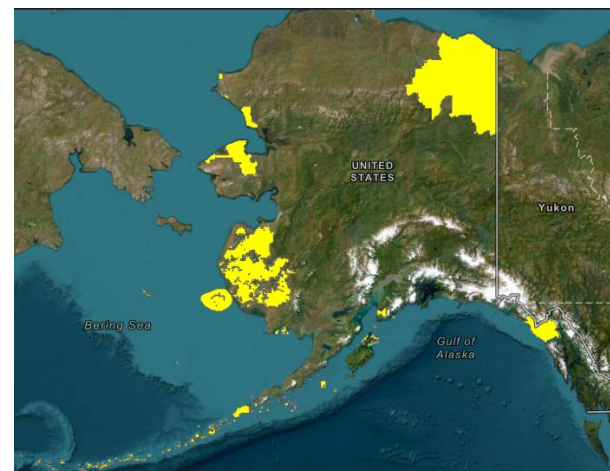
- Sets out a multi-step process whereby the government agency (e.g., NMFS) establishes multidisciplinary teams (consisting of fishery managers, rights holders, stakeholders, and independent experts) to evaluate each area relative to all criteria.

# Review of MPAs in Alaska

In 2000, Executive Order 13158 required the U.S. to develop and support a national system of MPAs. The goals were to conserve and manage areas for natural heritage, cultural heritage and sustainable production. MPAs included numerous fishery conservation areas off Alaska established under MSA (Witherell and Woodby 2005; Wenzel et al 2013).

In 2013, the MPA Center redefined MPAs based on IUCN definition, and no longer includes areas managed for “sustainable production” (i.e., all areas established under MSA).

Walrus Islands State Game Sanctuary  
Glacier Bay National Park & Preserve  
Sitka National Historical Park  
Bering Land Bridge National Park and Preserve  
Cape Krusenstern National Monument  
Kachemak Bay National Estuarine Research Reserve  
Yukon Delta National Wildlife Refuge  
Alaska Maritime National Wildlife Refuge  
Arctic National Wildlife Refuge  
Round Island No Entry Zone  
Steller Sea Lion Rookery Buffer Areas





# QUESTIONS?

