

August 31, 2022

Mr. Marc Gorelnik  
Pacific Fishery Management Council, Chair  
7700 NE Ambassador Place, Suite 101  
Portland, OR 97220

**RE: Agenda Item G.6 Non-Trawl Area Management**

Dear Chair Gorelnik and Council members:

As the Council considers modifying the Non-Trawl Rockfish Conservation Area and Cowcod Conservation Areas to provide access to additional areas for groundfish fishing, we urge the Council to continue its approach of simultaneously protecting vulnerable habitat features like cold-water corals and sponges, and to minimize the bycatch of protected and rebuilding species. Oceana reviewed the draft Environmental Assessment for this action<sup>1</sup> and we support alternatives that allow increased access while protecting priority habitats. Specifically,

1. Oceana supports *Alternative 1* in the EA, which allows non-bottom contact hook-and-line gear in the non-trawl rockfish conservation area south of the Oregon/ Washington border (46° 16' N. latitude). *Alternative 1* will have positive economic benefits for commercial fixed gear fisheries while minimizing impacts to seafloor habitat with the use of non-bottom contact gears only. We support adopting *Alternative 1* as a preliminary preferred alternative at this meeting.
2. For *Alternative 2*, which would adjust the seaward boundary of the non-trawl RCA to 75 fathoms between the Columbia River and Point Conception, CA (34° 27" N. latitude), we support continued analysis of the suboptions designed to protect sensitive habitats in overlapping EFH conservation areas and those designed to minimize the bycatch of yelloweye rockfish, which are still rebuilding.
3. Oceana supports the consensus proposal put forward by the California Department of Fish and Wildlife<sup>2</sup> for the Cowcod Conservation Areas (CCAs) described as *Alternative 3* in the draft EA. We request the Council adopt this proposal as a preliminary preferred alternative. *Alternative 3* would repeal the two CCAs in the Southern California Bight while establishing 8 new groundfish closure areas designed to protect sensitive corals, sponges, and other living habitats. The 8 proposed groundfish closures in *Alternative 3* represent less than 12% of the area of the CCAs but over 40% of coral observations and 35% of sponge observations (see attached analysis).

Cold-water corals and sponges provide structural habitat used by juvenile and adult rockfishes. Like their tropical counterparts, these living seafloor communities are biologically diverse, productive, rare, and sensitive to disturbance. Corals and sponges are also slow growing and can

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<sup>1</sup> PFMC Agenda Item G.6, Attachment 1 (September 2022).

<sup>2</sup> PFMC Agenda Item F.6.a, CDFW Report 1 (April 2022).

be extremely long-lived. A black coral over two meters high collected by researchers off Southern California was aged to be 140 years old.<sup>3</sup> Its growth rate was estimated to be only 0.12 millimeters per year. Dubbed the “Christmas Tree” coral, this colony was decorated with over 2,500 organisms. And cold-water corals off the U.S. West Coast are incredibly diverse; there are at least 101 known coral species,<sup>4</sup> many of which are structure forming and vulnerable to disturbance from bottom-contact fishing gears.

For nearly 20 years, the CCAs and non-trawl RCAs have helped rebuild overfished populations and provided seafloor habitat protection. We urge the Council to protect the 8 proposed groundfish closure areas in the CCAs to ensure some sensitive places remain free from bottom contact fishing gears and thus maintain the integrity and complexity of these unique and biologically rich places. Notably, the 8 proposed groundfish closures include a large proportion of the fragile black corals and gold corals that have been identified in the CCAs (see attached analysis).

Likewise, we urge the Council to keep sensitive habitats in the non-trawl RCAs closed to bottom contact gears while increasing fishing opportunities under Alternative 1. Under Alternative 2, without additional measures to protect seafloor habitats, 23 EFH conservation areas will be partially or entirely reopened to fixed fishing gears; approximately 201 mi<sup>2</sup> in total.<sup>5</sup> We support further consideration of the Alternative 2 suboptions that would keep these habitats closed to bottom contact fishing gears and hope to see these areas further considered in the next EFH review.

We appreciate the Council’s continued commitment to protecting vulnerable seafloor habitats, minimizing bycatch, and advancing responsible fishery management. We are encouraged by these efforts and look forward to continuing to work with you on these important issues.

Sincerely,



Ben Enticknap  
Pacific Campaign Manager  
& Senior Scientist



Geoff Shester  
California Campaign Director  
& Senior Scientist

Attached: Oceana Analysis of Cowcod Conservation Area Repeal and Proposed Groundfish Closed Areas

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<sup>3</sup> Love MS, Yoklavich MM, Black BA, and AH Andrews (2007). Age of black corals (*Antipathes dendrochristos*) colonies, with notes on associated invertebrate species. *Bulletin of Marine Science*, 802(2): 391-400

<sup>4</sup> Whitmire CE, Clarke E (2007) State of deep coral ecosystems of the U.S. Pacific Coast: California to Washington. In: Lumsden SE, Hourigan TF, Bruckner AW, Dorr G, editors. *The State of Deep Coral Ecosystems of the United States NOAA Technical Memorandum CRCP-3*. p. 109–154.

<sup>5</sup> PPMC Agenda Item G.6, Attachment 1 (September 2022), at 74.



## **PROTECTING CORAL AND SPONGE HOTSPOTS IN THE SOUTHERN CALIFORNIA BIGHT**

### **Analysis of Cowcod Conservation Area Repeal and Proposed Groundfish Closed Areas**

Prepared by Ben Enticknap, Brianne Mecum, and Geoff Shester, Oceana (August 31, 2022)

#### **BACKGROUND**

Off the coast of Southern California two conservation areas have been in place since 2001 for the purpose of rebuilding overfished cowcod rockfish (*Sebastes levis*). The Cowcod Conservation Areas (CCAs) make up a large portion of the Southern California Bight ecosystem, encompassing 5,286 square miles. These areas are generally closed to commercial and recreational fishing for groundfish, with exceptions, including allowing hook and line gear inside 40 fathoms around Tanner and Cortes Banks, Santa Barbara Island, and San Nicolas Island.<sup>1</sup>

Once the National Marine Fisheries Service (NMFS) determined that cowcod rockfish were rebuilt, the California Department of Fish and Wildlife (CDFW) proposed that the Pacific Fishery Management Council and NMFS remove the CCAs while designating eight new groundfish closed areas to protect vulnerable coral and sponge habitats inside the CCAs.<sup>2</sup> The CDFW proposal was developed in collaboration with fishermen representing the commercial groundfish fixed gear fishery, with representatives of the sport fishery, and with representatives from Oceana. CDFW also proposed new non-trawl rockfish conservation area boundaries around islands and banks within the CCAs that could be used for future area-based management decisions.<sup>3</sup> The proposed changes to the CCA are described as *Alternative 3* in the draft environmental analysis for an Amendment to the Pacific Coast Groundfish Fishery Management Plan for Non-Trawl Sector Area Management Measures.<sup>4</sup>

#### **HABITAT ANALYSIS**

Oceana conducted a Geographic Information System (GIS) analysis of physical and biogenic habitat features inside the Cowcod Conservation Areas and the proposed eight groundfish closed areas. We analyzed three scenarios for comparative purposes. We label these “options”, where options 1 and 2 are bookends and option 3 is the CDFW proposal; *Option 1*) status quo, or no action, where the CCAs remain in place; *Option 2*) repeal of the CCAs with no new management measures but the existing state and federal protected areas at Begg Rock and Santa Barbara Island are maintained; and *Option 3*) repeal of the CCAs with implementation of the eight groundfish closed areas and maintenance of the existing protected areas. Option 3 is equivalent to the CDFW “Proposed Groundfish Closures” described in *Alternative 3* of the PFMC draft EA for Non-trawl Sector Area Management Measures. We did not

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<sup>1</sup> Commercial fishing regulations, available: <https://www.ecfr.gov/current/title-50/chapter-VI/part-660/subpart-F/section-660.330>

Recreational fishing regulations, available: <https://wildlife.ca.gov/Fishing/Ocean/Regulations/Groundfish-Summary#cca>

<sup>2</sup> PFMC Agenda Item F.6.a, CDFW Report 1 (April 2022). Available: [here](#)

<sup>3</sup> PFMC Agenda Item E.5.a Supplemental CDFW Report 1 (November 2021)

<sup>4</sup> PFMC Agenda Item G.6, Attachment 1 (September 2022).

analyze the proposed non-trawl RCA boundaries within the CCAs. Those RCA boundaries are for possible future management actions but would not be ‘activated’ at this time.

## DATA

- Cowcod Conservation Areas West and East.<sup>5</sup>
- State and federal marine reserves: Within the western CCA there are two marine reserves. These are the Begg Rock State Marine Reserve and the Santa Barbara Island State and Federal Marine Reserve. Both reserves prohibit all take (no fishing, all gears) and these areas will remain closed with CCA removal, as they are outside the scope of this action.<sup>6</sup>
- CDFW Proposed Groundfish Closures.<sup>7</sup>
- Hard and Mixed Substrates: Surficial Geologic Habitat Induration, Version 4.0: This dataset describes geologic seafloor substrate off the coasts of Washington, Oregon and California categorized into three main types: hard, mixed and soft.<sup>8</sup>
- Coral and Sponge Observations: NOAA Deep-Sea Coral and Sponge Database: This dataset contains comprehensive records of coral, sponge and sea pen observations.<sup>9</sup>
- Coral Habitat Suitability: NOAA/NCOSS Predicted Deep-Sea Coral Habitat Suitability for the U.S. West Coast: spatial predictive models for deep-sea coral, sponges, and benthic macrofauna offshore the continental U.S. West Coast.<sup>10</sup> We analyzed areas of ‘high’ habitat suitability for the following structure forming corals: black corals (*Antipathes dendrochristos*), gold gorgonian corals (*Acanthogorgia*), purple gorgonian corals (*Eugorgia rubens*), bubble gum coral (*Paragorgia*), plus *Plumarella* and *Adelogorgia* (both gorgonians).

## RESULTS

The eight proposed groundfish closed areas combined total 609.1 mi<sup>2</sup>, accounting for 11.5% of the total area of the two CCAs. There are 1,607 coral observations and 4,857 sponge observations in the eight areas. The eight areas, when combined with the reserves at Begg Rock and Santa Barbara Island, will protect 47.6% of all coral observations inside the CCAs and 36.1% of all sponge observations. The eight proposed groundfish closures plus existing reserves include 235 mi<sup>2</sup> of ‘high’ habitat suitability for the analyzed structure forming corals, accounting for 25.8% of the respective coral habitat in the CCAs. 86.7% of the total CCA area will be opened to non-trawl commercial and recreational groundfish fisheries with repeal of the CCAs, adoption of the eight CDFW-proposed groundfish closures areas, and while keeping existing state and federal reserves at Begg Rock and Santa Barbara Island closed.

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<sup>5</sup> CDFW. California Cowcod Conservation Areas, Coordinates available: [here](#)

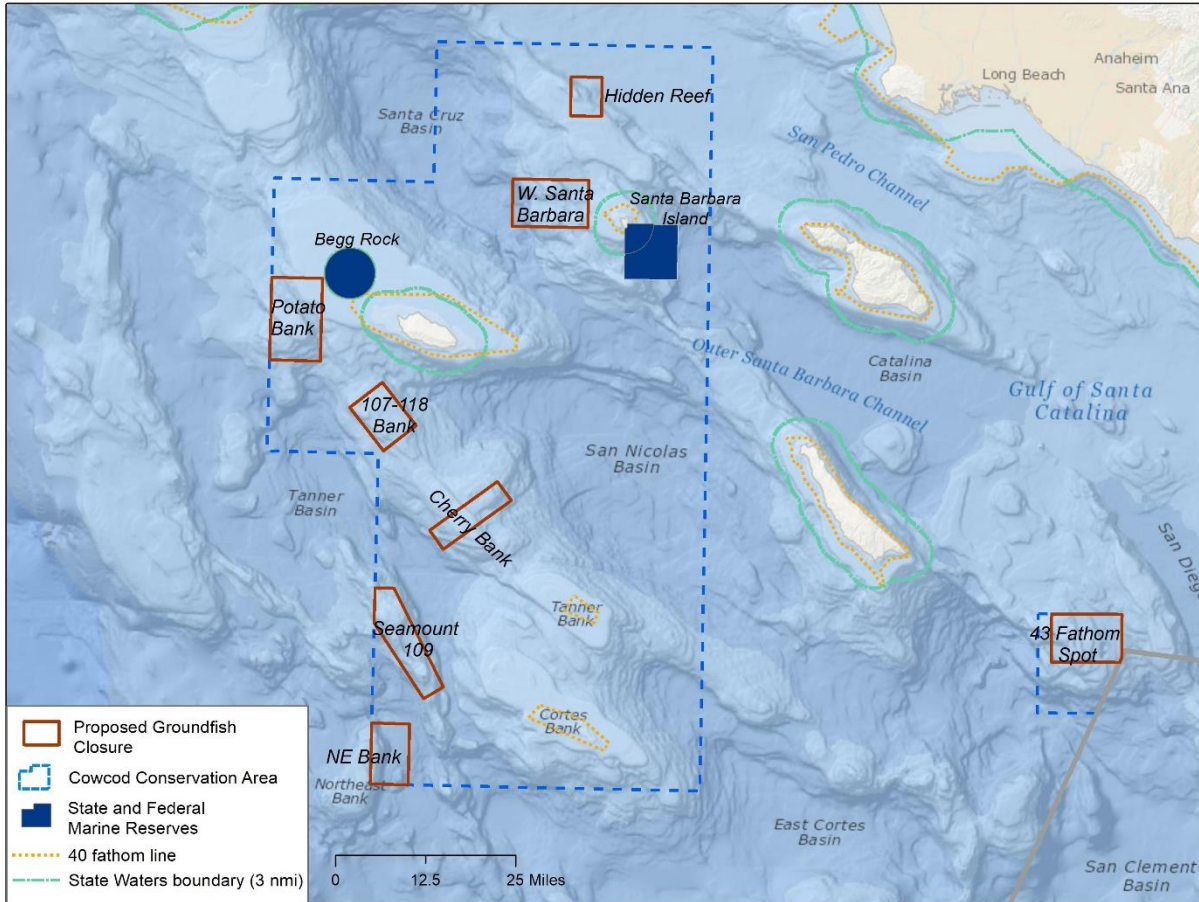
<sup>6</sup> CDFW (2019). Southern California Marine Protected Areas. Coordinates Available: [here](#)

<sup>7</sup> PFMC Agenda Item E.5.a Supplemental CDFW Report 1 (November 2021)

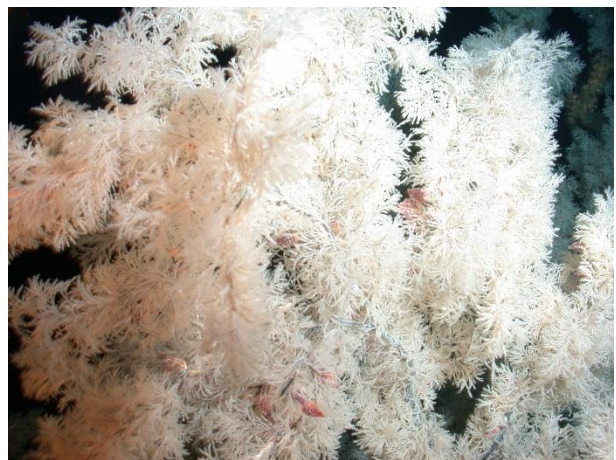
<sup>8</sup> Oregon State University, Active Tectonic & Seafloor Mapping Lab (OSU). (2018). *Surficial Geologic Habitat Induration, Version 4.0*. Available at: <https://www.nwfsc.noaa.gov/data/map>

<sup>9</sup> NOAA National Database for Deep-Sea Corals and Sponges (version 2021\_10\_08). <https://deepseacoraldata.noaa.gov/>; NOAA Deep Sea Coral Research & Technology Program.

<sup>10</sup> Poti, M., S.K. Henkel, J.J. Bizzarro, T.F. Hourigan, M.E. Clarke, C.E. Whitmire, A. Powell, M.M. Yoklavich, L. Bauer, A.J. Winship, M. Coyne, D.J. Gillett, L. Gilbane, J. Christensen, and C.F.G. Jeffrey. 2020. Cross-Shelf Habitat Suitability Modeling: Characterizing Potential Distributions of Deep-Sea Corals, Sponges, and Macrofauna Offshore of the US West Coast. Camarillo (CA): US Department of the Interior, Bureau of Ocean Energy Management. OCS Study BOEM 2020-021. 267 p.



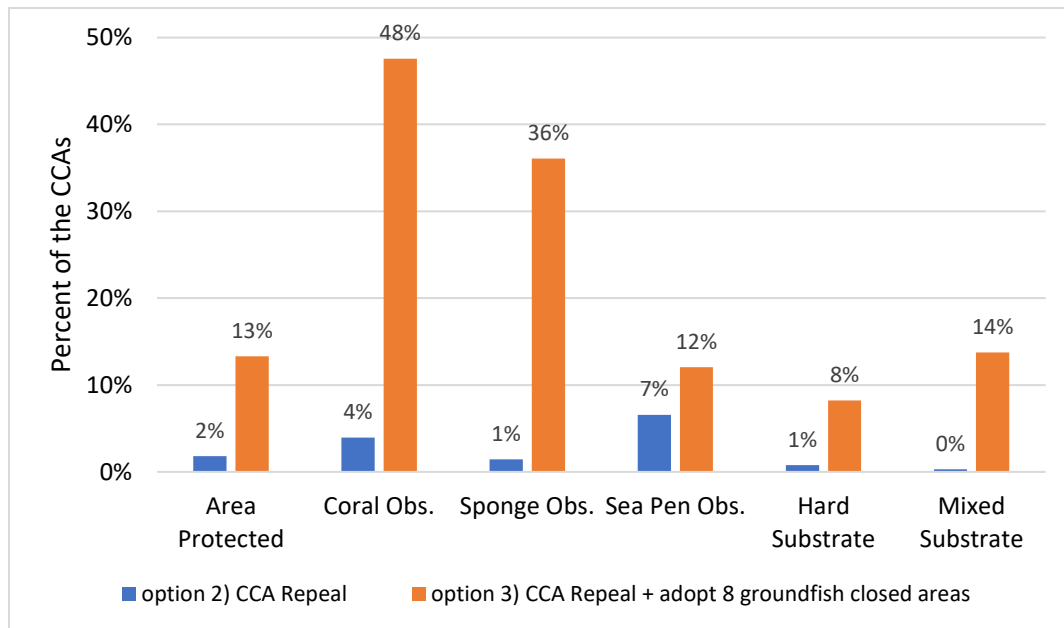
**Figure 1.** Boundaries of the eastern and western CCAS with eight proposed groundfish closed areas and the existing state and federal protected areas analyzed here.<sup>11</sup>



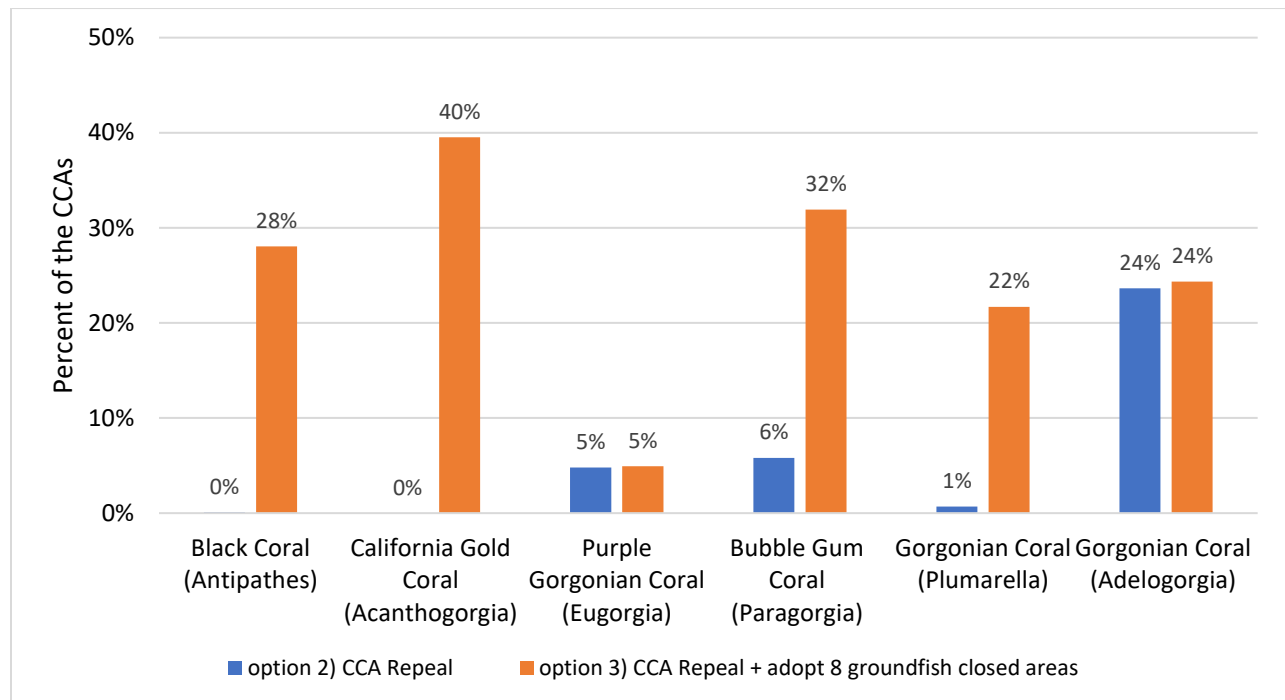
**Images** from the 43-fathom spot. Rockfish with large sponges (left) and black coral (right). NOAA.

<sup>11</sup> Detailed maps of each proposed protection area are available in PFMC Agenda Item F.6.a, CDFW Report 1 (April 2022), Available: [here](#) and in the PFMC draft EA for the non-trawl RCA modifications (*supra note 4*).

**Comparative Analysis of Area and Habitat Features within Closure Areas Relative to the Current CCAs**



**Figure 2.** Percent of the CCAs, coral and sponge observations, and physical substrates that remain protected from bottom contact groundfish fishing gears under option 2) repeal of the CCAs, or, option 3) CCA repeal plus adoption of the eight proposed groundfish closures. [Option 1 (no action) would keep 100% of the area and features closed to non-trawl groundfish gears.]



**Figure 3.** Percent of 'high' coral habitat suitability in the CCAs that remain protected with option 2) repeal of the CCAs, or, option 3) CCA repeal plus adoption of the 8 proposed groundfish closed areas.

		Area	Coral	Sponge	Sea Pens	Hard Substrate	Mixed Substrate
	Site Name	(mi <sup>2</sup> )	# Obs.	# Obs.	# Obs.	(mi <sup>2</sup> )	(mi <sup>2</sup> )
<b>Option 1</b>	CCA - West	5,137.7	3,507	13,588	2,015	435.0	131.8
	CCA - East	148.4	177	437	41	0.1	0.6
<b>Option 2</b>	Begg Rock SMR	38.0	17	151	0	0.5	0.0
	Santa Barbara Island SMR/FMR	56.9	129	52	135	2.9	0.4
<b>Option 3</b>	8 Proposed Groundfish Closed Areas + existing protected areas	704.0	1,753	5,060	248	35.8	18.2

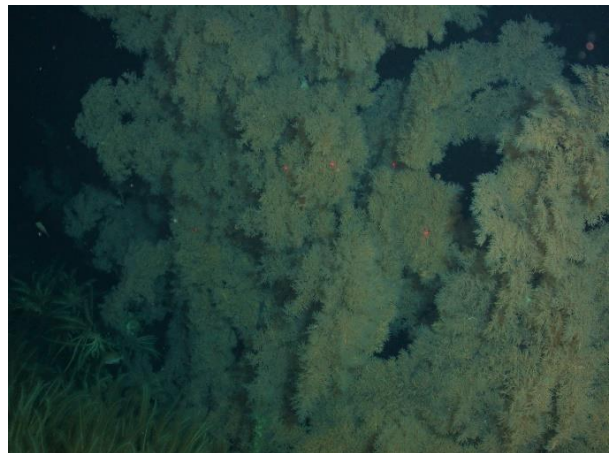
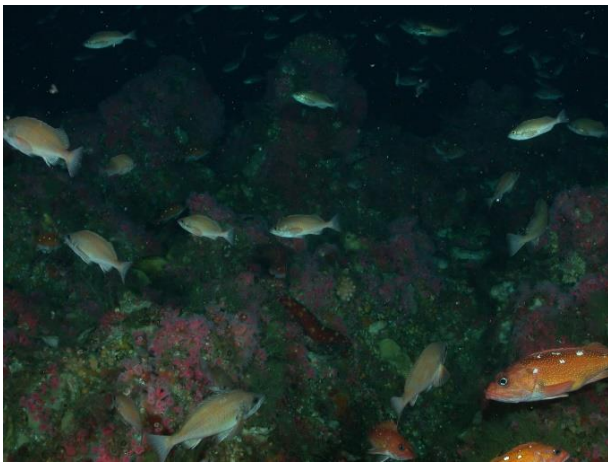
**Table 1.** Total area, coral, sponge and sea pen observations and physical substrates protected from groundfish bottom contact gears under three options. **Option 1** is the no action alternative where the CCAs would remain in place. **Option 2** would be a full repeal of the CCAs and only the existing protected areas at Begg Rock and Santa Barbara Island would remain closed to bottom contact groundfish gears. **Option 3** is equivalent to the PFMC Alternative 3 for the non-trawl RCAs. Under this option the CCAs would be repealed, 8 new groundfish closed areas within the CCAs would be implemented and the existing protected areas at Begg Rock and Santa Barbara Island are maintained.



**Images.** *Acanthogorgia* gold gorgonian coral (left) and sponge with octopus (right) at the West Santa Barbara Island area (Oceana).

		Classified Mean Habitat Suitability - Area of HIGH Coral Habitat Suitability (mi <sup>2</sup> )					
	Site Name	<i>Antipathes dendrochristos</i>	<i>Acanthogorgia</i>	<i>Eugorgia rubens</i>	<i>Paragorgia</i>	<i>Plumarella longispina</i>	<i>Adelogorgia phyllosclera</i>
<b>Option 1</b>	CCA West	132.2	23.5	79.0	344.0	217.7	75.1
	CCA East	18.9	0.6	0.0	0.0	12.7	0.0
<b>Option 2</b>	Begg Rock SMR	0.0	0.0	0.0	0.0	0.0	17.8
	Santa Barbara Island SMR/ FMR	0.1	0.0	3.8	20.0	1.6	0.0
<b>Option 3</b>	8 proposed groundfish closures + existing protected areas	42.4	9.5	3.9	109.8	50.0	18.3

**Table 2.** Area of high coral habitat suitability closed to groundfish bottom contact gears under three comparative options.



**Images** from the 17-79 at Hidden Reef. Rockfish with a diversity of inverts (left) and a large black coral (right). Photos: NOAA.



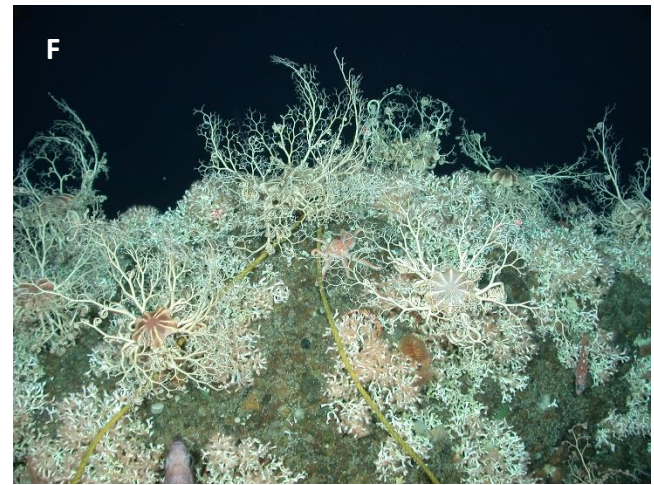
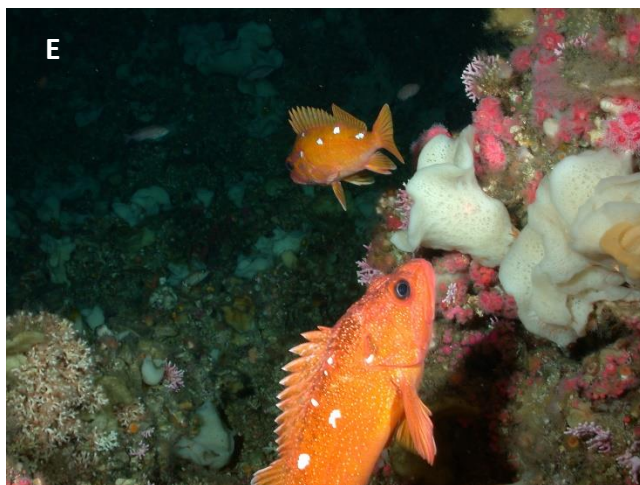
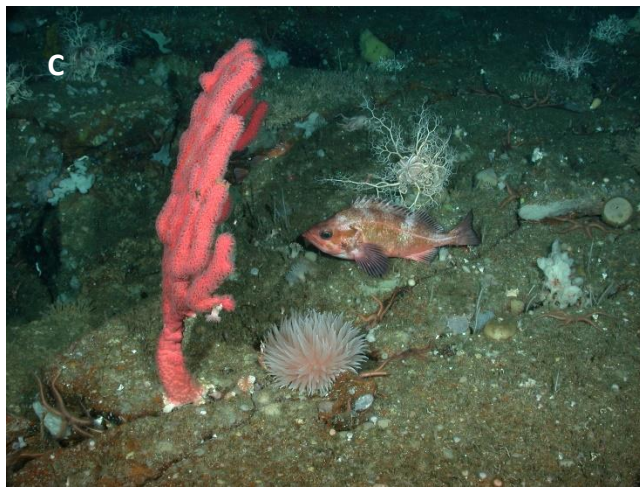
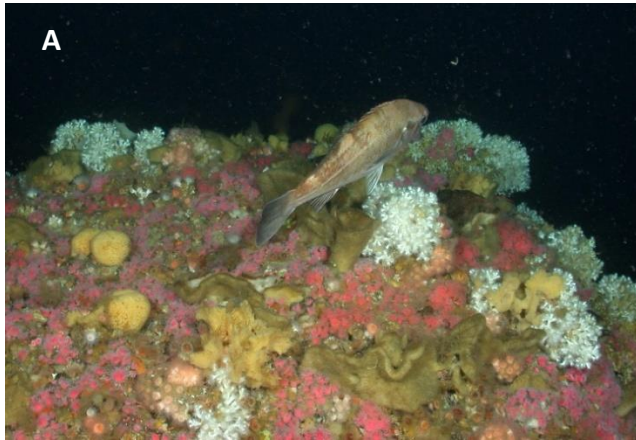
### Area Analysis

	Area	Coral	Sponge	Sea Pens	Hard Substrate	Mixed Substrate
Site Name	(mi <sup>2</sup> )	# Observations	# Observations	# Observations	(mi <sup>2</sup> )	(mi <sup>2</sup> )
Potato Bank	116.6	26	1,015	2	0.94	6.89
107-118 Bank	62.3	37	353	0	0.00	0.00
Cherry Bank	54.1	143	337	1	9.48	10.31
Seamount 109	87.1	88	131	0	2.00	0.00
NE Bank	62.8	0	0	0	13.72	0.00
W. Santa Barbara Island	100.2	665	1,102	9	3.38	0.00
The 17-79 at Hidden Reef	34.1	471	1,482	60	2.86	0.02
43-fathom spot	92.0	177	437	41	0.09	0.59

**Table 3.** Area and physical and biogenic features inside the 8 proposed groundfish closed areas.

Site Name	Classified Mean Habitat Suitability - Area of HIGH Coral Habitat Suitability (mi <sup>2</sup> )					
	<i>Antipathes dendrochristos</i>	<i>Acanthogorgia</i>	<i>Eugorgia rubens</i>	<i>Paragorgia</i>	<i>Plumarella longispina</i>	<i>Adelogorgia phyllosclera</i>
Potato Bank	0.06	0.80	0.00	1.34	3.55	0.26
107-118 Bank	0.00	0.69	0.00	21.01	0.00	0.00
Cherry Bank	3.86	0.01	0.00	11.85	10.32	0.00
Seamount 109	0.03	0.00	0.00	26.24	0.00	0.00
NE Bank	0.00	0.00	0.00	0.00	0.00	0.00
W. Santa Barbara Island	1.58	6.13	0.00	25.11	10.70	0.22
The 17-79 at Hidden Reef	14.88	1.28	0.06	4.25	12.50	0.00
43-fathom spot	21.84	0.55	0.04	0.00	11.32	0.04

**Table 4.** Area of 'high' habitat suitability for modeled coral species inside the 8 proposed groundfish closed areas.



Additional images. **A.** *Lophelia* corals and **B.** vase sponge at Potato Bank. **C.** *Paragorgia* bubble gum coral and **D.** *Antipathes* black coral at the 107-118 Bank. **E.** Rockfish, stony coral, *Lophelia* corals and sponge at Cherry Bank. **F.** *Lophelia*, basket stars and fishing line at Seamount 109. All photos credit NOAA, Deep Sea Coral and Sponge database.