INITIAL REVIEW DRAFT

Regulatory Impact Review/ Regulatory Flexibility Analysis/MSA Analysis for Proposed Amendment to the Groundfish Fishery Management Plan for Deep Sea Coral Research and Restoration

March 2024

Lead Agency:	National Marine Fisheries Service, West Coast Region National Oceanic and Atmospheric Administration
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Abstract: This Regulatory Impact Review/Magnuson Stevens Act Analysis analyzes an action to implement closures to commercial groundfish bottom contact gear in the Monterey Bay National Marine Sanctuary (MBNMS) for deep sea coral research and restoration. The action responds to a request by the Office of National Marine Sanctuaries. The three sites proposed for closure within the MBNMS are Año Nuevo Canyon, Ascension Canyon and Sur Ridge.

List of Acronyms and Abbreviations

Acronym or Abbreviation	Meaning
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
Council	Pacific Fishery Management Council
E.O.	Executive Order
EA	Environmental Assessment
EEZ	Exclusive Economic Zone
EFH	essential fish habitat
EIS	Environmental Impact Statement
FMP	fishery management plan
FONSI	Finding of No Significant Impact
FR	*Federal Register*
FRFA	Final Regulatory Flexibility Analysis
ft	foot or feet
IRFA	Initial Regulatory Flexibility Analysis
m	meter or meters
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
NAO	NOAA Administrative Order
NEPA	National Environmental Policy Act
NMFS	National Marine Fishery Service
NOAA	National Oceanic and Atmospheric Administration
OFL	Overfishing limit
OMB	Office of Management and Budget
PPA	Preliminary preferred alternative
PRA	Paperwork Reduction Act
RCA	Rockfish Conservation Area
RFA	Regulatory Flexibility Act
RIR	Regulatory Impact Review
SAFE	Stock Assessment and Fishery Evaluation
SBA	Small Business Act
Secretary	Secretary of Commerce
U.S.	United States
USCG	United States Coast Guard
VMS	vessel monitoring system
WCGOP	West Coast Groundfish Observer Program

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1 Introduction

This document analyzes proposed management measures that would apply exclusively to the Pacific Coast groundfish fishery. The action would implement a groundfish exclusion area(s) (GEA) for the purposes of coral research and restoration within Monterey Bay National Marine Sanctuary (MBNMS). GEAs were developed as a part of Amendment 32 to the Groundfish Fishery Management Plan (FMP) (88 FR 83830) and are designed to "mitigate impacts to sensitive environments from certain groundfish fishing activity" (pg. 92 of the Groundfish FMP). GEAs were developed as a specific groundfish conservation area that could "be used to protect sensitive areas that are separate and distinct from groundfish essential fish habitat (EFH)" (88 FR 83830).

This document is a draft Regulatory Impact Review/Regulatory Flexibility Act Analysis/Magnuson-Stevens Act Analysis (RIR/RFAA/MSA). An RIR/RFAA/MSA provides assessments of the benefits and costs of the alternatives and the distribution of impacts (the RIR), identification of the small entities that may be affected by the alternatives (RFAA), and analysis of how the alternatives align with the MSA National Standards. This RIR/RFAA/MSA addresses the statutory requirements of the Magnuson Stevens Fishery Conservation and Management Act, the National Environmental Policy Act, Presidential Executive Order 12866, and the Regulatory Flexibility Act. An RIR/RFAA/MSA is a standard document produced by the Pacific Fishery Management Council (Council) and the National Marine Fisheries Service (NMFS) West Coast Region to provide the analytical background for decision-making. Analysts have consulted with NMFS West Coast Region and have preliminarily determined that the proposed action falls within one of the NOAA Categorical Exclusion categories listed in Appendix F of the Companion Manual for NOAA Administrative Order 216-6A and that none of the alternatives have the potential to have an effect individually or cumulatively on the human environment. This determination is subject to further review and public comment. If this determination is confirmed when a proposed rule is prepared, the proposed action will be categorically excluded from the need to prepare an Environmental Assessment.

1.1 Problem Statement

The purpose of this action is to close areas within National Marine Sanctuaries off California to commercial groundfish bottom contact gear, in order to protect deep-sea coral research and restoration projects from the impact of fishing gear.

1.2 History of this Action

A Draft Restoration Plan and NEPA Evaluation for the YFD-70 Dry Dock ("Draft Restoration Plan") was released by NOAA for public comment in December 2022 and the public comment period closed March 15, 2023. The Draft Restoration Plan is the result of a Natural Resource Damage Assessment (NRDA) process that began after the dry dock sank in 2016. The NRDA process is driven by law, science, economics, and public input. Through the NRDA process, NOAA determined the extent of injuries and developed the Draft Restoration Plan that describes the locations and methods of proposed restoration activities. Pursuant to this specific settlement, ONMS recovered approximately $8.7 million for restoration actions.

In February 2023, Greater Farallones NMS (GFNMS) and MBNMS sent a joint letter with additional details to the Council to share the Draft YFD-70 Restoration Plan and provide additional details on coral restoration locations planned for restoration actions beginning in 2025 (Agenda Item F.4.a, Supplemental ONMS Report 1, March 2023). That report detailed a proposed deep-sea coral restoration project that focused on

deep-sea coral outplanting[1] in two to five locations. These locations were (and still are) closed to bottom trawl fishing from both federal (i.e., groundfish) and state (e.g., pink shrimp) fisheries in bottom trawl EFH Conservation Areas (EFHCAs) and some portion of four of the five locations in the proposal were closed at the time to non-trawl commercial groundfish and non-tribal commercial directed halibut fishing gear in the Non-Trawl Rockfish Conservation Area (RCA).

In that letter, ONMS encouraged the Council to consider pathways to protect potential coral restoration sites from groundfish bottom-contact fishing gear in the future. At the March 2023 meeting, the Council was considering final action on Amendment 32, which made changes to the non-trawl RCA and opened up areas of interest to ONMS for coral restoration. While the timing did not allow for the Council and ONMS to include any area closures for coral restoration under the Amendment 32 action, the Council did commit to considering the matter at a future meeting.

In September 2023, ONMS presented a scoping paper that posed five locations (the same general locations posed in the March 2023 letter) with ten areas (or 'sites') within Monterey Bay and Greater Farallones National Marine Sanctuaries (Agenda Item H.2.a, ONMS Report 1, September 2023) for restoration and research (i.e., expanding the previous scope to add research). The potential general sites (outplanting areas) from March 2023 did differ for some of the locations (five larger described areas). Ultimately, the Council chose to only continue to scope closures at the locations of Año Nuevo/Ascension Canyons (two sites) and Sur Ridge (one site) for areas to promote coral research and restoration. These three sites have been opened to fishing by non-trawl gears and were never closed through the NT_RCA. The Council proposed these areas to be closed to bottom contact gears. The Council asked NMFS to explore its authority to close these areas to all bottom contact gears (i.e., including state-managed fisheries).

At the March 2024 meeting, the Council is expected to adopt a range of alternatives and may adopt a preliminary preferred alternative, with final action scheduled in June 2024. The ONMS is planning to start deep-sea coral outplanting in 2025.

1.3 Description of Management Area

The action area is within the United States Exclusive Economic Zone (EEZ) within the boundaries of the MBNMS. Some areas within the MBNMS are not considered part of the action area because direct and indirect impacts are not anticipated from any of the alternatives described in Chapter 2.

1.4 Description of Bottom Contact Gear Fisheries

For the purposes of this analytical document, only federally managed fisheries were considered. A discussion of discretionary authority and state fishery overlap is provided in Agenda Item E.2.a, NMFS Report 1, March 2024.

The following is an assessment of each of the Council-managed fisheries and their use of bottom contact gear. Based on the depths in the current range of alternatives proposed in Section 2, the only federally managed fishery that would be subject to any closure proposed under this action would be commercial groundfish bottom contact gear. If the range of alternatives is expanded beyond that described in Section 2, the proposed fisheries that would be considered bottom contact fisheries would need to be re-evaluated.

For federal groundfish fisheries, bottom contact gears are defined in federal regulation at 50 CFR 660.11:

[1] Coral outplanting is a process that takes coral segments "source corals" from healthy colonies and transplants them to a new location.

> "fishing gear designed or modified to make contact with the bottom. This includes, but is not limited to, beam trawl, bottom trawl, dredge, fixed gear, set net, demersal seine, dinglebar gear, and other gear (including experimental gear) designed or modified to make contact with the bottom. Gear used to harvest bottom dwelling organisms (e.g. by hand, rakes, and knives) are also considered bottom contact gear for purposes of this subpart."

This list is non-exhaustive. All of the proposed coral research and restoration areas are within bottom trawl EFHCAs- which prohibit all bottom trawl gears from operating within the EFHCA boundaries. Therefore, the action proposed would apply to fishing with non-trawl bottom contact gear types within the proposed area closures. The commercial gears that would be permitted to operate within the closed areas as currently proposed are midwater trawl and select non-trawl gear types (commercial vertical hook-and-line gear not anchored to the bottom (e.g., vertical jig gear or rod-and-reel gear with weights suspended off the bottom) and troll gear). With regards to recreational groundfish gears, there is no official delineation of bottom contact and non-bottom contact gears although gears such as longleader are intended to be fished off the bottom. Given the depths of the proposed alternative, it is likely that any recreational gear would not contact the bottom and therefore recreational groundfish fisheries are not considered in the scope in this analysis.

For HMS fisheries, a variety of different gear types including troll gear, drift gillnet[2], deep-set buoy gear, purse seine, harpoons, pelagic longline, and hook and line gears. While there may be incidental contact with the bottom with deep-set buoy gear, none of these gear types are considered bottom contact gears and therefore would be permitted to continue to operate in the proposed areas.

Vessels participating in coastal pelagic species (CPS) fisheries for sardine, anchovy, mackerel, and squid typically harvest their catch using roundhaul gear (i.e., purse seine or lampara nets). There can be incidental bottom contact with the purse seine gear; however, roundhaul gear does not typically deploy deeper than 30 fm based on industry comments (Agenda Item H.2.a, Supplemental CPSAS Report 1, September 2023) and therefore would likely not have any incidental bottom contact in waters deeper than 30 fm. Fishing impacts are therefore dependent on the depth of water in which the gear is being fished (similar to midwater trawl gear used in groundfish). While CPS gears is not defined as "bottom contact" or "non-bottom contact" in the CPS regulations, given the similarities to midwater trawl in terms of the potential to have incidental contact with the bottom depending on the depth fished, it is considered to not be a bottom contact gear for the purposes of this analysis in the depths proposed under the alternatives.

The Council manages Chinook, coho, and Puget Sound pink salmon. Sockeye, chum, and steelhead are rarely caught in the Council's ocean fisheries and are not managed by the Council. Vessels targeting salmon utilize troll and hook and line gears. Similar to groundfish gears, salmon gears would be considered non-bottom contact gear types noting that there are recreational troll gears with a "sinker-release" that sacrifices the weight when the fish is caught. Therefore, salmon fisheries are not included in the scope of this action.

[2] The Driftnet Modernization and Bycatch Reduction Act mandates a phase out of the drift gillnet fishery by 2027.

2 Description of Alternatives

The following alternatives are based on the scope of action adopted by the Council at its September 2023 meeting.

2.1 No Action

Under No Action, there would be no new closures implemented for any federal groundfish fisheries for the purposes of coral restoration and research. Fisheries would be able to continue to operate as allowed under groundfish regulations found at 50 CFR 660.

2.2 Alternative 1- Año Nuevo and Ascension Canyons

Alternative 1 would create a GEA closure to commercial groundfish bottom contact gears, for the purpose of deep-sea coral research and restoration, and includes two options, a and b.

Option a: Año Nuevo Canyon (Figure 1, Coordinates defined in Table 1)

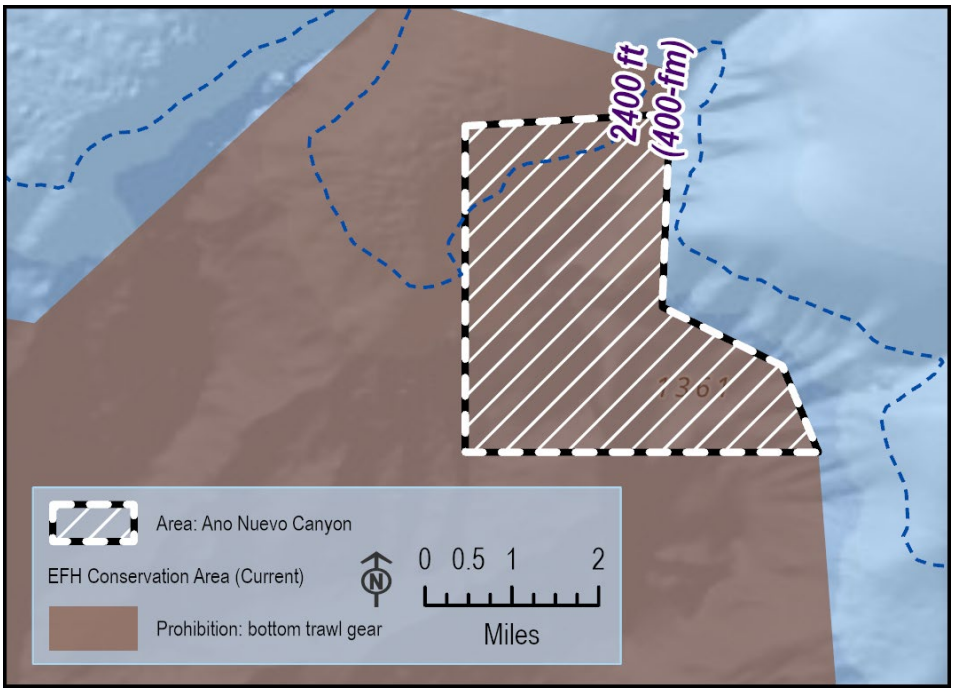

Figure 1. Año Nuevo Canyon coral research and restoration area (Alternative 1, Option a)

Table 1. Coordinates for Año Nuevo Canyon coral restoration and research area (Alternative 1, Option a)

Vertices	Coordinates (Decimal Degrees)
1	36.93293536° N. lat., -122.42741356° W. lon.
2	36.93493362° N. lat., -122.39335840° W. lon.
3	36.90284944° N. lat., -122.39463141° W. lon.
4	36.89305058° N. lat., -122.37460721° W. lon.
5	36.87869299° N. lat., -122.36859491° W. lon.
6	36.87869300° N. lat., -122.42741356° W. lon.
7 (Same as 1)	36.93293536° N. lat., -122.42741356° W. lon.

Option b: Ascension Canyon (Figure 2, Coordinates defined in Table 2)

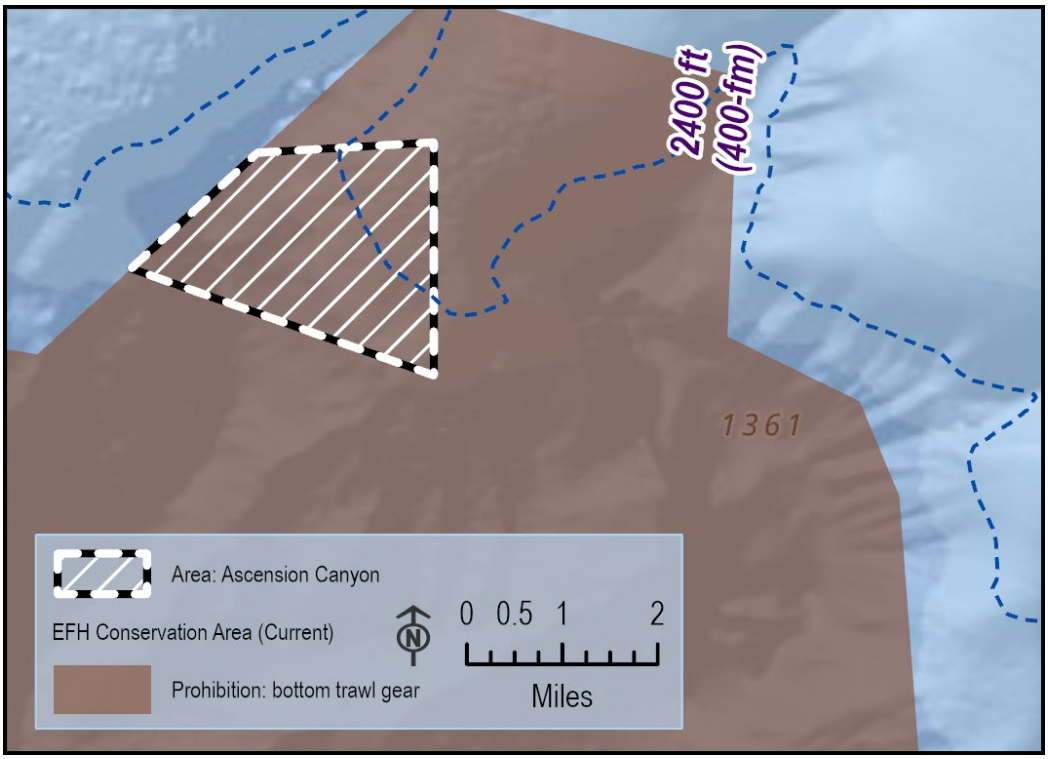

Figure 2. Ascension Canyon coral research and restoration area (Alternative 1, Option b)

Table 2. Coordinates for Ascension Canyon coral research and restoration area (Alternative 1, Option b).

Vertices	Coordinates (Decimal degrees)
1	36.93068188° N. lat., -122.46581824° W. lon.
2	36.93224856° N. lat., -122.43911834° W. lon.
3	36.89698058° N. lat., -122.43911831° W. lon.
4	36.91315680° N. lat., -122.48495246° W. lon.
5 (Same as 1)	36.93068188° N. lat., -122.46581824° W. lon.

Under Alternative 1, a closure for bottom contact gear would be developed within the Monterey Bay/Canyon bottom trawl EFHCA at Año Nuevo (Option a) and/or Ascension Canyon (Option b). These options are not mutually exclusive, and the Council could select one or both of the options. Depths for the closures range from 1,574-4,658 ft at Año Nuevo Canyon or 1,640-4,790 ft for Ascension Canyon.

For federal groundfish fisheries, a GEA (groundfish exclusion area) would be implemented at one or both of the two areas. As a reminder, GEAs were developed to protect sensitive areas that are separate from EFH. The only legal commercial non-trawl gear type that would be permitted in this area would be non-bottom contact gears specified at 50 CFR 660.11 (12). Midwater trawl gears would continue to be permitted in the area. Bottom trawl fisheries (state and federal) would continue to be prohibited from operating in this area because it is within the EFHCA. If the EFHCA were to be removed in the future, the GEA would continue to apply to groundfish bottom trawl fisheries as bottom trawl gear is considered bottom contact gear. Recreational groundfish fisheries would not be subject to the closure under the current proposal as described in Section 1.4.

This action would require an amendment to the FMP. Proposed FMP language is shown in Agenda Item E.2, Attachment 2.

2.3 Alternative 2-Sur Ridge

Alternative 2 would create a GEA closure to commercial groundfish bottom contact gears, for the purpose of deep-sea coral research and restoration.

Under Alternative 2, a GEA for bottom contact gear would be developed at Sur Ridge (Figure 3). Coordinates for the closure can be found in Table 3.

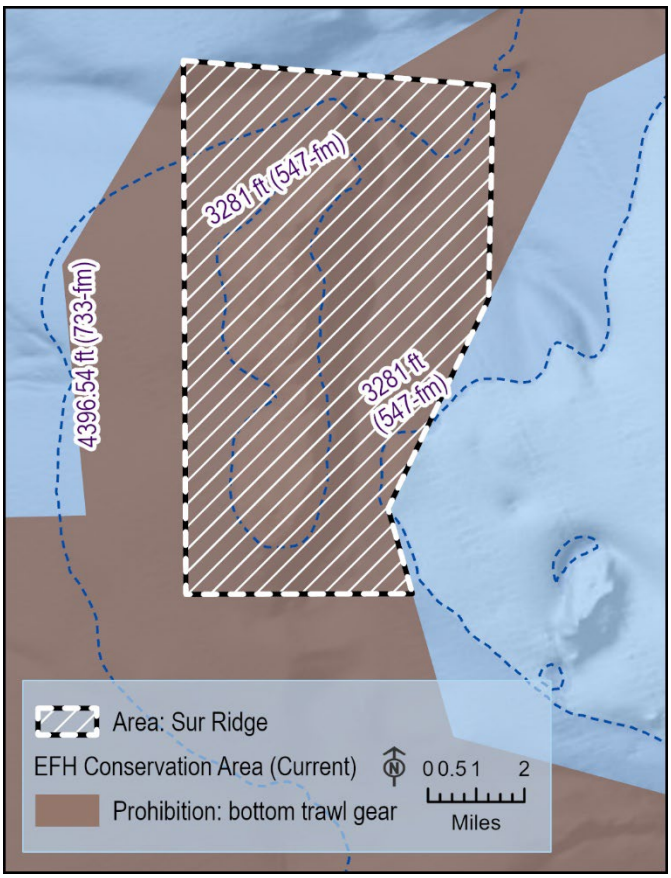

Figure 3. Sur Ridge coral restoration and research site (Alternative 2).

Table 3. Coordinates for Sur Ridge coral research and restoration site.

Vertices	Coordinates (Decimal degrees)
1	36.43333817° N. lat., -122.34684636° W. lat.
2	36.42576220° N. lat., -122.25391390° W. lat.
3	36.36187572° N. lat., -122.25532814° W. lat.
4	36.29922023° N. lat., -122.28545913° W. lat.
5	36.27374036° N. lat., -122.27816015° W. lat.
6	36.27352593° N. lat., -122.34606915° W. lat.
7 (Same as 1)	36.43333817° N. lat., -122.34684636° W. lat.

As with Alternative 1, for federal commercial groundfish fisheries, a GEA would be implemented at the site. The only legal gear type that would be permitted in this area would be non-bottom contact gears specified at 50 CFR 660.11 (12). Midwater trawl gears would continue to be permitted in the area. Bottom trawl fisheries (state and federal) would continue to be prohibited from operating in this area because it is within the EFHCA. If the EFHCA were to be removed in the future, the GEA would continue to apply to bottom trawl fisheries.

This action would require an amendment to the FMP. Proposed FMP language is shown in Agenda Item E.2, Attachment 2.

2.4 Preferred Alternative

To be completed after March 2024.

2.5 Comparison of Alternatives

Table 4. Summary of alternatives and major impacts.

	No Action	**Alternative 1**	**Alternative 2**
Location		**Año Nuevo/Ascension Canyon**	**Sur Ridge**
Differences in Alternatives (Sections 2.1 and 2.2)			
Area size	No closures	2.96-6.5 sq. nm	36.64 sq. nm
Depth range	No closures	Año Nuevo Canyon: 1,574-4,790 ft (262-776 fm) Ascension Canyon: 1,640-4,790 (273-798 fm)	2,690-5,118 ft (448-853 fm)
Environmental Impacts			
Fish	No changes	Negligible impacts	Negligible impacts
Protected Species	No changes	Negligible impacts	Negligible impacts
Habitat	No change	Positive impacts	Positive impacts
Ecosystem	No change	Positive impacts	Positive impacts
Economic Impacts			
Fishing effort	No change	Uncertain, but potential shift in effort	Uncertain, but potential shift in effort
Gross Revenue at Risk	No change	Uncertain, but negligible to potential negative	Uncertain, but negligible to potential negative

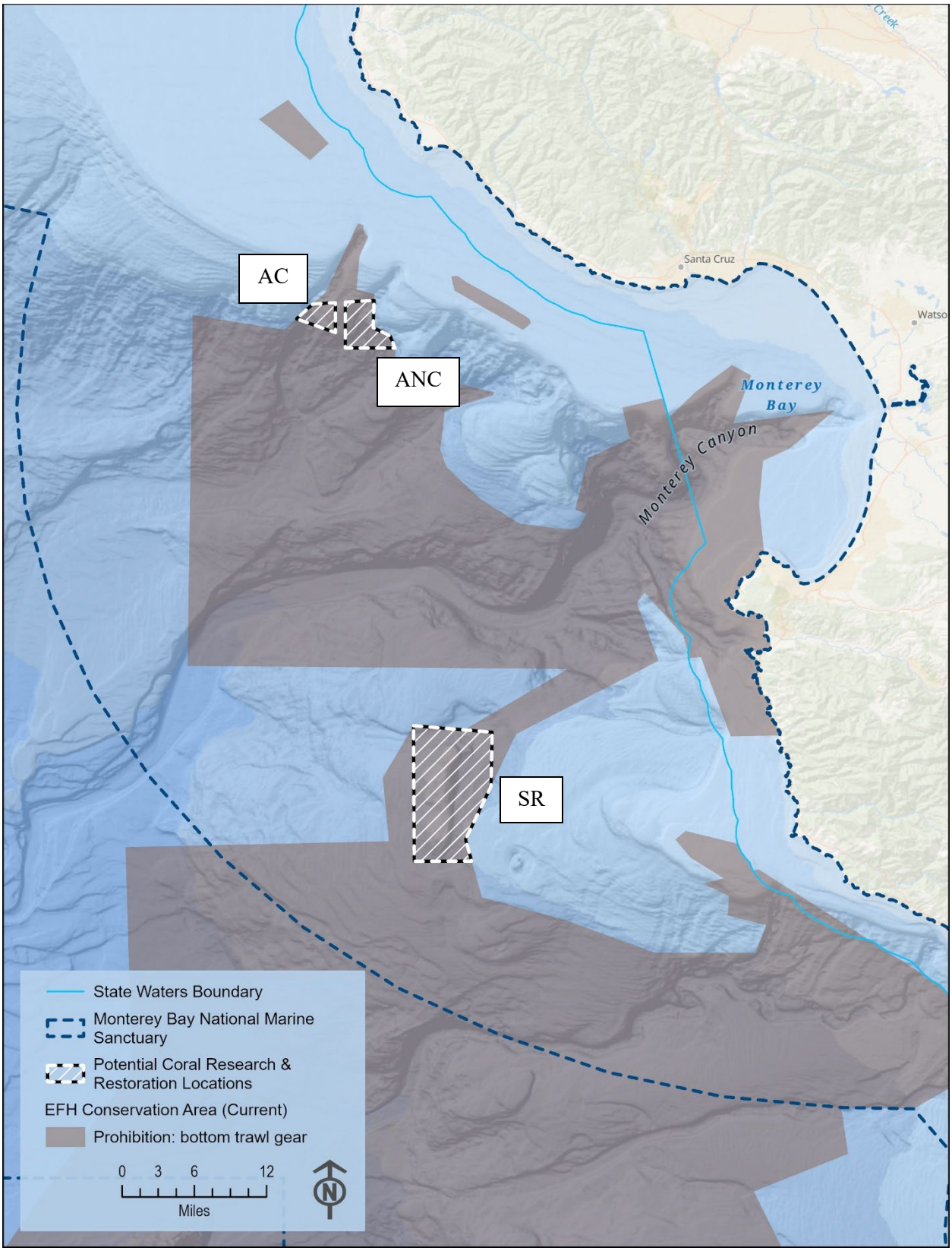

Figure 4. Map of potential DSC research and restoration locations within the MBNMS. AC=Ascension Canyon, ANC=Año Nuevo, SR=Sur Ridge.

3 Regulatory Impact Review

The President of the United States signed E.O. 12866, "Regulatory Planning and Review," on September 30, 1993. This order established guidelines for promulgating new regulations and reviewing existing regulations. The E.O. covers a variety of regulatory policy considerations and establishes procedural requirements for analysis of the benefits and costs of regulatory actions. The E.O. stresses that in deciding whether and how to regulate, agencies should assess all of the costs and benefits of available regulatory alternatives. Based on this analysis, they should choose those approaches that maximize net benefits to the Nation, unless a statute requires another regulatory approach.

NMFS satisfies the requirements of E.O. 12866 through the preparation of an RIR. The RIR provides a review of the potential economic effects of a proposed regulatory action in order to gauge the net benefits to the Nation associated with the proposed action. The analysis also provides a review of the problem and policy objectives prompting the regulatory proposal and an evaluation of the available alternatives that could be used to solve the problem.

The RIR provides an assessment that can be used by the Office of Management and Budget to determine whether the proposed action could be considered a significant regulatory action under E.O. 12866. E.O. 12866 defines what qualifies as a "significant regulatory action" and requires agencies to provide analyses of the costs and benefits of such action and of potentially effective and reasonably feasible alternatives. An action may be considered significant if it is expected to:

- Have an annual effect on the economy of $200 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local or tribal governments or communities;
- Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in E.O. 12866.

3.1 Statement of the Problem

A statement of the problem is available above in Section 1.1 titled "Problem Statement".

3.2 Description of the management goals and objectives

A description of the management goals and objectives can be found in Section 1.1.

3.3 Description of Fisheries and Other Affected Entities

A detailed description of the fishery and affected entities is available in Section 1.4.1.2 of the Stock Assessment and Fishery Evaluation (SAFE) document. This includes a summary of historic harvests, description of management, and economic characteristics of harvesting vessels, processors, and communities.

3.4 Description of the Alternatives

A description of the Alternatives is available in Section 2.

3.5 An Economic Analysis of the Expected Effects of Each Selected Alternative Relative to the No Action Alternative

3.5.1 Analysis of Expected Effects: No Action

Under No Action, there would be no new area closures for deep sea coral research and restoration in the MBNMS. Groundfish fisheries would be able to operate as under current regulations. There would be no costs associated with No Action to the fishing industry or NMFS.

3.5.2 Analysis of Expected Effects: Alternative 1

Under Alternative 1, a GEA for coral restoration and research would be implemented at Año Nuevo and/or Ascension Canyon and be applicable to groundfish bottom contact gears. Depending on the option selected, this would result in 2.96 (Option a), 6.5 sq. nm. (option b), or a total of 9.46 sq. nm. of area being closed to applicable groundfish operations.

For groundfish fisheries, there has historically been non-trawl activity within the areas of Año Nuevo and Ascension Canyons in both the non-catch shares and catch shares (i.e., trawl permitted vessels using non-trawl gear or "gear switching") fisheries. Figure 5 through Figure 7 below shows the intensity of fishing (color scale) and footprint (grey scale) from 2011-2018, 2019-2020, and 2021 respectively in the catch shares pot (left panel) and non-catch shares pot (middle panel) and hook and line (right panel) fisheries observed by WCGOP. There were no observations from the catch shares hook and line fisheries (2011-2021) in the general area of the closure and therefore area excluded from the figures. Additionally, there were no observations from the non-catch shares hook and line fishery in the figure extent in 2021 (Figure 7) and therefore there is not a panel representing this stratum in the figure. The data compared to the potential closure can be seen at the DSC Research and Restoration Scoping Tool. The fishing intensity scale shows the effort by each gear/sector strata in the given year(s) at a finer spatial scale (noting that areas with fewer than three vessels were removed for confidentiality). The footprint scale is at a larger scale (10 x 10 min blocks) and shows the percentage of coastwide effort in that block in that strata; these blocks are not considered confidential even if fewer than three vessels were active in a given time period. As an example of how to read this on the map, in Figure 5 for 2011-2018, the darker shading of grey behind Año Nuevo for catch shares pot (left panel) means that there was a higher percentage of effort coastwide in that block compared to the block to the right of Año Nuevo (lighter grey), but due to confidentiality, the precise intensity scale of the fishing at the finer spatial scale could not be shown. For a full description of the methodology, see https://www.pcouncil.org/documents/2023/05/h-6-a-nmfs-report-6-fishing-effort-in-the-2002-2021-u-s-pacific-coast-groundfish-fisheries-electronic-only.pdf/ Somers, et.al 2023.

Fishing activity was observed in the areas of potential closure under both Alternative 1 options over the time series and therefore there is likely to be some impacts to fishing vessels that operate in these areas historically. However, it is not clear how much total fishing activity is taking place in those areas due to confidentiality mandates and less than 100 percent observer coverage in the non-catch shares fisheries (discussed in detail below). In relation to the overall footprint of groundfish bottom contact fishing, it is likely that negative impacts would be negligible. That said given the proposed changes to the groundfish fisheries off of California due to restrictions associated with quillback rockfish, it is likely that there could be increased effort in the general area of these proposed closures with vessels being forced offshore.

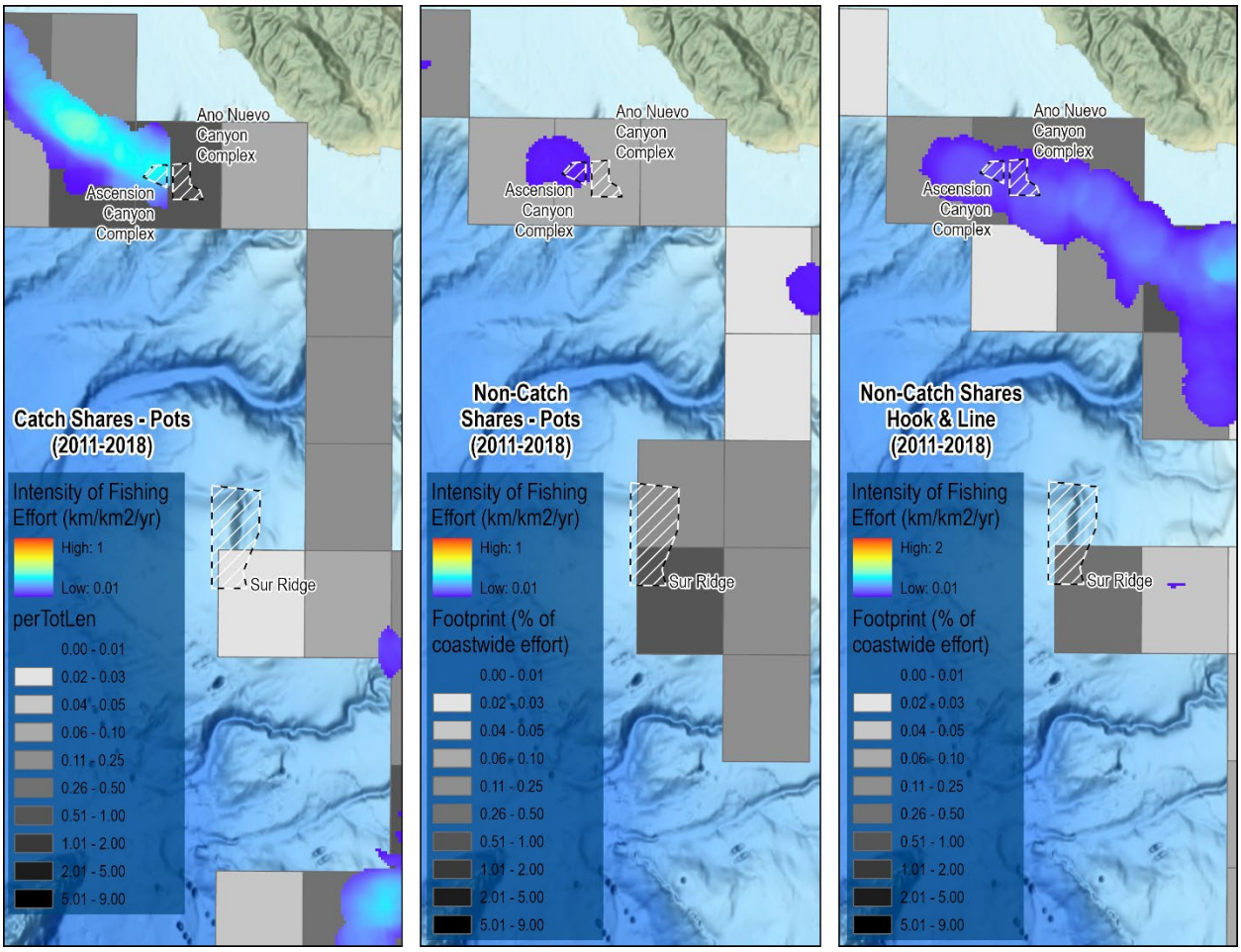

Figure 5. Intensity of Fishing Effort (km/km^2/yr) and footprint (percent of coastwide efforts) for catch shares and non-catch shares fisheries from 2011-2018. Source: WCGOP

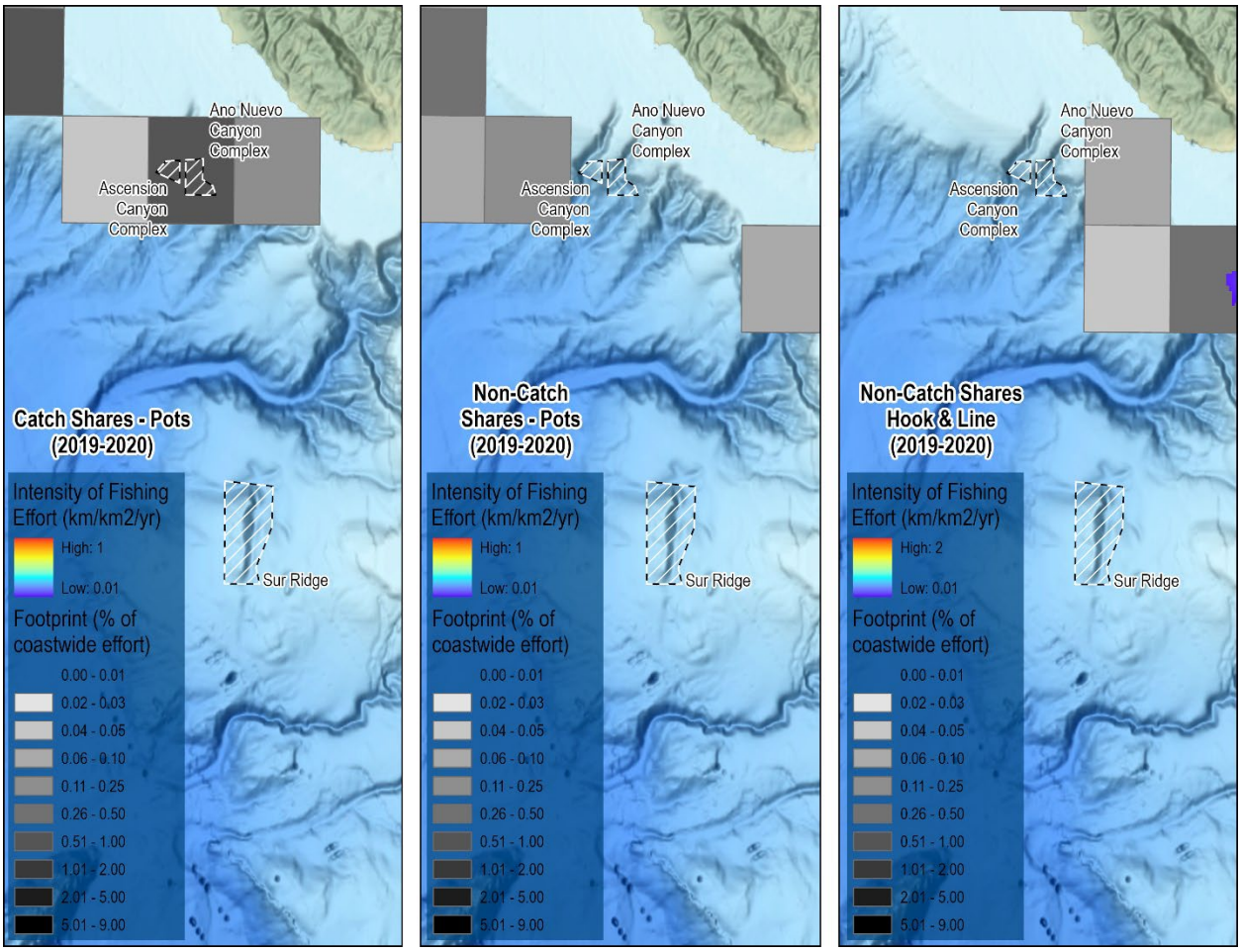

Figure 6. Intensity of Fishing Effort (km/km^2/yr) and footprint (percent of coastwide efforts) for catch shares and non-catch shares fisheries from 2019-2020. Source: WCGOP

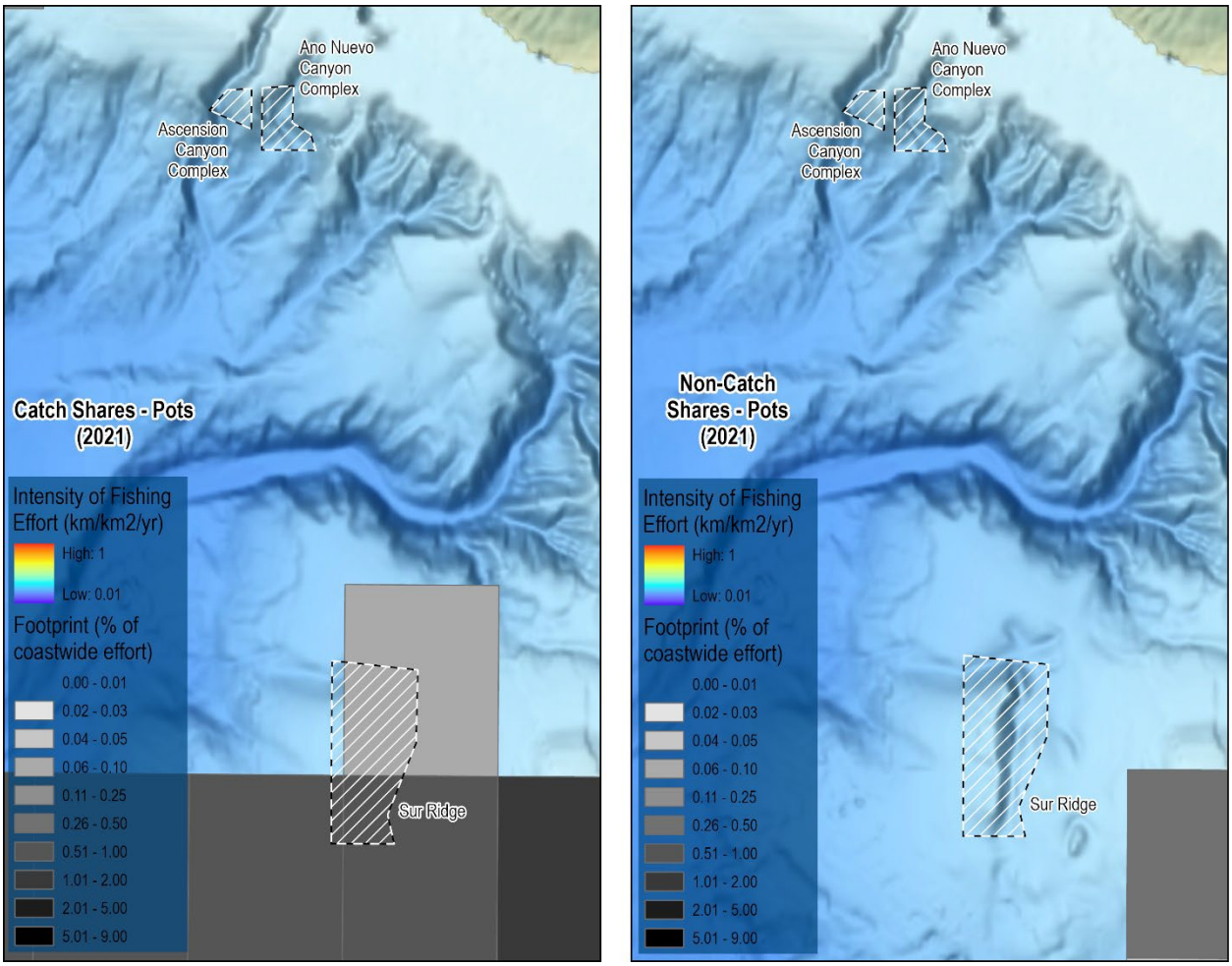

Figure 7. Intensity of Fishing Effort (km/km^2/yr) and footprint (percent of coastwide efforts) for catch shares and non-catch shares fisheries from 2021. Source: WCGOP

Note that while the intensity and footprint maps may show low levels of fishing effort or a lack of recent historical footprint, these data represent only observed sets and, in the non-catch shares sectors, reflect a relatively low level of observer coverage of the sector. As an example of the limitations of the observer coverage, within the latitudinal bin of 40° 10' to 36° N. lat., only 5 percent of groundfish landed were observed (representing 2.5 percent of coastwide OA landings) on average from 2018-2022. Yet, on average, 45 percent of all OA groundfish landings are landed in this area (Somers, et. al 2023). While this band of latitudes is much larger than the actual proposed action areas, it is the catch area that encompasses the proposed closures (both Alternatives). For the sablefish primary fishery, there were fewer than three vessels in the area annually observed from 2018-2022, with the exception of 2019 when 1.4 percent of the total coastwide sablefish landings were observed (or 9 percent of the landings within the area). In the same five-year time period, approximately 16 percent of the total sablefish landings in the sector were landed in this area. For the limited entry non-sablefish endorsed fishery (i.e., daily trip limit, DTL), it is estimated that an average of 3.4 percent of coastwide landings are observed.[3] No further stratification could occur due to confidentiality. The majority of non-catch shares observations are from the limited entry fixed gear primary fleet- which primarily delivers into Puget Sound, Newport and Coos Bay/Brookings- outside of

[3] This value was calculated by dividing the observed landings in the observer coverage report (Somers et al 2023) by the total groundfish landed in the DTL fishery in the GEMM report.

the action area (Table 13 of 2022 LEFG Program Review). All catch shares trips are monitored (via EM or observer) and less than 13 percent of total landings are caught in this area on average.

While the actual impacts to the fishing industry are uncertain, looking at the fishing revenues of various sectors that fish within the area might provide insight to the sectors, ports, and communities that could be impacted. Table 5 below shows the ex-vessel revenues by groundfish sector and port group from landings between 40° 30' and 36° N. lat. While WCGOP estimates discussed above are for the area spanning 40°10' N. lat. to 36° N. lat., the closest approximation available in PacFIN is 40° 30' to 36° N. lat. Monterey Bay is the closest port group to the sites in Alternative 1 and therefore could be the most likely to be impacted (assuming vessels in the area are fishing closer to the ports in which they are landing). Within the ports near the proposed GEA closures, Monterey Bay is the most involved (measures as the ex-vessel value in a port as share of total revenue) in the LE fixed gear DTL fisheries (sablefish and non-sablefish[4]). If vessels are actively fishing in the area of Alternative 1 options, it is possible that vessels could fish in other areas and still maintain their operational levels. The degree of this impact can't be quantified but depending on the fishing opportunity typically available in the location compared to a different location, it could range from negligible to something greater. Yet, given the size of the closures relative to the broader fishing footprint, it is likely negligible to the fleet overall. No impacts to vessel safety are expected with Alternative 1 as GEAs allow for continuous transit.

Table 5. Revenues ($2023) by port group and groundfish sector from PacFIN catch area 1b (40° 30' to 36° N. lat.). c/ denotes confidential strata.

Sector	Port Group				
	Bodega Bay	Ft. Bragg	Eureka	Monterey Bay a/	San Francisco
Catch Shares	$ -	$ -	$ -	c	$ 60,589
LE Fixed Gear DTL	$ 83,181	$ 172,510	$ -	$ 699,667	$ 28,734
Limited Entry Sablefish	$ 33,395	$ 535,393	c	$ 258,546	$ 104,177
OA Fixed Gear	$ 153,503	$ 358,125	$ 81,997	$ 349,254	$ 408,007

a/ includes Morro Bay port group landings

3.5.3 Analysis of Expected Effects: Alternative 2

Under Alternative 2, a total area of 36.64 sq. n. mi. would be closed to bottom contact groundfish fishing gears. While observer data do not show concentrated fishing intensity in the Sur Ridge area (see Figure 5 through Figure 7), a small amount of groundfish fishing effort was observed occurring in the area (shown by grey shading behind the proposed Sur Ridge closure). However, as described under Alternative 1, there is no way to assess whether the spatial patterns of observed effort are fully representative of the fleet's effort at fine spatial scales.

Compared to either or both options under Alternative 1, Alternative 2 would close off a larger portion of the currently accessible fishing area to the fleet. The degree of impact is again, not quantifiable, but if fishing activity in the area would be displaced as a result of this action, the net impact would depend on the availability of fishing opportunities with similar proximity to shore, fishing success, and operational costs. The greater depth of Sur Ridge (1000 feet deeper than Ascension/Año Nuevo) could imply a lower baseline level of fishing effort and therefore less impact to fishing activities than the Alternative 1 options. However, sablefish vessels do operate at the depths of the Sur Ridge location, or deeper (pers. comm. Gerry Richter),

[4] Table 11-16 of Agenda Item F.4., Attachment 2, April 2022 depicts the involvement of all IOPAC port groups coastwide for non-sablefish fisheries in LEFG with Monterey ranking #3.

and therefore could be potentially displaced. Overall impacts are uncertain, but likely to be negligible given the size of the closure relative to the broader fishing footprint. Similar to Alternative 1, the port group most likely to be impacted is Monterey given the proximity.

No impacts to vessel safety are expected with Alternative 2 as GEAs allow for continuous transit.

3.6 Summation of the Alternatives with Respect to Net Benefit to the Nation

The action alternatives described below are not mutually exclusive.

- The No Action Alternative would allow for fishing operations to continue as allowed under current regulations. There would be no new closures for deep-sea coral research and restoration, which may result in loss of scientific information and new corals in these areas.
- Under Alternative 1, one or two new areas for coral research and restoration would be implemented near Año Nuevo and/or Ascension Canyons which would be beneficial to scientific studies of deep-sea coral restoration and research. However, there would be new fishery closures to groundfish participants which could impact select sectors in the area to a degree and therefore cause a reduction in ex-vessel revenue and impacts to coastal communities.
- Under Alternative 2, a new area for coral research and restoration would be implemented near Sur Ridge which would be beneficial to scientific studies of deep-sea coral restoration and research. However, there would be new fishery closures to groundfish participants which could impact select sectors in the area to a degree and therefore cause a reduction in ex-vessel revenue and impacts to coastal communities.

3.7 Determination of Significant Impact

As noted above, under E.O. 12866, a regulation is a "significant regulatory action" if it is likely to: (1) have an annual effect on the economy of $200 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raise legal or policy issues for which centralized review would meaningfully further the President's priorities or the principles set forth in this Executive order, as specifically authorized in a timely manner by the Administrator of OIRA in each case. A determination will be made after the selection of the final preferred alternative.

4 Regulatory Flexibility Analysis

To be completed after selection of a PPA.

5 Magnuson-Stevens Act and FMP Considerations

5.1 Magnuson-Stevens Act National Standards

Below are the 10 National Standards as contained in the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), and a brief discussion of how each alternative is consistent with the National Standards, where applicable. In recommending a preferred alternative, the Council must consider how to balance the national standards.

National Standard 1 — Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.

The biennial harvest specifications and management measures undertaken and described in the 2023-2024 Biennial Harvest Specifications and Management Measures EA, establish harvest levels consistent with National Standard 1 and the harvest management framework described in Chapter 4 of the Groundfish FMP. This action does not revise the harvest management framework, or groundfish harvest limits. Proposed GEAs under Alternatives 1 and 2 would protect groundfish habitat (indirectly) within the proposed opened areas. These areas could contribute to productive fish populations. The closure of these areas may displace fishing effort, but the degree to which is unknown. However, given the size, it would be unlikely to prevent the non-trawl fishery from helping the groundfish fishery as a whole achieve optimum yield.

National Standard 2 — Conservation and management measures shall be based upon the best scientific information available.

The best scientific information available was used to select the proposed deep-sea coral research and restoration sites as outlined in Agenda Item H.2.a, ONMS Report 1, September 2023. Scientific experts in deep-sea coral research and restoration were provided with deep-sea coral location information, historical fishing data, and other background materials and designed proposed polygons for closure.

With regards to the fisheries impacts information, fish ticket and observer data were used to estimate impacts of the proposed action on the socioeconomic environment. As discussed in Section 3.5, there is less robust information about areas proposed for closure given the lack of observer coverage and the small areas proposed to be closed. The best available historic fish ticket and observer data are used, and are the best indicators of historic importance of an area to the fishery.

National Standard 3 — To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.

The Council develops and designates management units for groundfish, which include stocks, stock complexes, or geographic subdivisions thereof. The proposed action does not change any management units for groundfish. The alternatives considered would not result in stocks being managed differently throughout their range, nor would they likely fail to manage stocks as a unit.

National Standard 4 — Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be; (A) fair and equitable to all such fishermen, (B) reasonably calculated to promote conservation, and (C) carried out in such a manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.

The current analysis only applies to commercial groundfish non-trawl bottom contact gear types and no other types of potential bottom contact fisheries- such as state fisheries. If the bottom trawl EFHCA

currently present in the area(s) were to be removed, bottom trawl vessels would still be subject to closure and therefore there would be no impact. If state fisheries operate in the area and are continued to be allowed to fish in the area, there would be a disadvantage to groundfish vessels operating under federal management.

National Standard 5 — Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources, except that no such measure shall have economic allocation as its sole purpose.

Implementation of the GEAs could have a negative impact on utilization of fishery resources in the non-trawl groundfish fisheries by closing areas to fishing. However, given the small size of the proposed areas, it is likely that vessels could shift effort to outside the proposed closures and still utilize the fishery resources.

National Standard 6 — Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

GEAs are designed in a manner in which they can be turned off at a future time if the purpose for which they are implemented is no longer warranted. In the future, if coral planting is not successful in the area, the GEA could be removed and thereby opening up opportunities to vessels.

National Standard 7 — Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

The implementation of these new GEAs would create new costs associated with implementing GEAs and enforcement costs for monitoring the closure- as well as costs to industry to avoiding the area. However, given the size of the closures and the ability for enforcement to use VMS, the costs should be relatively minimal overall.

National Standard 8 — Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities by utilizing economic and social data that meet the requirements of National Standard 2, in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities.

Alternatives 1 and 2 would create new discrete fishery closures, which may have some degree of impact on fishing communities if vessels that deliver to those communities fish in the proposed closures and have less success fishing at other locations. However, the degree of that impact will depend on the ability for vessels to shift effort and still provide deliveries into those communities.

Deep sea coral communities are complex ecosystems that provide sources of food, shelter and spawning grounds for fish and invertebrates. They are reserves for biodiversity and more diverse marine ecosystems, which are generally able to better withstand survival in changing conditions. In addition, the public derives benefits because MBNMS provides outreach on the importance of deep-sea coral communities through video webinars, school curriculum, teacher materials, exhibits in visitor centers, and posters.

National Standard 9 — Conservation and management measures shall, to the extent practicable, (A) minimize bycatch, and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.

There are no expected impacts to bycatch of any species outside of No Action as described in the 2023-2024 Harvest Specifications EA.

National Standard 10 — Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.

There is no expected impact to the safety of human life at sea outside of that described in the 2023-2024 Harvest Specifications EA.

5.2 Section 303(a)(9) Fisheries Impact Statement

Section 303(a)(9) of the Magnuson-Stevens Act requires that a fishery impact statement be prepared for each FMP or FMP amendment. A fishery impact statement is required to assess, specify, and analyze the likely effects, if any, including the cumulative conservation, economic, and social impacts, of the conservation and management measures on, and possible mitigation measures for (a) participants in the fisheries and fishing communities affected by the plan amendment; (b) participants in the fisheries conducted in adjacent areas under the authority of another Council; and (c) the safety of human life at sea, including whether and to what extent such measures may affect the safety of participants in the fishery.

The RIR prepared for this plan amendment constitutes the fishery impact statement. The likely effects of the proposed action are analyzed and described throughout the RIR. The effects on participants in the fisheries and fishing communities are analyzed in the RIR (Section 4). The effects of the proposed action on safety of human life at sea are evaluated in Section 3.5, and above under National Standard 10, in Section 2.

The proposed action affects the groundfish fisheries in the EEZ off the West Coast, which are under the jurisdiction of the Pacific Fishery Management Council. Impacts on participants in fisheries conducted in adjacent areas under the jurisdiction of other Councils are not anticipated as a result of this action.

6 Other Applicable Laws

Executive Order 13175 Consultation and Coordination with Indian Tribal Governments

Executive Order 13175 is intended to ensure regular and meaningful consultation and collaboration with tribal officials in the development of Federal policies that have tribal implications, to strengthen the United States government-to-government relationships with Indian tribes, and to reduce the imposition of unfunded mandates upon Indian tribes.

The Secretary recognizes the sovereign status and co-manager role of Indian tribes over shared Federal and tribal fishery resources. At Section 302(b)(5), the MSA reserves a seat on the Council for a representative of an Indian tribe with Federally-recognized fishing rights from California, Oregon, Washington, or Idaho.

The proposed action and other alternatives have been developed through the Council process. Through the tribal representative on the Council, the Tribes have had a role in developing the proposed action and analyzing the effects of the alternatives; therefore, the proposed action is consistent with EO 13175.

National Marine Sanctuaries Act

The National Marine Sanctuary Act (16 U.S.C. § 1431 et seq.) authorizes NOAA to identify and designate national marine sanctuaries as certain areas of the marine environment with special conservation, recreational, ecological, historical, scientific, educational, cultural, archeological, or aesthetic qualities. NOAA is authorized to develop regulations to protect, restore, and enhance sanctuary resources.

7 Preparers and Persons Consulted

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