

INITIAL REVIEW DRAFT

**Preliminary Environmental Assessment/Regulatory Impact Review/
Regulatory Flexibility Analysis/Magnuson-Stevens Fishery Conservation and
Management Act Analysis**

**Cordell Bank Fishery Regulation Changes
PFMC/NMFS Analytical Template, Version 2.0**

November 2024

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Abstract: This Environmental Assessment/Regulatory Impact Review/Regulatory Flexibility Act Analysis/Magnuson-Stevens Fishery Conservation and Management Act Analysis (EA/RIR/RFAA/MSA) analyzes a proposed management measure that would apply exclusively to the Pacific Coast groundfish fishery. Specifically, this would remove the Cordell Bank Groundfish Conservation Area (GCA) for all groundfish fisheries and implement a new Groundfish Exclusion Area (GEA) for all groundfish fisheries on the Cordell Bank (50 fm isobath) bottom contact Essential Fish Habitat Conservation Area (EFHCA). No changes are proposed to the Cordell Bank bottom trawl EFHCA or the bottom contact EFHCA.

List of Acronyms and Abbreviations

Acronym or Abbreviation	Meaning
ABC	acceptable biological catch
ACL	annual catch limit
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	<i>Federal Register</i>
FRFA	Final Regulatory Flexibility Analysis
ft	foot or feet
GMT	Groundfish Management Team
IFQ	Individual fishing quota
IRFA	Initial Regulatory Flexibility Analysis
lb(s)	pound(s)
LOA	length overall
m	meter or meters
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
t	tonne, or metric ton
NAICS	North American Industry Classification System
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

Acronym or Abbreviation	Meaning
RFFA	reasonably foreseeable future action
RIR	Regulatory Impact Review
RPA	reasonable and prudent alternative
SAFE	Stock Assessment and Fishery Evaluation
SBA	Small Business Act
Secretary	Secretary of Commerce
SRKW	Southern Resident killer whales
TAC	total allowable catch
U.S.	United States
USCG	United States Coast Guard
USFWS	United States Fish and Wildlife Service
VMS	vessel monitoring system
WCGOP	West Coast Groundfish Observer Program

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1 Introduction

This document analyzes a proposed management measure that would apply exclusively to the Pacific Coast groundfish fishery. Specifically, this action would remove the Cordell Bank Groundfish Conservation Area (GCA) for all groundfish fisheries and implement a new Groundfish Exclusion Area (GEA) for all groundfish fisheries in the same area, but with a different footprint.

This document is an Environmental Assessment/Regulatory Impact Review/Regulatory Flexibility Act Analysis/Magnuson-Stevens Fishery Conservation and Management Act Analysis (EA/RIR/RFAA/MSA). An EA/RIR/RFAA/MSA provides assessments of the environmental impacts of a proposed action and its reasonable alternatives (the EA), 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 National Standards (MSA). This EA/RIR/RFAA/MSA addresses the statutory requirements of the MSA, the National Environmental Policy Act (NEPA), Presidential Executive Order 12866, and the Regulatory Flexibility Act. An EA/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.

For purposes of the EA, the purpose and need for the proposal is described in Chapter 1 and the alternatives are described in Chapter 2. Chapter 3 describes the affected environment and analyzes the impacts of the alternatives, the economic impacts of the alternatives are presented in Chapter 4, the RIR. A list of agencies and persons consulted is included in Chapter 8.

This EA applies the Council on Environmental Quality's (CEQ) NEPA regulations currently in effect. See 50 C.F.R. § 1506.13.

1.1 Purpose and Need

The following purpose and need is proposed for Council consideration:

The purpose of this action is to provide fishing access to previously closed areas surrounding Cordell Bank while protecting sensitive habitats. The Cordell Bank GCA was initially implemented to reduce catch of several overfished groundfish stocks, which are all now rebuilt or rebuilding ahead of schedule. This action is needed to reduce unnecessary regulatory complexity.

1.2 History of this Action

The first iteration of the Cordell Bank GCA was implemented during the 2004 Harvest Specifications and Management Measures process specifically to prohibit recreational groundfish fishing as a measure to protect rockfish species that were declared overfished in the preceding years ([69 FR 11063](#)). At the time, the closure was defined as:

Cordell Banks. Cordell Banks are located offshore of California's Marin County. Recreational fishing for certain species of groundfish is prohibited within a 5 nautical mile radius around a point located at 38°02' N. lat. and 123°25' W. long.

Specifically, comments from the California Department of Fish and Wildlife (CDFW, known as California Department of Fish and Game at the time) noted that the area saw recreational catch of some species that were "notably higher than for other fishing grounds off central California. Catches of widow, bocaccio, canary, and yelloweye rockfishes and lingcod comprised 27 percent of the landings from

Cordell Bank, as compared to 15 percent of landings from all other areas”. While CDFW requested that the area also be closed to commercial fishing as well to align closures with the recreational fisheries, NMFS could not implement it for commercial fisheries at the time due to several overlapping boundary lines for the rockfish conservation areas (RCAs). Cordell Bank was within the commercial Non-Trawl RCA but was shoreward of the trawl RCA in 2004. As a result, inseason action was taken at the March 2004 Council meeting to adjust the trawl RCA boundary line, thereby closing Cordell Bank to all commercial groundfish fishing ([69 FR 23440](#)). Then, as part of the 2005-2006 Biennial Harvest Specifications and Management Measures process, the Cordell Bank GCA was specified in regulation with its own coordinates and prohibited all groundfish fishing, except for fishing for of the Other Flatfish complex by the non-trawl commercial and recreational sectors ([69 FR 77011](#)). Currently, the Cordell Bank GCA prohibits take of groundfish, except for non-trawl commercial take of the Other Flatfish complex (50 CFR 660.230(d)(16) and 50 CFR 660.330(d)(18)), and, recreational take of the Other Flatfish complex, petrale sole and starry flounder (50 CFR 660.360(c)(3)(i)(C)). The Cordell Bank GCA does not restrict other fishery activities from operating within the area but groundfish retention rules still apply.

In addition to the GCA at Cordell Bank and the RCAs, there have been two other conservation areas implemented in the action area. The Cordell Bank bottom trawl Essential Fish Habitat Conservation Area (EFHCA) was initially implemented in 2006 during the first groundfish EFH process ([71 FR 27408](#)), and subsequently modified in 2020, including expansions to the north and southwest, though not to the boundaries of the Cordell Bank GCA, as part of Amendment 28 to the Pacific Coast Groundfish Fishery Management Plan ([84 FR 63966](#)). Amendment 28 also resulted in the removal of the trawl RCA off of California. The bottom trawl EFHCA at Cordell Bank is currently one of 38 bottom trawl EFHCAs off California designed to protect habitat from bottom trawl impacts. It prohibits the use of bottom trawl gear, except for demersal seine, and while the bottom trawl EFHCA extends outside of the Cordell Bank GCA, it does not encompass the entirety of the Cordell Bank GCA.

Additionally, a bottom contact EFHCA (Cordell Bank (50-fm isobath)) was also implemented during the 2006 EFH process ([71 FR 27408](#)). Though part of the formal EFH review in 2020, the Council decided to not consider bottom contact EFHCAs at that time and, therefore, it was not modified. Within the bottom contact EFHCA, use of bottom contact gear of any type is prohibited. The result of these closures resulted in four different and overlapping conservation areas, which has created regulatory complexity, enforcement complications, and confusion among fishermen of what gear types are allowed in which areas.

During the consideration of Amendment 32 and the 2023-2024 biennial harvest specifications, issues with the overlapping regulatory areas became more apparent as the RCA lines were changing. For the commercial non-trawl fishery, modifications to the 75-fm RCA line were made under Amendment 32 to mitigate some of the enforcement concerns in the area ([Agenda Item F.4.a, CDFW Report 1, March 2023](#)). For the recreational fishery, the 2023-2024 harvest specifications allowed for an all-depth or seaward of 50 fathom (fm) fishery. While recreational participants could fish for sanddabs, the Other Flatfish complex and petrale sole in areas outside the bottom contact EFHCA but within the Cordell Bank GCA, the changes in 2023-2024 harvest specifications resulted in portions of fishing grounds in the area being opened to all recreational gears and more confusion amongst stakeholders with the current 50 fm restriction of the bottom contact EFHCA. This is not as much of an issue in the upcoming biennium due to California quillback rockfish restrictions resulting in mostly limiting fishing inside of state waters; however, due to changes in the California recreational fishery in this area due to support California quillback rockfish rebuilding, these overlapping areas and corresponding regulation is likely to continue to confuse stakeholders in the months when an offshore fishery, i.e., greater than 50 fm, in this area is allowed.

In brief, the resulting configuration of the RCA lines, GCA, and EFHCA areas has resulted in differential regulations within a discrete area. Therefore, in March 2023, under Workload and New Management

Measure Priorities, the Pacific Fishery Management Council (Council) prioritized scoping and potential development of removing the Cordell Bank GCA and other associated changes as described in [Agenda Item F.8.a, Supplemental CDFW Report 1, March 2023](#).

In September 2023, CDFW proposed to remove the Cordell Bank GCA entirely (yellow polygon in *Figure 1*) and create a new GEA that overlays the existing bottom contact EFHCA, which is intended to minimize impacts to sensitive environments from certain groundfish fishing activities. GEAs were developed as a management measure under Amendment 32 for the protection of sensitive habitats. The Council recommended that the proposed action move forward for development.

At this meeting (November 2024), the Council is scheduled to select a range of alternatives and a preliminary preferred alternative (PPA). A tentative final preferred alternative is scheduled for March 2025.

1.3 Description of Management Area

The management area for this action is the Cordell Bank GCA and the overlapping EFHCAs in the Cordell Bank area, which is northwest of San Francisco (Figure 1) and west of Bodega Bay, CA. It is also within the Cordell Bank National Marine Sanctuary (CBNMS). This area is entirely in Federal waters.

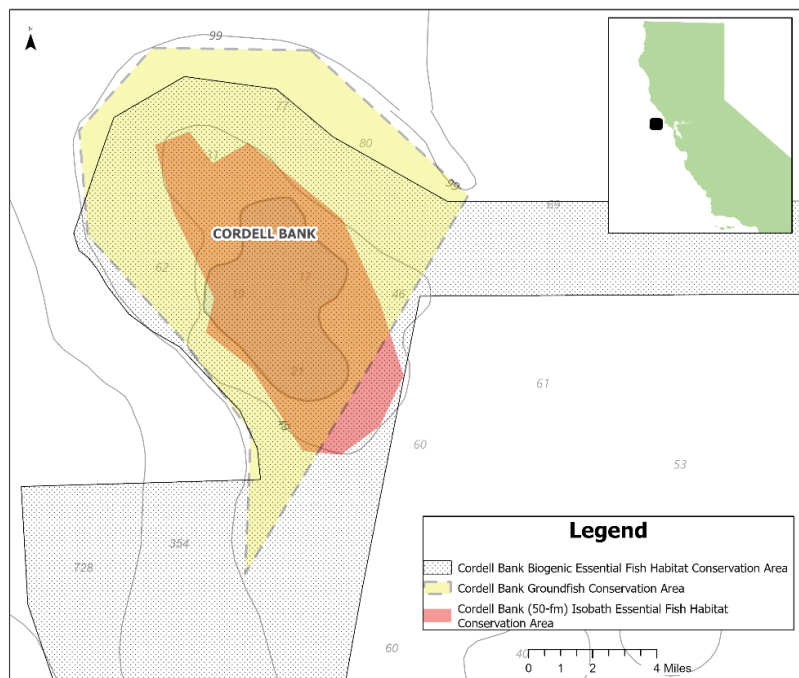


Figure 1. Map of the Cordell Bank Biogenic Essential Fish Habitat Conservation Area (trawl EFHCA), Cordell Bank Groundfish Conservation Area (Cordell Bank GCA) and Cordell Bank (50-fm) Isobath Essential Fish Habitat Conservation Area (bottom contact EFHCA).

2 Description of Alternatives

2.1 No Action

Under No Action, the Cordell Bank GCA would remain in regulation, as shown in Figure 2. Groundfish vessels would be subject to various management measures depending on the sector, gear, target species, and area as described in Table 1.

Table 1. Summary table of conservation areas around Cordell Bank, including fisheries to which they apply, prohibitions and section of federal regulation specifying the prohibitions and conservation area.

Conservation Area	Applicable Fisheries	Prohibition	Federal Regulatory Section Defining Prohibition	Federal Regulatory Section Defining Area
Rockfish Conservation Area (RCA)	Non-trawl commercial, recreational and incidental open access groundfish fisheries	Generally, all groundfish, except non-bottom contact gear and other flatfish (non-trawl comm.); and yellowtail rockfish (incidental salmon troll)	50 CFR 660.230(d)(14) 50 CFR 660.330(d)(15) 50 CFR 660.360(c)(3)(i)	660.71 through 660.74
Cordell Bank/Biogenic Area Essential Fish Habitat Conservation Area (bottom trawl EFHCA)	All fisheries, including non-groundfish	Fish with bottom trawl gear, other than demersal seine	50 CFR 660.112(a)(5)(vi)	660.79(q)
Cordell Bank Groundfish Conservation Area (Cordell Bank GCA)	Non-trawl commercial and recreational groundfish	Generally, all groundfish, except for non-trawl comm. harvest of other flatfish and rec. harvest of petrale sole, starry flounder, and other flatfish	50 CFR 660.330(d)(18)	660.70(v)
Cordell Bank (50-fm (91m) isobath) Essential Fish Habitat Conservation Area (bottom contact EFHCA)	All fisheries, including non-groundfish	Fish with bottom contact gear of any type	50 CFR 660.12(a)(16)	660.79(r)

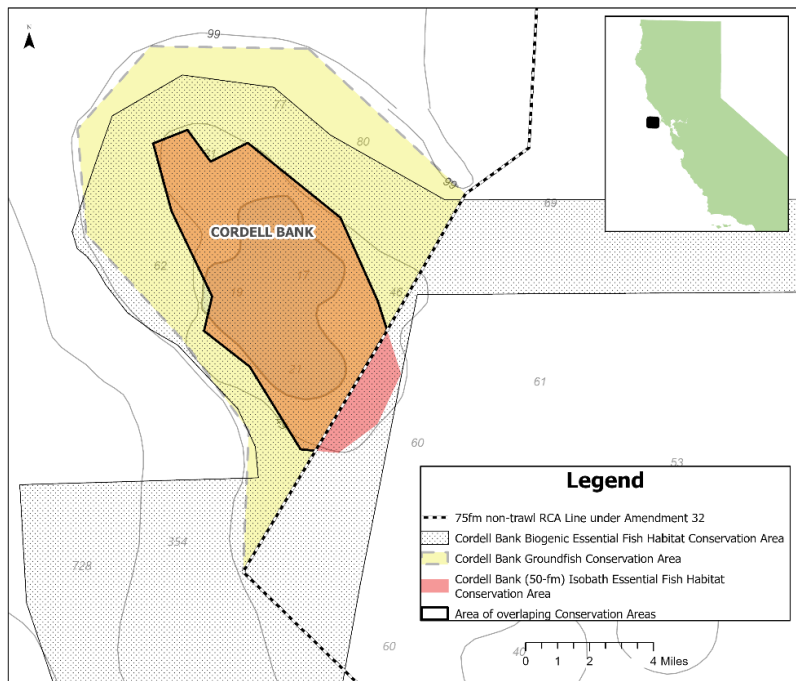


Figure 2. Map of the Cordell Bank Biogenic Essential Fish Habitat Conservation Area (trawl EFHCA), Cordell Bank Groundfish Conservation Area (Cordell GCA), Cordell Bank (50-fm) Isobath Essential Fish Habitat Conservation Area (bottom contact EFHCA) and the 75-fathom non-trawl Rockfish Conservation Area boundary line under Amendment 32, detailing the area of overlap which has resulted in a cumulative effect of prohibiting groundfish fishing.

2.2 Alternative 1

Alternative 1: Remove the Cordell Bank GCA and implement a new GEA over the Cordell Bank Bottom Contact EFHCA that would be applicable to all groundfish fisheries.

Alternative 1 would remove the Cordell GCA entirely (yellow polygon in Figure 2) and create a new GEA (striped polygon in Figure 3) that overlays the existing bottom contact EFHCA, which is intended to minimize impacts to sensitive environments from certain groundfish fishing activities. There would be no changes or modifications to either the bottom trawl or bottom contact EFHCAs in regulation within the area of the Cordell Bank GCA. Under this action, there would be 10.2 square miles (sq. mi.) of area opened to bottom trawl (purple polygon in Figure 4) and 40.1 sq. mi opened to non-trawl bottom contact gears (green polygon in Figure 5). 2.5 sq. mi would be closed to non-bottom contact gears permitted in the Non-Trawl RCA with the implementation of the GCA (red portion of polygon to the left of the 75 fm Non-Trawl RCA boundary in Figure 2). This alternative would require a regulatory amendment; no amendments to the FMP are necessary.

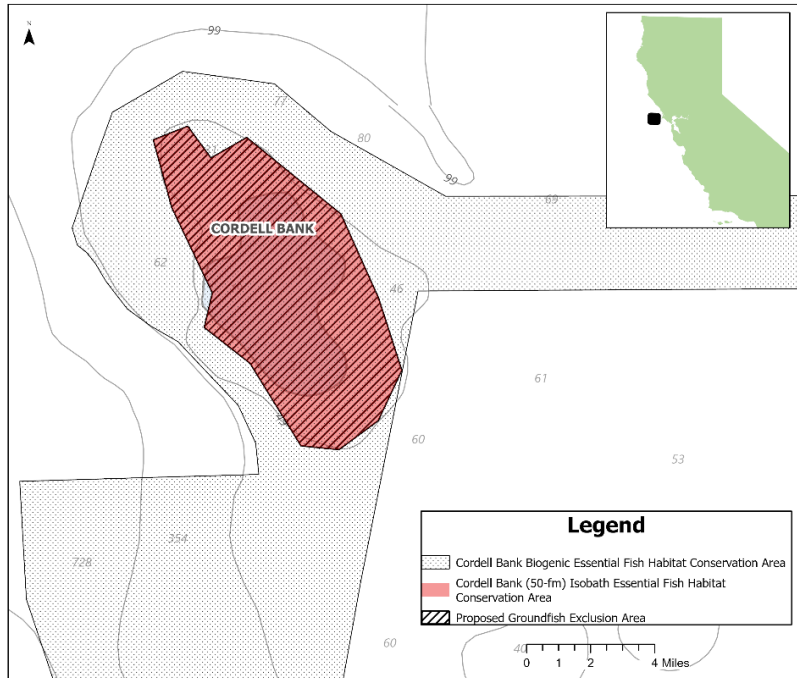


Figure 3. Map depicting the Cordell Bank Biogenic Essential Fish Habitat Conservation Area (bottom trawl EFHCA), the Cordell Bank (50-fm) Isobath Essential Fish Habitat Conservation Area (bottom contact EFHCA) and the proposed new GEA.

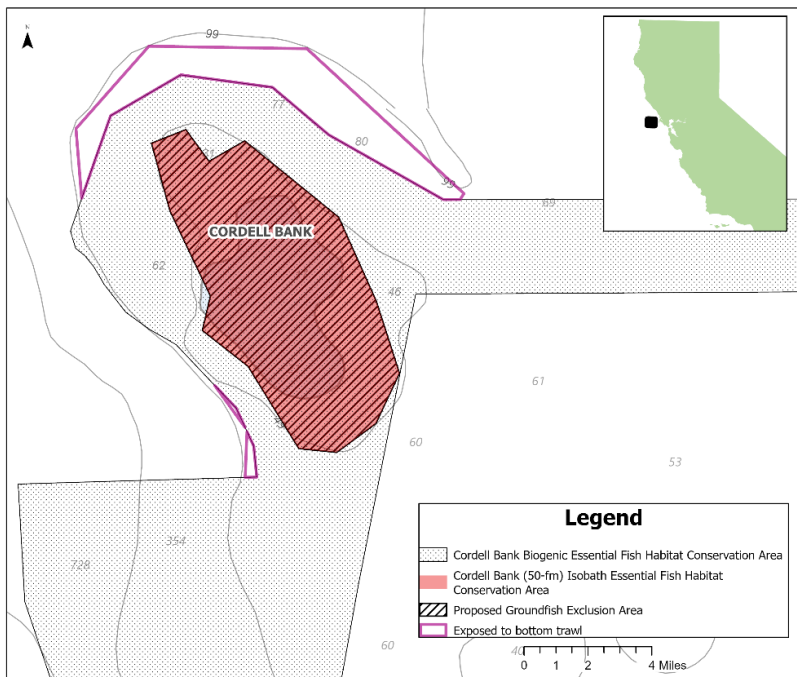


Figure 4. Map of the Cordell Bank Biogenic Essential Fish Habitat Conservation Area (bottom trawl EFHCA), the Cordell Bank (50-fm) Isobath Essential Fish Habitat Conservation Area (bottom contact EFHCA), the proposed new GEA and area that would be exposed to bottom trawl (10.2 sq. mi.)

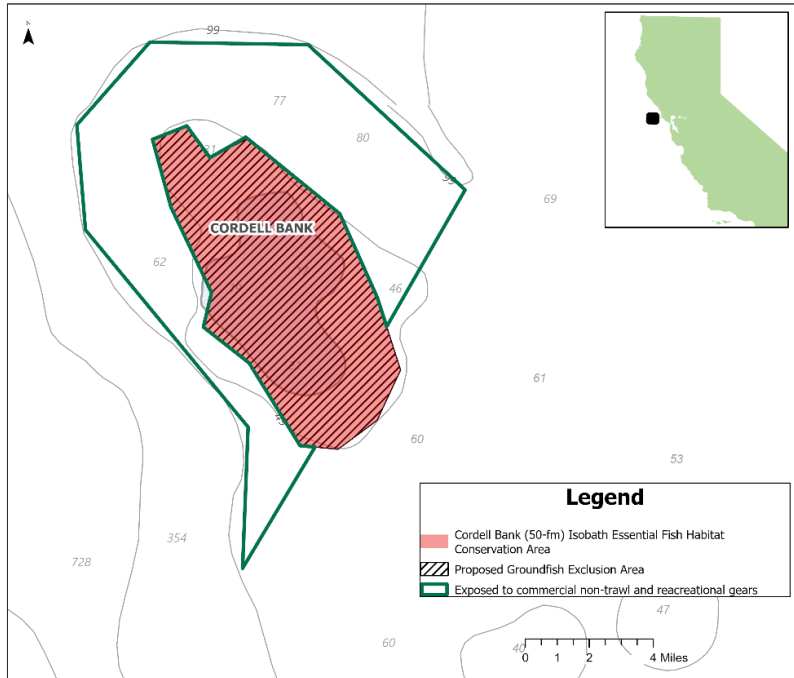


Figure 5. Map of the Cordell Bank (50-fm) Isobath Essential Fish Habitat Conservation Area (bottom contact EFHCA), the proposed new Groundfish Exclusion Area and area that would be exposed to commercial non-trawl and recreational gear (40.1 sq. mi.).

2.3 (Preliminary) Preferred Alternative

To be completed after November 2024

2.3.1 Rationale for the Council's Preferred Alternative

To be completed after November 2024

3 Preliminary Draft Environmental Assessment

For each resource, the analysis identifies the necessary information to understand the affected environment and the potential impacts of each alternative.

The effects of the alternatives on resources would be caused by the opening of previously closed areas to groundfish fisheries. The primary resource that would be impacted is habitat. Potential impacts to habitat are discussed in Section 3.2 below and impacts to remaining resources (except economics) are in section 3.3. Economic impacts will be discussed in Section 4 (RIR).

3.1 Methods Used for the Cumulative Effects Analysis

This EA analyzes the impact on each resource that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions (RFFA) regardless of what agency (federal or nonfederal) or person undertakes such other action.

The geographic scope for habitat is the West Coast exclusive economic zone (EEZ). For socioeconomic resources, the geographic scope is those United States fishing communities directly involved in the harvest or processing of Council-managed resources, particularly those of California.

The temporal scope of selecting past and present actions for the affected resources encompasses actions that occurred since Amendment 32 to the Pacific Coast Groundfish FMP. The temporal scope of selecting RFFA is based on the following two criteria.

1. Actions in the West Coast EEZ that affect the same resources impacted by the proposed action. Administrative fishery management actions that have no discernible effect are not included.
2. Actions that are not speculative, in that the action is defined to an extent that it can be analyzed and that some concrete step has been taken toward implementation. This includes actions for which the Council has at least decided on a PPA or if NMFS is anticipating publication of a proposed rule or issuance of a permit. Actions only “under consideration” have not generally been included, because they may change substantially or may not be adopted, and so cannot be reasonably described, predicted, or foreseen.

Given the Council’s current agenda, the timeframe for the most distant, non-speculative action is 2025.

The anticipated effects of these actions, as they pertain to fisheries, extend into the future and are unlikely to decrease in magnitude. The direct, indirect, and cumulative effects of substantive future fishery actions, such as the 2027-2028 groundfish harvest specifications, will be analyzed in future NEPA documents. Therefore, we do not quantify a temporal scope for the effects of the reasonably foreseeable future actions.

The following sections summarize the relevant past, present, and RFFA that contribute to cumulative effects on the same resources analyzed in this document. The selection of actions to include is guided by the same criteria listed above for selecting the temporal scope of the actions (impacts the same resources as this proposed action and are reasonably foreseeable). Actions are understood to be human actions (e.g., a designation of northern right whale critical habitat in the Pacific Ocean), as distinguished from natural events (e.g., an ecological regime shift). CEQ regulations require consideration of actions, whether taken by a government or by private persons, that are reasonably foreseeable. In addition to these actions, this cumulative effects analysis includes the effects of climate change.

Past and present actions that are considered in the cumulative effects section in this chapter include:

- Amendment 32 (Non-Trawl Area Management Measures), Effective January 1, 2024. This action opened areas of the Non-Trawl RCA off Oregon and California and removed the Cowcod Conservation Area.
- 2025-2026 Harvest Specifications and Management Measures, Expected Effective January 1, 2025. This action adopted the harvest specifications and management measures for the groundfish fishery for 2025 and 2026, including implementation of a rebuilding plan for California quillback rockfish.

Reasonably foreseeable future actions that are considered in the cumulative effects section in this chapter include:

- Limited Entry Fixed Gear (LEFG) follow on action, Expected Development 2025. This action is considering allowing vessels registered to pot and longline endorsed vessels utilize non-endorsed gear types in the LEFG fishery.

3.1 Habitat

3.1.1 Affected Environment

The following analysis describes the potential impacts to seafloor habitat. Data developed by the Pacific Marine and Estuarine Fish Habitat Partnership (PMEP) was used to generate a rocky reef habitat layer using the Coastal and Marine Ecological Classification Standard (CMECS). Figure 7 displays the rocky reef habitat present within the action area. Documentation for the CMECS classification can be found at <https://coast.noaa.gov/data/digitalcoast/pdf/cmeecs.pdf> and additional details about PMEP can be found on their website (<https://www.pacificfishhabitat.org>). Due to the location of the action area, these series of maps focus on rocky reef habitat rather than all groundfish Habitat Areas of Particular Concern (HAPCs) which do not overlap.¹ It should be noted that the Cordell Bank itself is identified as a groundfish HAPC due to it being an area of interest. As described in Amendment 19, these types of HAPCs are designated as of “specific interest due to their unique geological and ecological characteristics.” Specifically, the EIS for Amendment 19 noted that “Cordell Bank is an offshore granite bank about 45 nautical miles (nm) northwest of San Francisco, California. The vertical relief and hard substrate of the Bank provides benthic habitat with near-shore characteristics in an open ocean environment 20 nm from shore. Unpublished observations indicate the presence of many rockfish species, sponges, anemones, hydrocorals, hydroids, tunicates, and scattered crabs, holothurians, and gastropods (CBNMS and MBNMS 2004).”

¹ Groundfish HAPCs are defined in Section 7.3 of the Pacific Coast Groundfish FMP and include estuaries, canopy kelp, seagrass, and rocky reefs.

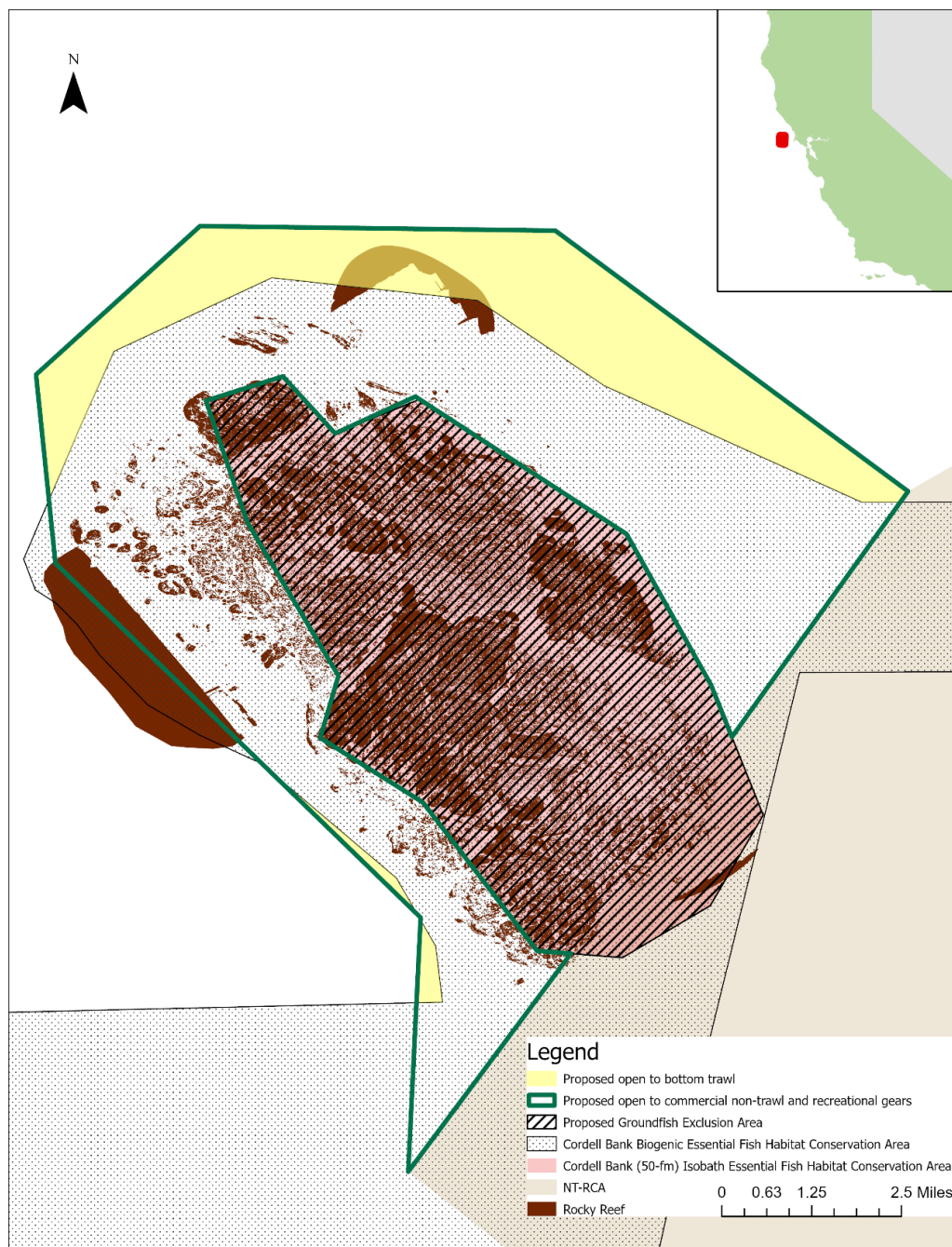


Figure 6. Cordell Bank action area and closed areas compared to rocky reef habitat (based on PMEC dataset).

Deep sea corals and sponge observation data and habitat suitability model for corals was obtained from the [NOAA Deep-Sea Coral and Sponge Map Portal](#) (description of the database and sources can be found in the [NOAA Technical Memorandum NOS NCCOS 191](#)). In addition to the observations on the portal, ONMS provided 3,471 additional structure forming sponge observations seen on all Delta dive-transects in 2002 and 2003 that are included in Figure 7 and Figure 8. All observations were grouped into three main categories as was done under Amendment 28 and 32 to the Pacific Coast Groundfish FMP: corals, sponges, and sea pens. The combination of the habitat suitability model and the observation data aligns with recommendations by the Council and NMFS staff for analyses performed by the Bureau of Ocean Energy and Management (BOEM) and other entities for potential projects.

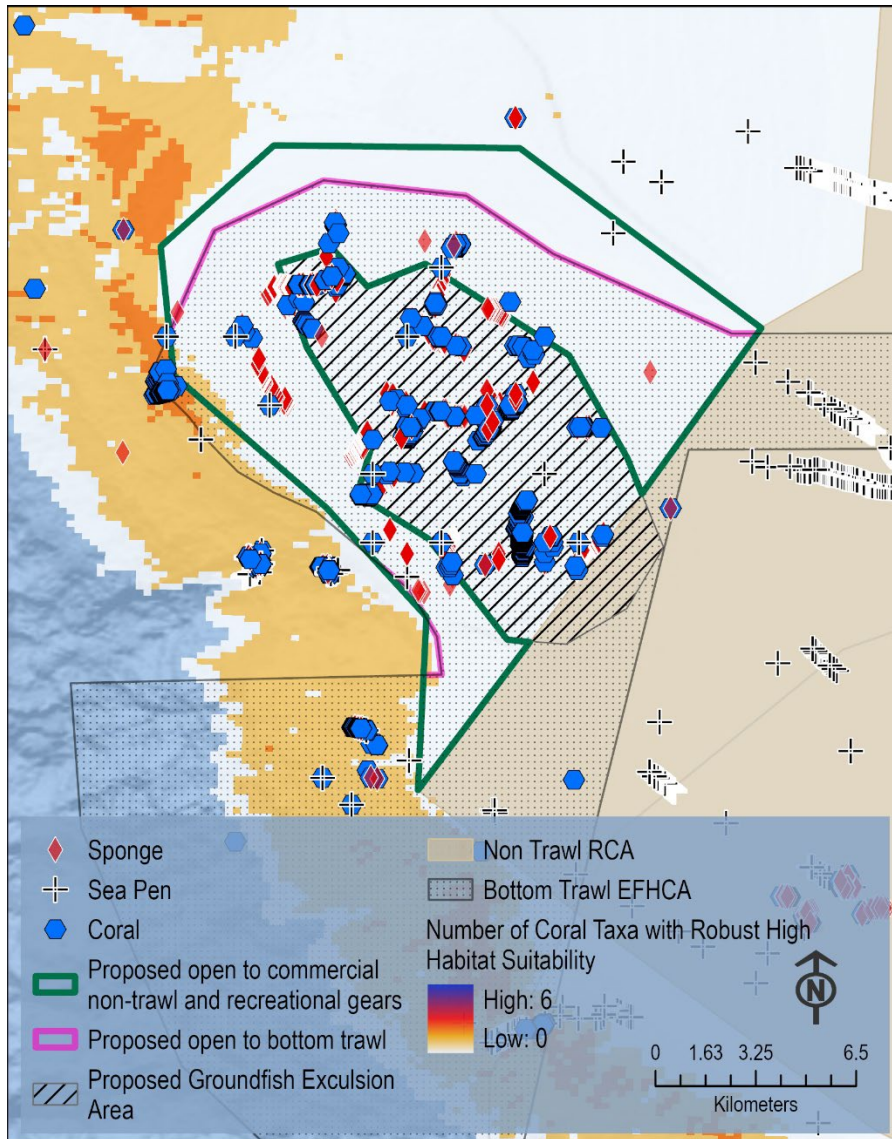


Figure 7. Cordell Bank action area observed corals, sea pens, and sponges (from both NOAA DSC Database and ONMS) and modeled number of coral taxa with robust high habitat suitability (based on NOAA Deep-Sea Coral and Sponge Database).

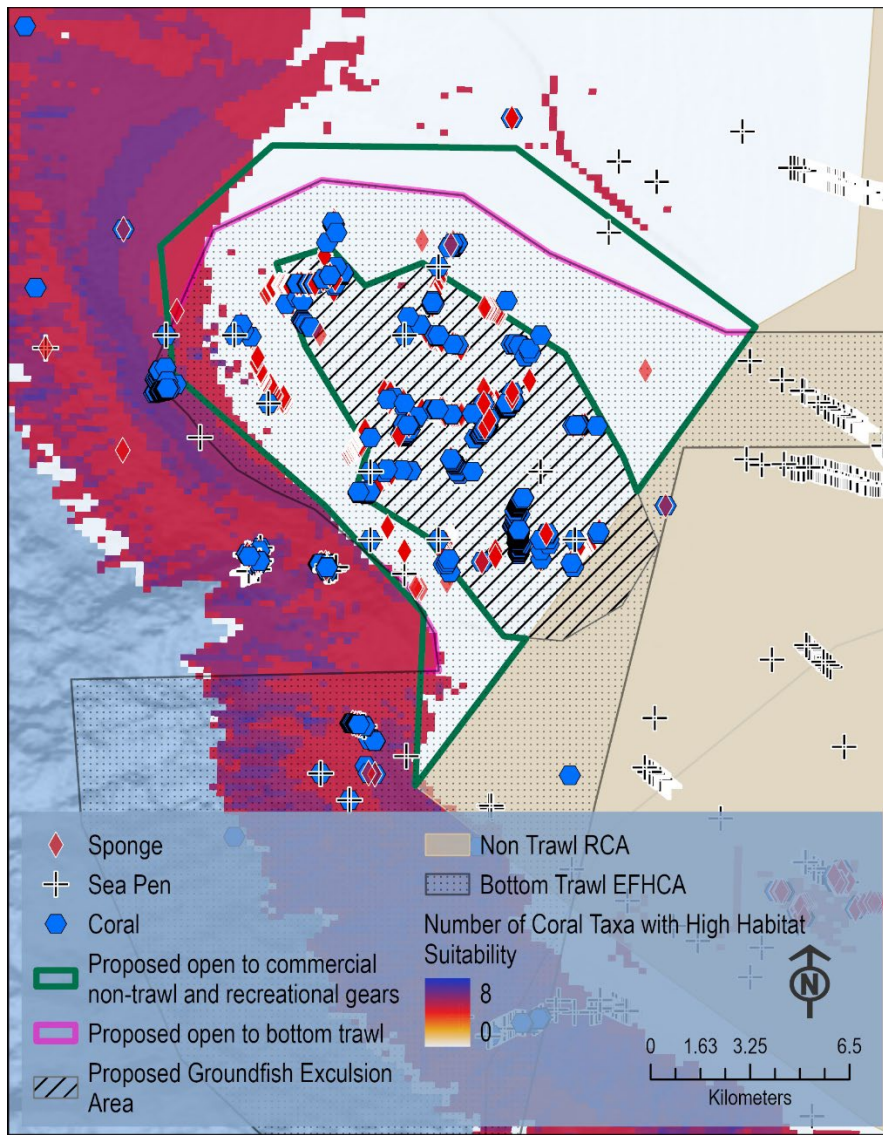


Figure 8. Cordell Bank action area observed corals, sea pens, and sponges (from both NOAA DSC Database and ONMS) and modeled number of coral taxa with high habitat suitability (based on NOAA Deep-Sea Coral and Sponge Database).

Office of National Marine Sanctuary (ONMS) staff provided additional habitat, coral, and sponge data to support analysis of this outside of that presented above. While the rocky reef substrate is the best representation of the rocky reef HAPC currently and contains a mix of hard and mixed substrates, ONMS staff determined that additional data was available that was not in the PMEP database. Figure 8 and Figure 9 show the habitat classification data provided by the ONMS relative to the proposed action areas. These interpreted habitat maps were developed based on three data sources- 1) a thesis project by Dr. Mary Young, California State University Monterey Bay (2007), 2) substrate classification work performed by Guy Cochrane of the U. S. Geological Survey using data collected from the NOAA Ship *Okeanos Explorer* in 2009, and 3) from the E/V *Nautilus* in 2017. Predicted substratum maps were interpreted from multibeam and backscatter data using methods described in Cochrane (2008). Note that while the ONMS has mapping data for the majority of the action area, there is currently no data in the northeast portion of the action area that accounts for 6.4 sq. mi. or approximately 65 percent of the area (i.e. the majority of the area to be opened to bottom trawl gear shown in purple outline). Therefore, the

absence of data should not be interpreted as a lack of rocky reef or sensitive habitats and the Council should consider this in their risk assessment of potential impacts.

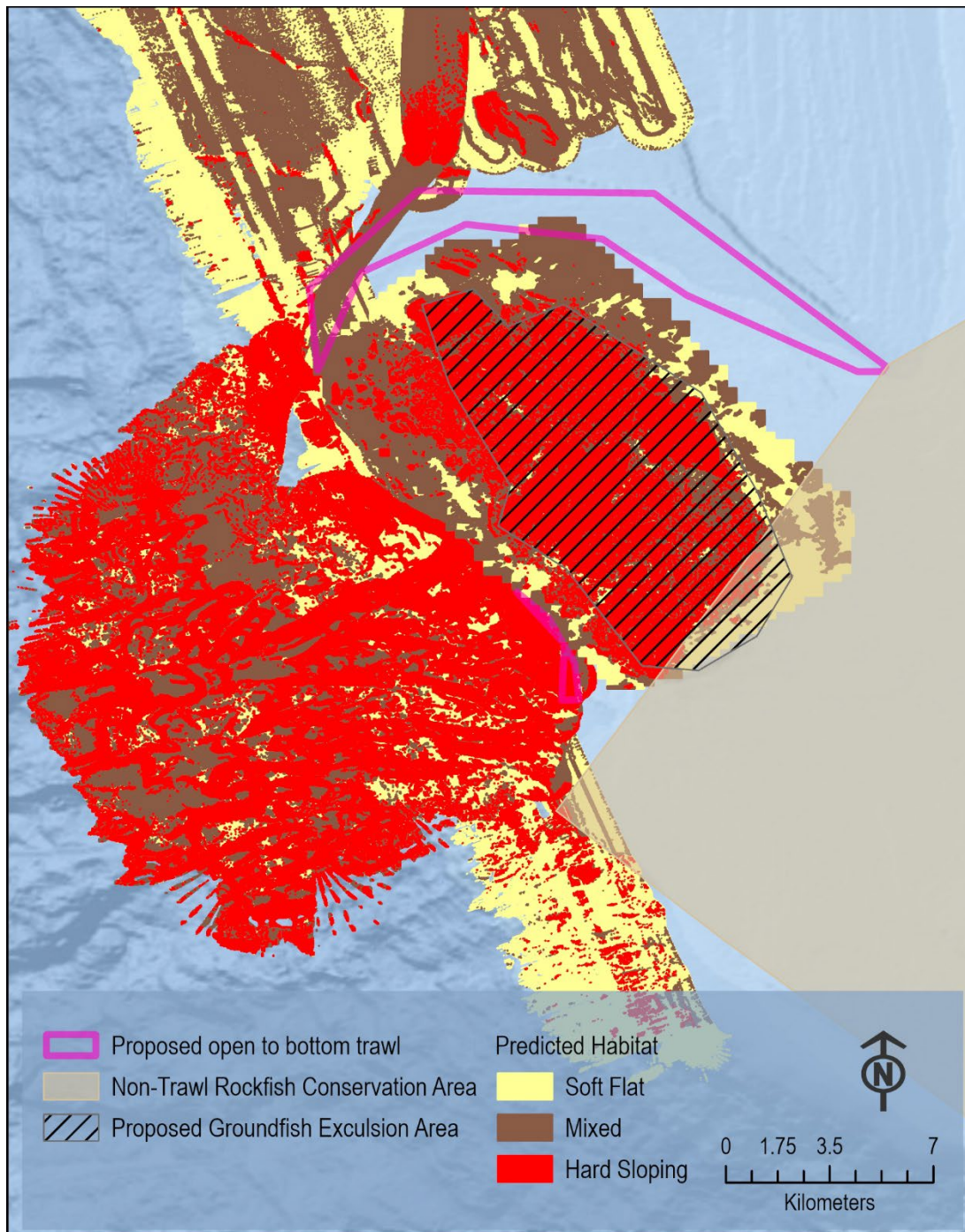


Figure 8. Predicted habitat classification from ONMS compared to the area proposed to be opened to bottom trawl gear under Alternative 1.

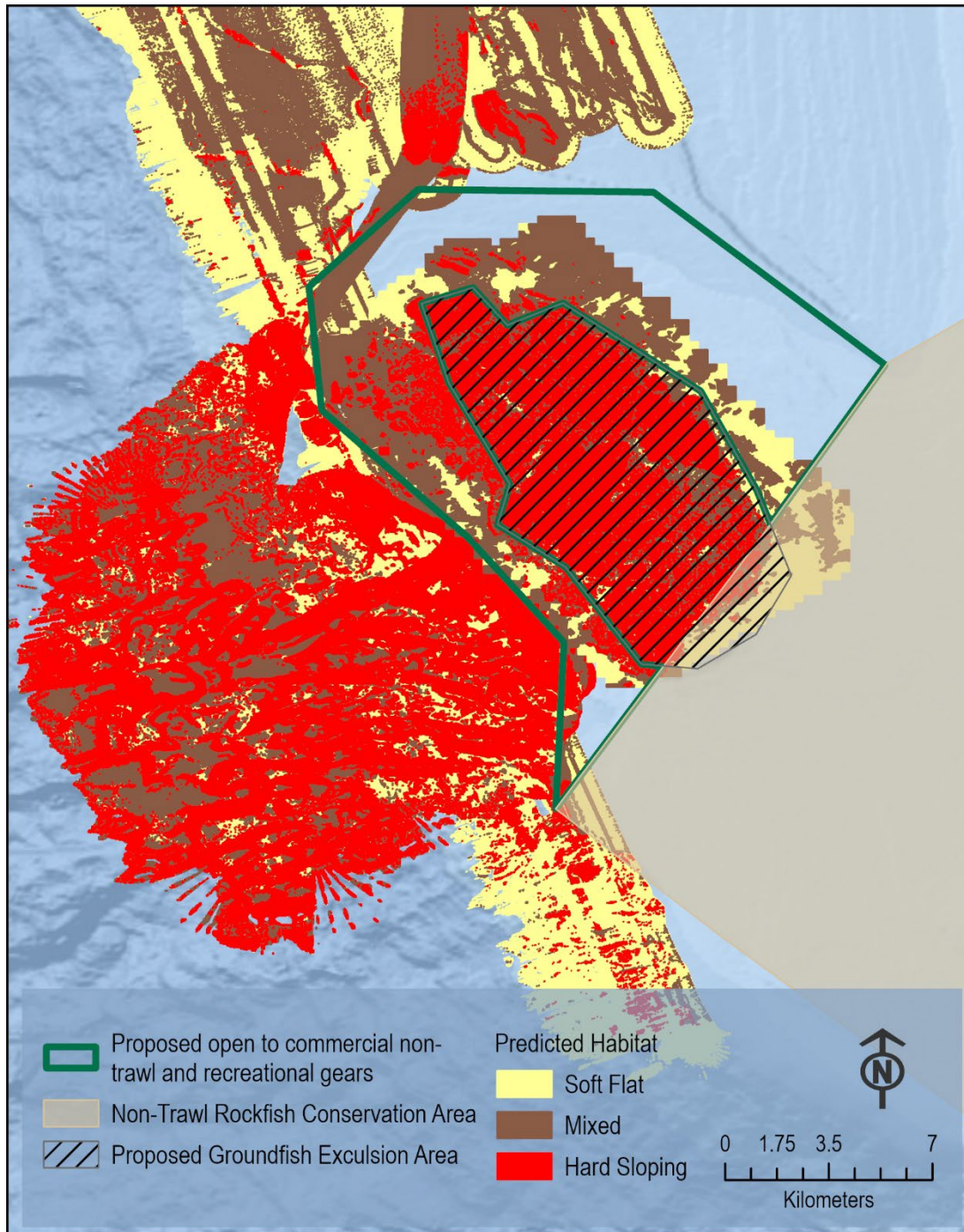


Figure 9. Predicted habitat classification from ONMS compared to the area proposed to be opened to non-trawl commercial bottom contact and recreational gear under Alternative 1.

Additionally, ONMS provided coral suitability models for two genera of coral: *Stylaster* spp. and *Swiftia* spp. These two species are the predominant species on Cordell Bank, with *Stylaster* having high densities and percent cover in the shallow regions of the bank, and what was called *Swiftia* (now identified as *Chromoplexaura marki*) at slightly deeper depths than *Stylaster*. A description of the methods and data used to develop these models can be found at <https://nmSCordellBank.blob.core.windows.net/cordellbank-prod/media/archive/science/cbcoralfn111.pdf>.

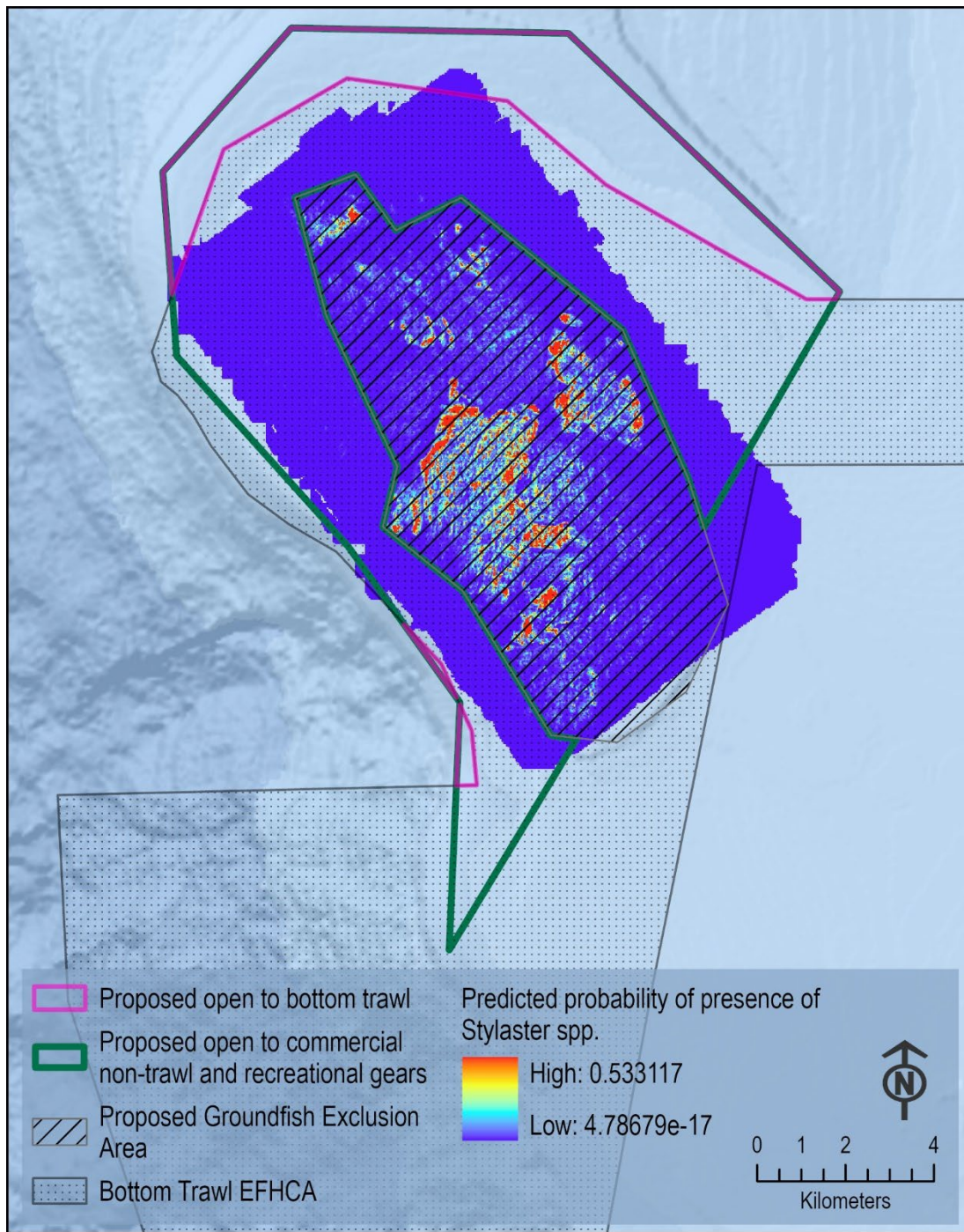


Figure 10. Predicted probability of the presence of *Stylaster* spp compared to Alternative 1 areas proposed to be opened.

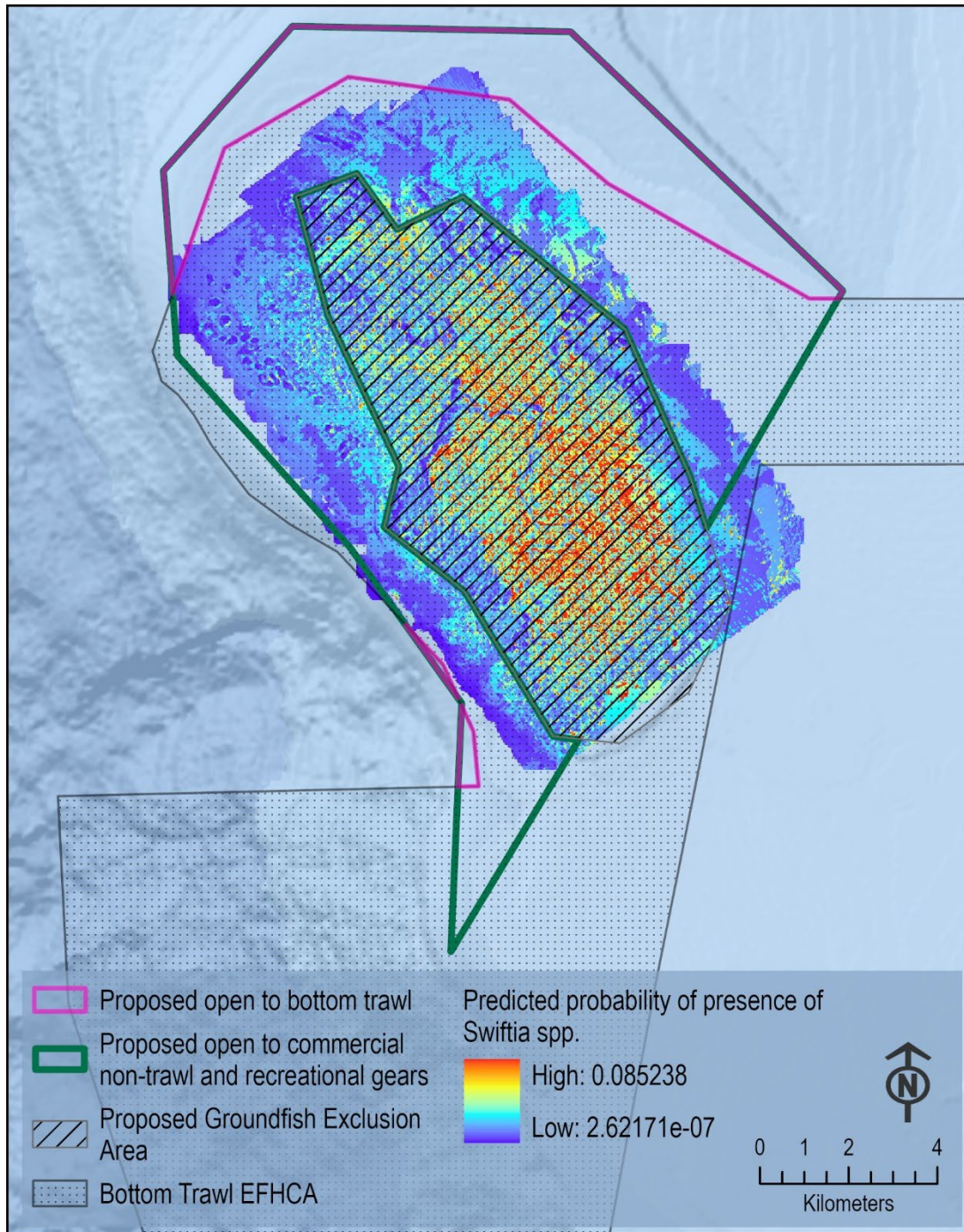


Figure 11. Predicted probability of presence of *Swiftia* spp compared to Alternative 1 areas proposed to be opened.

3.1.2 Effects of the Alternatives

Fishing operations may change the abundance or availability of certain habitat features used by managed fish species to spawn, breed, feed, and grow to maturity. These changes may reduce or alter the abundance, distribution, or productivity of species. The effects of fishing on habitat depend on the intensity of fishing, the distribution of fishing with different gears across habitats, and the sensitivity and recovery rates of specific habitat features.

The Council and NMFS routinely update habitat information, and their understanding of the impacts of fishing on habitat, in periodic 5-year reviews of the EFH components in the Pacific Coast Groundfish FMP. Maps and descriptions of EFH for groundfish species are available in the Pacific Coast Groundfish FMP (Appendix B and C). As described in the FMP Appendix C, habitat sensitivity and recovery time vary between habitat type and gear type. Table 2 provides an overview of the impacts from groundfish gears. Each gear type has a different impact and recovery time on bottom substrate types.

Across all bottom types, average impacts in terms of both habitat sensitivity and recovery time vary by gear type, with bottom trawl having higher impacts ranging from minor to major compared to midwater trawl or non-trawl gears which fall between the “no detectable” to minor impacts category (see Table 3A and Table 3B of Appendix C). It is important to consider that since these impact analyses were adapted from a 2004 study, new information has shown that there is a reduction in mortality to various sponges, urchins and other vegetation through gear modifications. This includes fishing doors off the bottom, using lighter ground gear, and floating bridles. Therefore, the analysis document in Appendix C is likely overstating the impact of bottom trawl fishing.

Within the non-trawl gear types (and those with research available), habitat is more sensitive and incurs a longer recovery time from interaction with longline and pot gear than other types of fixed gear types (e.g., hook-and-line). Of the three general bottom type categories (hard, mixed, soft), hard bottom is the most sensitive to bottom trawl and pot/longline gears compared to the other two bottom types. Hook-and-line style gears and midwater trawl are thought to have similar impacts across habitat types. Though counter to sensitivity, recovery time is lowest for hard substrates and highest for soft bottom for non-trawl gears.

Table 2. Summary of groundfish gears and their effects on habitat, from Appendix C-1 of the Pacific Coast Groundfish FMP

Gear type	Method of Fishing	Gear Components that impact substrate	Substrates generally fished	Potential effects to habitat
Bottom trawl	Deployed on bottom	Groundweights, net, footrope, bridles	Soft and hard bottom (not rocky reef)	Removal, upending, or burial of vegetation, corals, and sponges, disturbance of sediments
Midwater trawl	Trawling in water column	Groundweights, net, footrope, bridles	Primarily fished in water column, potential for interaction with seafloor (mostly soft sediments)	Possible removal of benthic organisms if interact with rocky habitat.
Bottom longline	Deployed on bottom	Anchors, weights, mainline	Soft and hard bottom	Overturn, undercut, crush, break habitat and organisms, displace/disturb biogenic habitat
Pots/traps	Deployed on bottom	Pot, line	Soft and hard bottom	Smother organisms, crush, biogenic habitat
Dinglebar gear	Bounces on bottom	Dinglebar, hooks, line	Hard bottom, rocky reef	Overturn, undercut, crush, break habitat and organisms, displace/disturb biogenic habitat
Troll gear	Trolling in upper water column	Weights	Primarily fished in water column	Crush/break biogenic habitat (from weights), entanglement
Vertical Longline (single or multi hook gangion and weight)	Drift fishing “jigging” or trolled	Weights, hooks, line	All bottom types and water column	Damage to and displacement of biogenic habitat damage; entanglement

No Action

Under No Action, there would be no habitat impacts outside of those described in the [2025-2026 Harvest Specifications EA](#). The GCA would remain in place, permitting limited groundfish gear in the area (exceptions noted in Table 1 for flatfish). The bottom trawl and bottom contact EFHCAs would remain in place restricting the use of bottom trawl (except demersal seine) and all bottom contact gear in the action area. Vessels using non-bottom contact gear would be permitted to fish inside the Non-Trawl RCA within the bottom contact EFHCA (red polygon to the right of the non-trawl RCA line in Figure 2). These impacts are not considered significant, as determined in the 2025-2026 Harvest Specifications EA.

Alternative 1

Under Alternative 1, the Cordell Bank GCA would be removed and a GEA put in place over the Cordell Bank bottom contact EFHCA. Due to the overlapping nature of the area restrictions in this location, different areas (with different habitats) would be opened to trawling and non-trawl commercial and recreational gears. Figure 4 shows the portion of the GCA (yellow shading in Figure 6 and purple outlined polygons in remaining figures) that would be newly opened to trawling- which equates to 10.2 sq. mi. As described in Section 1.2, during Amendment 28 to the Groundfish FMP, a portion of the GCA was proactively closed by extending the bottom trawl EFHCA (Cordell Bank EFHCA Modifications 1 and 2) for a total of 8 sq. mi.² The rationale behind the two modifications was to extend the existing EFHCA at the time to cover hard and mixed substrate and coral habitat. In particular, the western expansion (Modification 2) was developed through conversations with the CBNMS and was extended to the north to cover a section of ground explored by the CBNMS using ROV surveys (see Collaborative proposal). Of the area proposed to be opened, ~3.25 percent (0.5 sq. mi) of the area is rocky reef habitat (based on the PMP database) with limited coral and sponge observations present in the area (see Figure 7 and Figure 8). There is limited robust high or highly suitable habitat for any coral taxa present in the area proposed to be open based on the NOAA Deep-sea predictive models (Figure 7 and Figure 8). However, based on the data provided by ONMS, there is additional known hard sloping substrate (0.25 sq. mi) and mixed substrate (2.3 sq. mi) in the area proposed to be opened- noting that rocky reef habitat may not include all mixed substrate depending on the definition. The coral suitability maps for *Swiftia* and *Stylaster* spp. do not extend into most of the area proposed to be open, however, there is a lower probability of habitat suitability as the distance increases from the bank.

Observer data from the West Coast Groundfish Observer Program (WCGOP) may offer insight into the potential effort shift (and therefore potential level of impact to habitat) that could occur into the GCA area under Alternative 1. For commercial groundfish fisheries, there has historically been fishing activity in the vicinity of the action area in both the non-catch shares and catch shares fisheries. Figure 13 through Figure 16 below show the intensity of fishing (color scale) and footprint (gray scale) from 2011-2018, 2019-2020, and 2021, respectively, in the catch share bottom trawl (Figure 13), catch shares pot (Figure 14), non-catch shares pot (Figure 15) and hook-and-line (Figure 16) fisheries observed by the WCGOP. There were no observations from the catch shares hook-and-line fishery (2011-2021) in the general vicinity of the action area and therefore these are excluded from the figures.³ 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

² An additional 20 sq. mi. were opened up on the bottom trawl EFHCA- but outside the scope of the area affected by this action. See <http://www.soundgis.com/efh/efh2018eis-metrics/> for details.

³ There has been no mortality in the catch shares hook-and-line fishery since 2019, and prior to that, the average proportion of mortality from hook-and-line gears for vessels using non-trawl gears in the catch shares sector was 20 percent. Source: GEMM.

even if fewer than three vessels were active in a given time period. Note that while there is intensity and footprint data occurring within the bounds of the Cordell Bank GCA for bottom trawl and non-catch shares hook-and-line gear, this is likely due to the spatial scale at which the data was mapped. No fishing is permitted inside of the GCA unless under one of the few exceptions for hook-and-line fishing for flatfish (see Table 1). As an example of how to read this on the map, in the catch shares bottom trawl fishery for 2019-20 (Figure 9, middle panel), the darker shading of grey to the left of the Cordell Bank GCA means that there was a higher percentage of effort coastwide in that block compared to the blocks to the south of the GCA (white shading), 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.

For the bottom trawl sector, fishing activity was observed in the vicinity of the action area prior to 2018; however there has been limited to no observations since that time. As described above, bottom trawl is thought to mainly fish over soft and hard bottoms but avoid high relief (i.e., rocky reef habitat) in order to protect their gear (see [Amendment 28 FEIS](#)). Therefore, even if there were high relief habitats in the area to be opened, given the limited effort of bottom trawl fisheries in the area in recent years and the tendency to avoid those habitat types, the overall habitat impacts are expected to be minimal and not significant.

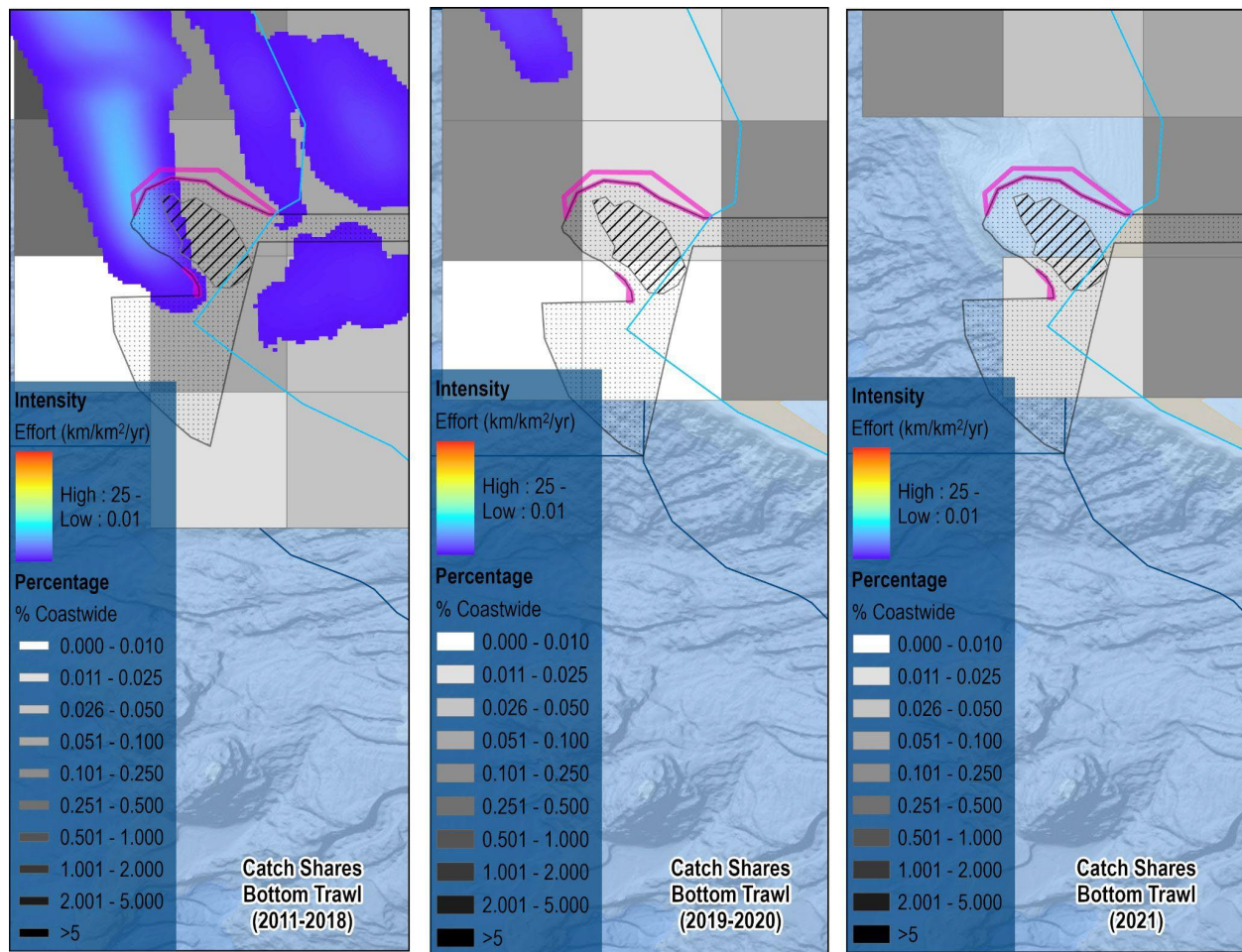


Figure 9. Intensity of fishing effort (km/km²/yr) and footprint (percentage of coastwide effort) for the bottom trawl fishery in 2011-2018, 2019-2020, and 2021. Purple polygon notes area to be opened to bottom trawl gear, dashed polygon is the proposed GEA (and bottom contact EFHCA), blue line represents the 75-fm boundary of the Non-Trawl RCA (shown in tan).

Alternative 1 would result in 40.1 sq. mi. being open to all commercial non-trawl and recreational gears (green outline in Figure 6 and all remaining figures). While limited groundfish activities can already occur in the area for selected gear types and species (see Table 1) as well as any non-trawl non-groundfish activities, these fishing activities could result in impacts to habitat such as crushing, snagging benthic habitat and organisms through the use of non-trawl gear types, particularly for bottom contact gears (e.g., pot, longline- see Table 2). However, 29.9 sq. mi. of the area proposed to be opened (approximately 75 percent) to non-trawl bottom contact gears would remain closed to trawling through the bottom trawl EFHCA, thus limiting the potential habitat impacts to the area that has been closed to the majority of fishing effort for over twenty years. In addition to limiting the amount of area open to all bottom contact gears, non-trawl are thought to have a lower degree of impact and therefore lower recovery time compared to bottom trawl gears (Appendix C to the Groundfish FMP) noting gear innovations described above may lessen the difference in potential impacts of bottom trawl and fixed gears..

Of the area to be opened to non-trawl bottom contact gears, 22.3 percent (3.5 sq. mi) of the area is rocky reef habitat based on the PMEC database. Incorporating the data provided by the ONMS, there is 2.8 sq. mi. of hard substrate and 14.9 sq. mi. of mixed substrate. As noted earlier, rocky reef habitat as defined by the PMEP database does not include all types of mixed substrate. Fishermen tend to avoid hard substrates

with high relief ([Amendment 32 EA](#)) to avoid gear entanglements and gear loss when fishing with longline and pot gear. Based on this, we assume vessels would continue to fish in areas that contain soft substrate or low relief under Alternative 1.

It is not clear how much total fishing activity would actually occur in the reopened areas, given that the area has 1) been closed for nearly two decades, 2) the fishing effort data for the surrounding areas is limited due to confidentiality mandates, and 3) the fact that there is less than 100 percent observer coverage in the non-catch shares fisheries. Based on the information available, it is likely that the non-catch shares sector fisheries, particularly those for hook-and-line, would take advantage of the proposed openings under Alternative 1. Vessels in that sector have been most recently fishing (as in 2021) on the border of the proposed opening of the GCA (blue intensity figure to the north of the GCA, right panel of Figure 16). In relation to the overall footprint of groundfish fishing on the California coast, it is likely that this opening would not create a significant opportunity to attract a large effort shift.

While we cannot anticipate what type of gear would be used or the location and intensity of the fishing effort, given the size of the proposed opening and recent effort levels in the area (see discussion in Section 4.3 on potential fishing sectors and communities most likely to fish in the area), any potential change in effort in the area is likely to be minimal. Impacts on these habitats ultimately would depend on the type of gear used (e.g., pot, longline or non-bottom contact) and the type of habitat fished as described in Table 2. As with the proposed area to be opened to bottom trawl, there is a portion of this area (15.3 sq. mi or 38 percent of the area proposed to be opened) that has not been surveyed.

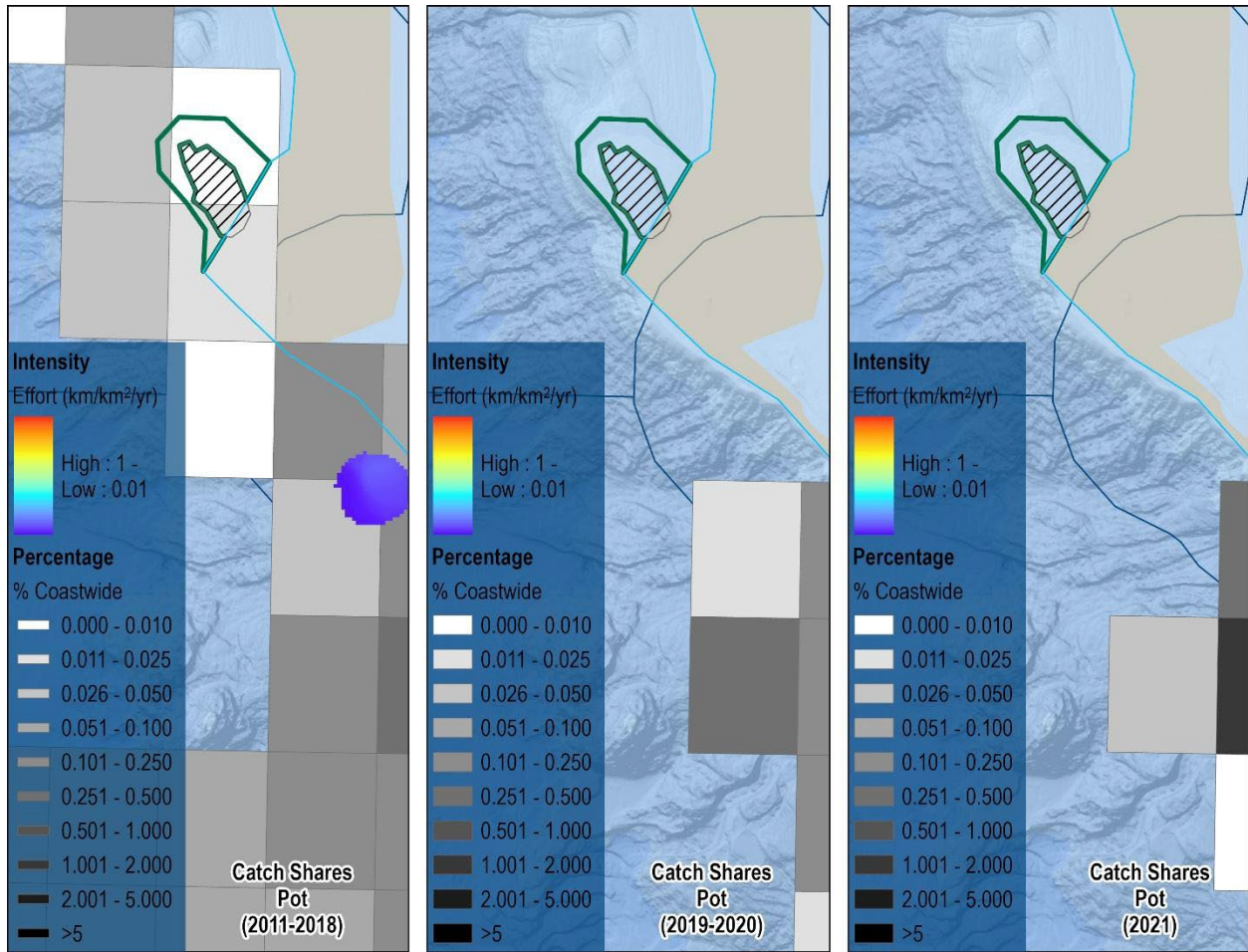


Figure 10. Intensity of fishing effort (km/km²/yr) and footprint (percentage of coastwide effort) for the catch shares pot fishery in 2011-2018, 2019-2020, and 2021. Green polygon notes area to be opened to non-trawl bottom contact gear, dashed polygon is the proposed GEA (and bottom contact EFHCA), blue line represents the 75-fm boundary of the Non-Trawl RCA (shown in tan).

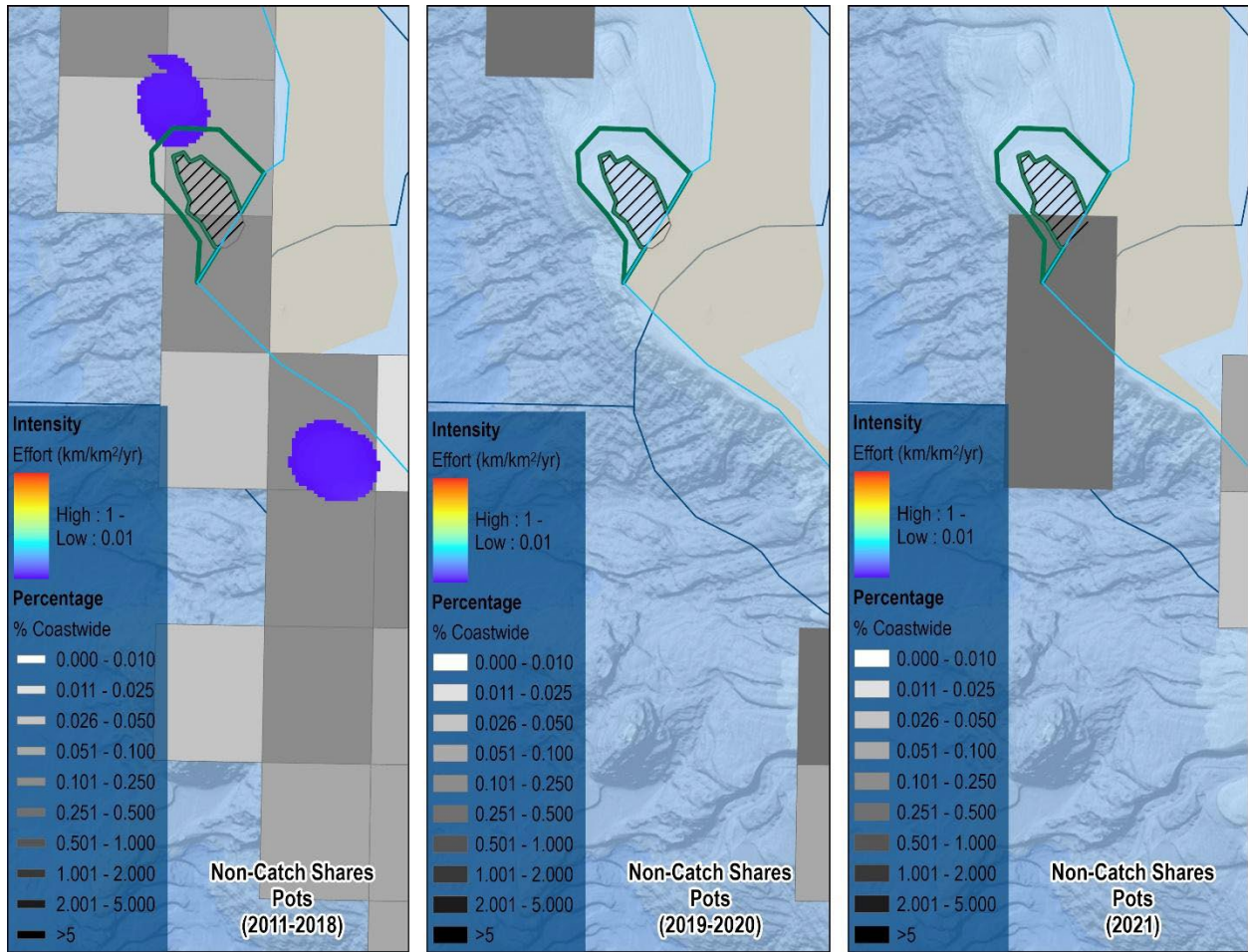


Figure 11. Intensity of fishing effort (km/km²/yr) and footprint (percentage of coastwide effort) for the non-catch shares pot fishery in 2011-2018, 2019-2020, and 2021. Green polygon notes area to be opened to non-trawl bottom contact gear, dashed polygon is the proposed GEA (and bottom contact EFHCA), blue line represents the 75-fm boundary of the Non-Trawl RCA (shown in tan).

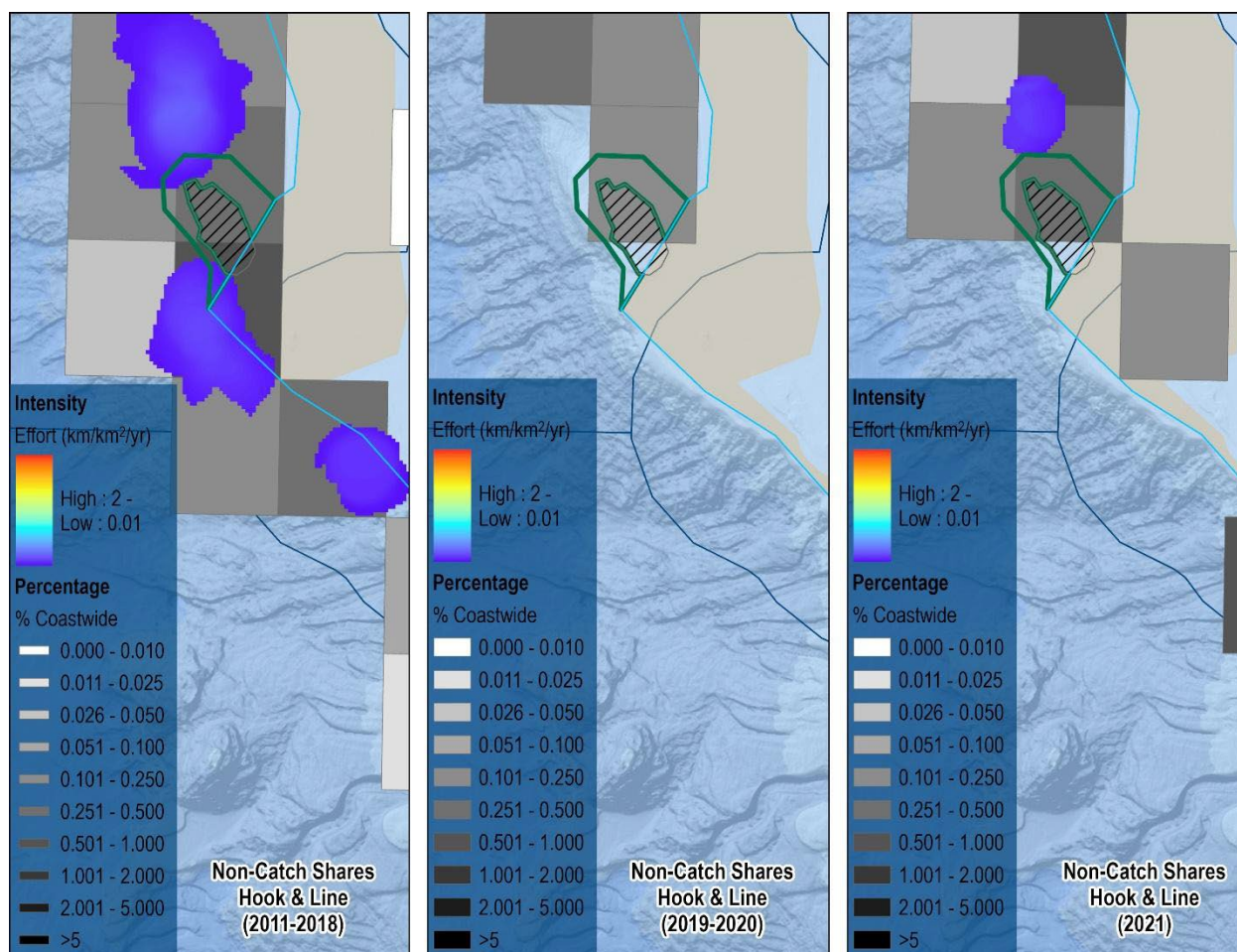


Figure 12. Intensity of fishing effort (km/km²/yr) and footprint (percentage of coastwide effort) for the non-catch shares hook and line fishery in 2011-2018, 2019-2020, and 2021. Green polygon notes area to be opened to non-trawl bottom contact gear, dashed polygon is the proposed GEA (and bottom contact EFHCA), blue line represents the 75-fm boundary of the Non-Trawl RCA (shown in tan).

There are limited occurrences of coral, sponges, or sea pens in the area proposed to be opened to non-trawl bottom contact gears (commercial and recreational) under Alternative 1 (Figure 7). As discussed above, the majority of the corals, sponges, and sea pens observed in the area are protected from bottom contact fisheries through the bottom contact EFHCA. However, there are some notable occurrences to the west/southwest of the GCA that would not be within the proposed GEA. There is no robust high or highly suitable habitat predicted by the NOAA Deep-Sea Coral database for any coral taxa present in the area proposed to be open (Figure 7 and Figure 8). However, using the two predictive models for habitat suitability models provided by ONMS (Figure 10 and Figure 11) there is a low to moderate probability of *Swiftia* spp. occurring within the area proposed to be open to non-trawl commercial and recreational gears. If corals are present within the area as proposed by the model, there could be risk of impact to the corals by non-trawl bottom contact gear.

Alternative 1 would increase habitat protection for the Cordell Bank HAPC of special interest (which aligns with the bottom contact EFHCA) by preventing all groundfish activity from occurring in the GEA—which is more restrictive than the current overlapping restrictions in that area. There would be no exceptions for specific gear types and vessels using non-bottom contact gears in that area. Specifically, this would close off 2.5 sq. mi. outside of the Cordell Bank GCA within the Non-Trawl RCA to any

groundfish fishing (recreational or commercial; pink shaded polygon overlapping the tan shaded Non-Trawl RCA in Figure 6 and habitat shown under the tan-shaded Non-Trawl RCA in Figure 8). There are known rocky reef habitats in this area, thereby providing positive habitat benefits- shown by both the rocky reef HAPC layer and the ONMS predictive habitat data. Additionally, as shown by Figure 10 and Figure 11, the highest probabilities of coral occurrence for both *Swiftia* and *Sylaster* spp are within the proposed GEA.

The overall impact of Alternative 1 is likely not to be significant.

Cumulative Effects on Habitat

The cumulative impacts of No Action to habitat are described in the 2025-2026 Harvest Specifications and Management Measures EA.

Overall, there may be some impacts to habitat such as crushing, breaking, or smothering benthic habitat and organisms (see Table 2 for gear dependent impacts by habitat type) under Alternative 1 with the removal of the Cordell Bank GCA and creation of the Cordell Bank GEA. However, it is important to consider that some fishing already occurs within the GCA for select flatfish by recreational and commercial fisheries and other state fisheries. [Table 11 of Agenda Item F.6, Attachment 1, April 2022](#) describe the state-managed fisheries off California that occur by latitudinal bin and depth. In the area and depth of Cordell Bank (37° 11' to 38° 57.5' N. lat. bin and depths of approximately 75 fm or greater), commercial pink shrimp, hagfish, and Dungeness crab may already be operating. While these fisheries would be subject to the EFHCAs in the area (pink shrimp to the bottom trawl EFHCA and the latter fisheries to the bottom contact EFHCA), the areas that are outside of the EFHCAs and within the GCA would be open to these fisheries. However, CDFW has indicated that there is limited evidence that activity by state fisheries have been occurring in the Cordell Bank GCA recently (pers. comm, Andre Klein, CDFW).

Overall, while there may be a negative cumulative impact on habitat through increased bottom contact gear interactions with benthic habitat with Alternative 1, it is likely to not be significant given the remaining habitat protections through the EFHCAs. Furthermore, while the areas proposed to be exposed do contain rocky reef or hard/mixed habitat (to the east of the bottom contact EFHCA and proposed GEA as shown in both Figure 6 and Figure 8), they will continue to be protected from bottom trawl gear. Non-trawl gears that have a higher impact to habitat (pot and longline gears) are less likely to operate in this area compared to other non-trawl gears based on industry comments that they avoid areas with high relief to minimize gear loss. While there could be expansion of the amount of pot gear or other non-trawl gear types utilized by the LEFG fleet depending on the alternatives considered in the LEFG follow on action (anticipated development in 2025), given the size of the area proposed to be opened under Alternative 1, the impacts are likely within those considered here. The HAPC at Cordell Bank will also be even more protected from fishing impacts (resulting in a positive impact on habitat) through the proposed GEA- which would limit all groundfish fishing from being in the current bottom contact EFHCA.

Considering the potential impacts of Alternative 1 evaluated in this analysis together with the effects of past and present actions previously analyzed in other documents that are incorporated by reference and the impacts of reasonably foreseeable future actions, the overall potential impacts of the proposed action are not likely to be significant.

3.2 Other Resources

No Action

Impacts to target species, non-target species, protected/prohibited species, marine mammals, turtles, seabirds, ecosystem (including climate change impacts), or equity and environmental justice (EEJ) considerations under No Action would be those described under the 2025-2026 Harvest Specification EA. The Cordell Bank GEA would remain in place and vessels would continue to be subject to the current management area restrictions.

Alternative 1

No adverse effects are expected on target species, non-target species, protected/prohibited species, marine mammals, turtles, seabirds, ecosystem (including climate change impacts), or EEJ considerations under Alternative 1. With regards to target species and non-target groundfish species, as described in previous NEPA documents ([2025-2026 Harvest Specification EA](#)), groundfish harvest specifications assume full removal of annual catch limits (ACLs) in assessing the impacts to target stock and the alternatives would not affect how groundfish are managed to stay within allocations or ACLs. While the initial purpose of the Cordell Bank GCA was to protect seven overfished groundfish stocks, all but one are rebuilt (with yelloweye anticipated to be rebuilt ahead of schedule by 2028).⁴ Canary rockfish was one of the primary stocks of concern when closing the area off for groundfish fisheries and while the stock status is in the precautionary zone, given the size of the area (0.01352 percent of the EEZ), expected activity, and anticipated management measures, it is anticipated that impacts will be minimal and within that described in the 2025-2026 Harvest Specification EA. Similar impacts are expected for yelloweye rockfish which would continue to be prohibited for retention. Therefore, while catch and discards of some select species could increase within the area if effort were to spread into the newly reopened areas, all catch would still be accounted for within the management regime in place. Since the implementation of the GCA, California quillback rockfish have been [declared overfished](#). However, given that the depth of the action area is deeper than where the stock is typically encountered in the groundfish fishery (i.e., 20-50 fm), it is anticipated that California quillback rockfish mortality would be minimal. Further, any mortality of California quillback rockfish would be accounted for in the setting of routine management measures (e.g., annual or inseason trip limits, retention and discard requirements, etc.).

With regards to protected/prohibited species, marine mammals, turtles, and seabirds, the proposed action would not increase the amount of effort and potential risk of bycatch or entanglement by any of the groundfish fisheries subject to this action. The entire area proposed to be opened under Alternative 1 overlaps with critical habitat for ESA-listed leatherback sea turtles (zone 3 as defined in the [CA Entanglement Risk Assessment and Mitigation Program and Draft Conservation Plan](#)) and the Central American and Mexico distinct population segments (DPS) of humpback whales. However, the area to be opened and expected fishery effort shift is so small that significant adverse impacts to these species are not anticipated.

With regards to ecosystem impacts, there are no anticipated impacts from the proposed removal of the GCA, as there is expected to be negligible impacts on forage species and the overall effort of the groundfish fishery will continue to be constrained by the allocations and management measures set forth in the harvest specifications. There is not an expected change in greenhouse gas emissions from the opening of the fishing area and therefore, no impacts are expected related to climate change. Ecosystem

⁴<https://www.pcouncil.org/documents/2024/02/catch-only-rebuilding-projection-status-of-yelloweye-rockfish-sebastes-ruberrimus-along-the-u-s-west-coast-in-2023.pdf/>

impacts do consider impacts to EFH; however, those will be discussed alongside habitat impacts in Section 3.2 below. Therefore, all other ecosystem impacts are expected to be similar to those as described in the 2025-2026 Harvest Specifications EA.

With regards to EEJ impacts, the port communities nearest to the action area, Bodega Bay and San Francisco port areas are considered to be highly engaged in commercial and recreational fisheries respectively, but have low social vulnerability to changes in fishing opportunities ([CCIEA Report, 2024](#)).

4 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.
- This RIR also provides economic impact analysis for the EA.

4.1 Statement of the Problem

A statement of the problem is available above in Section 1.1 titled “Purpose and Need”.

4.2 Description of the management goals and objectives

A description of management goals and objectives can be found in Section 1.1 titled “Purpose and Need”.

4.3 Description of Fisheries and Other Affected Entities

A detailed description of the fishery and affected entities is available in the Stock Assessment and Fishery Evaluation document. This includes a summary of historic harvests, description of management, and economic characteristics of harvesting vessels, processors, and communities. This specific action will affect commercial and recreational groundfish sectors fishing off of California in the action area.

While the action area is discrete, and it is difficult to ascertain the specific number of participants that would be affected, the following analysis uses a recent assessment of fishing activity in the general area of Cordell Bank.

For both recreational and commercial fisheries, it is likely that the communities of Bodega Bay, San Francisco, and Half Moon Bay will be the most likely to be affected by this action given the proximity to the action area location. While vessels may choose to travel to the area to fish, it is uncertain from what ports and to what degree that may occur.

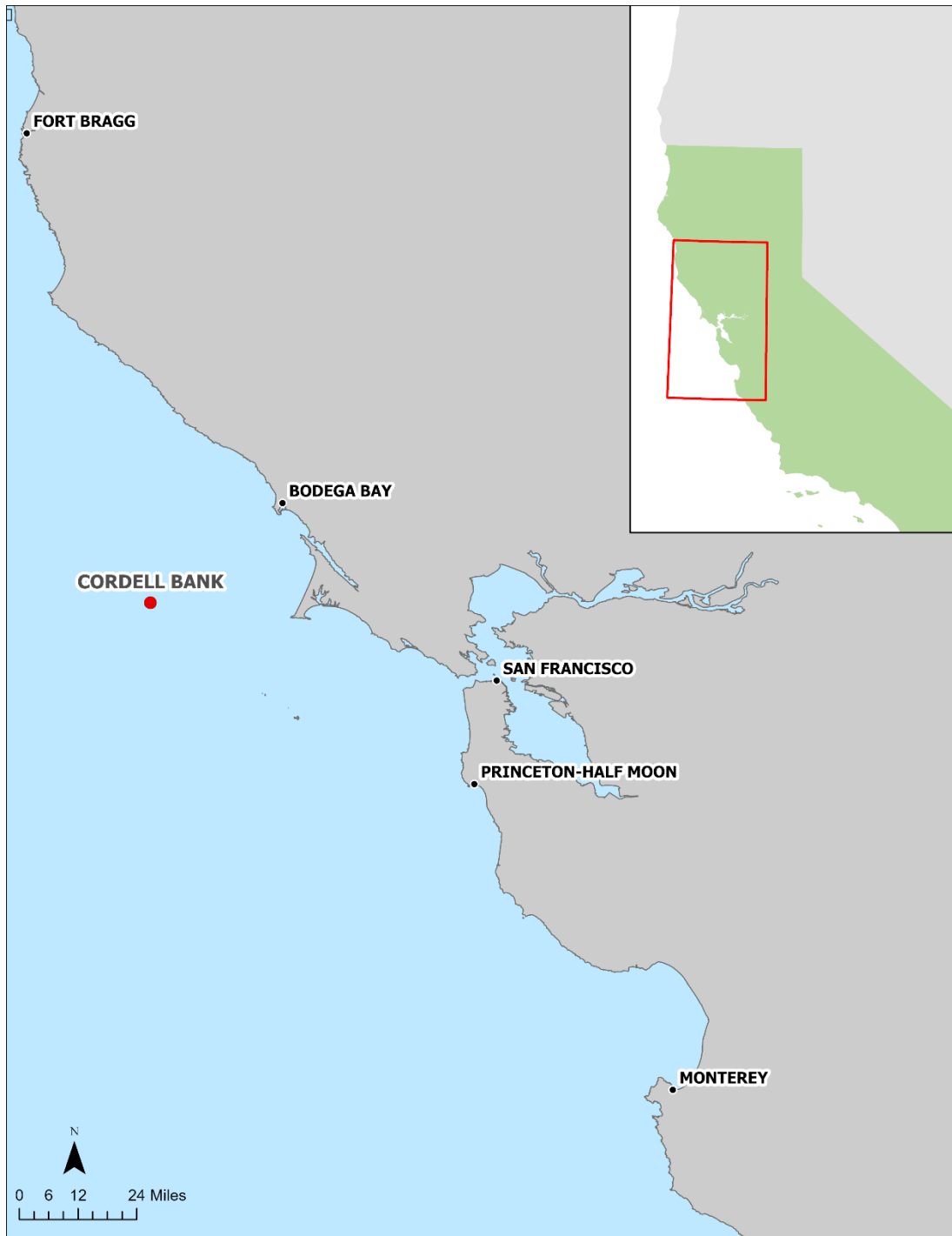


Figure 13. Cordell Bank location compared to fishing ports.

In terms of commercial groundfish fisheries in the action area, the catch area between 40° 30' and 36° N. lat. was used for analysis. While this latitudinal range is larger than the area to be open, it is the catch area available in the Pacific Fisheries Information Network (PacFIN). From 2019-2023, the sectors with the highest number of participants were the open access (OA) fixed gear and nearshore sectors, the latter of which would not be operating in the proposed action area given the deeper depths and is outside the scope of this action as a state-managed fishery (Table 3) . There was no midwater trawling recorded in the area. Midwater trawl vessels would be exempted from the EFHCAs present in the Cordell Bank action area, but subject to the GCA.

Table 3. Average number of vessels by sector and PacFIN port group. “c” denotes confidential strata.

Sector	Bodega Bay	Ft. Bragg	Eureka	Monterey Bay	Morro Bay	San Francisco
Bottom Trawl	0	5	1	2		3
LE Fixed Gear DTL	c	6		10	c	2
Limited Entry Sablefish a/	c	10	1	5		4
Nearshore	3	23	9	17	2	18
OA Fixed Gear	21	33	10	54	2	47

a/ Includes Individual Fishing Quota (IFQ) Gear Switching (GS)

For recreational groundfish fisheries, the San Francisco District, which includes Sonoma, Marin, San Francisco, and San Mateo counties on the coast, was used as the analysis area. Estimates of recreational effort data for California are available only at the District level. In this case, estimated effort for the recreational fishing modes private/rental boats and party/charter fishing vessels (CPFV) would be biased high as the effort estimates would also include data from outside of the primary port used to access Cordell Bank, which is Bodega Bay, Sonoma County, California. In brief, recreational access to Cordell Bank is possible from San Francisco ports; but would be unusual due to the distance. Bodega Bay is the most likely port anglers would use, and have historically, used to access the Cordell Bank area.

District level estimates could, therefore, give the impression that Cordell Bank has been heavily accessed, when in fact it has not. However, port level sample data can be used to understand the relative angler efforts outside of 3 nautical miles (nm) from Bodega Bay. These numbers may not reflect future effort as they are a result of the current regulations. As regulations are expected to change and require anglers to fish more offshore, effort could increase near Cordell Bank; however, angler behavior is highly uncertain. Table 4 shows anglers sampled, by mode, from 2019-2023. The drastic increase in anglers fishing in waters greater than 3nm in 2023 is likely a response to inseason regulation changes that required recreational anglers to fish in depths greater than 50 fathoms to avoid quillback rockfish. Table 5 indicates more private/rental boat effort than CPFV occurred in waters outside of 3 nm in the 2019-2023 period.

Table 4. Number of angler trips targeting groundfish outside of 3nm in the party/charter and private/rental boat modes at Bodega Bay recreational angler sampling sites from 2019-2023 by mode (RecFIN, 10/1/2024)

Year	Party/Charter Boats	Private/Rental Boats
2019	0	123
2020	0	37
2021	0	144
2022	0	115
2023	627	1991

Table 5. Estimated angler trips from SF District targeting groundfish outside of 3nm in the party/charter and private/rental boat mode from 2019-2023 by mode (RecFIN, 10/1/2024)

Year	2019	2020	2021	2022	2023
Private/Rental Boats	8872	6083	8037	8138	18493
Party/Charter	6987	5463	7673	6343	9103

4.4 Description of the Alternatives

A description of the Alternatives is available in Section 1.

4.5 An Economic Analysis of the Expected Effects of Each Alternative

4.5.1 Analysis of Expected Effects: No Action

Under No Action, the Cordell Bank GCA would remain in place. As described in Section 2.2, there would continue to be four different conservation areas within the action area with differing boundaries and restrictions for both commercial and recreational fisheries resulting in regulatory and enforcement complexity. This results in confusion for participants on where they can fish and with agencies responsible for enforcing the various provisions. Certain vessels would continue to be restricted from fishing in the Cordell Bank GCA that has been closed for over two decades resulting in loss of fishing opportunity. The impact of the closure on fishing operations is not quantifiable. In terms of communities, the Bodega Bay and San Francisco port areas are considered to be highly engaged in commercial and recreational fisheries respectively, but have low social vulnerability to changes in fishing opportunities ([CCIEA Report, 2024](#)). The Cordell Bank GCA was put into place to limit bycatch of overfished species such as canary and yelloweye which are all now rebuilt or nearly rebuilt. No Action would continue to provide indirect habitat protection provided by the Cordell Bank GCA.

There are no expected impacts to vessel safety with this alternative.

4.5.2 Analysis of Expected Effects: Alternative 1

Under Alternative 1, the Cordell Bank GCA would be removed from regulations and a new GEA would be implemented over the current bottom contact EFHCA.

The primary benefit of Alternative 1 is the reduction in regulatory complexity, which would benefit stakeholders, enforcement, and fishery managers. By removing the Cordell Bank GCA, this would result in participants having a clearer understanding of where they can fish. For enforcement and administration, although there would be initial outreach required, there would likely be a reduction in overall costs to NOAA as there would be less need to answer questions regarding the multiple area restrictions.

While the main benefit may be the reduction in regulatory complexity, the removal of the Cordell Bank GCA would ultimately result in 10.2 sq. miles opening to trawl fisheries and 40.1 sq. mi. to non-trawl bottom contact gear (commercial and recreational). This would result in additional areas for groundfish vessels to fish. Given all of the restrictions currently in place for fisheries, particularly in California, any additional opportunities for fishing are beneficial, given the restrictions implemented for California quillback rockfish and the fact that there are limited other fishing opportunities (such as salmon or crab). Overall, there could be increased effort in the general areas of the new proposed GEA closure with vessels forced offshore due to California quillback restrictions and limited opportunities in the Non-Trawl RCA for select species like lingcod or in the groundfish OA sector in general with vessels able to target high quotas of sablefish. However, given the size of the proposed opening and effort levels in the area, any potential change in effort in the area is likely to be minimal.

As described in Section 3.1, there is some activity occurring in the vicinity of the GCA and therefore potential for some activity if the GCA were removed- although this would not be a significant opportunity in terms of the footprint of California coast. However, it is worth noting that the purpose of the GCA is no longer warranted given the rebuilding of groundfish stocks and that any additional opportunities may be beneficial in the landscape of California fishing portfolios (both commercial and recreational).

While the actual impacts to the fishing industry are uncertain, looking at commercial and recreational fishing data in the area might provide insight into the sectors, ports, and communities that could take advantage of any new openings. For the commercial fisheries, Table 5 below shows the ex-vessel revenues by groundfish sector and port group from landings between 40° 30' and 36° N. lat. from 2019-2023. The Bodega Bay and San Francisco port groups are the closest to the Cordell Bank area and are therefore participants who land in those ports are the most likely to utilize any openings in the area (assuming vessels in the area are fishing closer to the ports in which they are landing). Future opportunities in other fisheries, like salmon, may also lead to some new entrants in the area who wish to access the grounds to expand portfolios using similar gear types.

Within the port groups near the Cordell Bank GCA (San Francisco- which includes Half Moon Bay- and Bodega Bay), the greatest number of participants on average are in the OA sector (Table 3). There are some trawling vessels delivering into San Francisco area ports that may choose to fish in the areas to be opened to bottom trawling. The degree of impacts of the alternative can't be precisely quantified, but qualitatively, it is likely overall positive given that it would be an overall net gain in areas open to fishing. There would be a small portion of the Non-Trawl RCA that is currently open to non-bottom contact vessels (2.5 sq. mi.), however, it is likely that this would be an overall negligible impact given the size of the area and that vessels using these gear types would also be permitted to fish in the formerly closed GCA (leading to a net positive in open fishing ground).

Table 6. Average revenues (\$2024, 1000s of dollars) by port group and groundfish sector from PacFIN catch area 1b (40° 30' to 36° N. lat.) from 2019-2023.

Sector	Bodega Bay	Fort Bagg	Eureka	Monterey Bay a/	San Francisco
Bottom Trawl	-	\$ 2,141.0	\$ 6.1	\$ 212.5	\$ 361.1
LE Fixed Gear DTL	\$54.1	\$160.1	-	\$ 717.0	\$ 18.4
Limited Entry Sablefish b/		\$ 500.9	\$ 12.3	\$ 269.6	\$ 160.4
Nearshore	\$11.2	\$ 491.4	\$ 80.0	\$ 300.5	\$ 177.7
OA Fixed Gear	\$158.3	\$ 316.7	\$ 90.4	\$ 476.1	\$ 443.5

a/ includes Morro Bay port group landings

b/ Includes IFQ GS

For recreational fisheries, there could also be potential benefits similar to the non-trawl commercial vessels with the GCA being removed. While it is difficult to determine if the opening of the area will result in additional trips or effort, there has been increasing effort in the Sonoma District (which covers the proposed action area)- particularly in the party/charter boat sector (Table 4). Although recreational fisheries have been prioritizing opportunities in state waters with California quillback rockfish restrictions, there is the potential for deep-water (all depth) season structures that could be beneficial to vessels in the area. Similar to commercial participants, it is likely that the action will affect those vessels coming out of Bodega Bay and San Francisco port areas.

There are no impacts to vessel safety with this alternative.

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

- No Action would continue to result in significant regulatory complexity for participants fishing in the action area and maintain a closure for groundfish species that are no longer overfished. However, No Action would continue to provide indirect habitat protection from groundfish gears within the Cordell Bank GCA.
- Alternative 1 would provide a net increase in fishing grounds for groundfish participants by removing the GCA that is no longer warranted given the status of the previously overfished stocks. While there could be habitat impacts due to the opening of the GCA, the implementation of the GEA over the current bottom contact EFHCA would result in protection of the majority of sensitive habitats in the area.

4.7 Determination of Significant Regulatory Action under EO 12866

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 of significance will be made after final action.

5 Regulatory Flexibility Analysis

To be completed after selection of a PPA.

6 Magnuson-Stevens Act and FMP Considerations.

6.1 Magnuson-Stevens Act National Standards

Below are the 10 National Standards (NS) 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 2025-2026 Harvest Specifications EA establish harvest levels consistent with National Standard 1 and the harvest management framework described in Chapter 4 of the Pacific Coast Groundfish FMP. This action does not revise the harvest management framework, or groundfish harvest limits. While the Cordell Bank GCA was initially implemented to protect overfished rockfish species, those stocks are now rebuilt (with the exception of yelloweye which is anticipated to be rebuilt by 2028). Therefore, the removal of the GCA should not contribute to the overfishing of stocks given the current management regime in place for the groundfish fisheries compared to the early 2000s when the GCA was implemented. Furthermore, the opening of any fishing grounds to healthy groundfish stocks, while limited in the total area, could assist in the achievement of optimum yield for the groundfish fishery. This is especially in light of other fishing restrictions for groundfish and other fisheries.

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

The best scientific information available standard applies to the following areas relative to this proposed action: benthic habitat mapping and methods for determining habitat suitability, biological fishery information, and socioeconomic fishery information. The seafloor habitat maps used to conduct the habitat impacts analysis, as described in Section 3.7, incorporate the best scientific information available, which includes substrate maps and deep-sea coral and sponge occurrences. Regarding fishing data, commercial fish ticket and recreational angler data was used to determine the vessels most likely to be impacted by the action in the port areas close to the action area. As discussed in Section 4.5, there is less robust information about areas proposed for reopening and closing because of the lack of recent fishing activity in those (currently closed) areas and the small amount of area to be opened relative to the nearby fishing grounds.

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.

There is no allocation of fishing privileges through the proposed action and therefore there are no impacts outside of No Action as described in the 2025-2026 Harvest Specifications EA.

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.

The area around Cordell Bank as currently managed is resulting in inefficient management of fisheries under No Action and thereby not meeting NS5. Alternative 1 would result in more efficient management of groundfish fisheries by creating fewer overlapping areas with various restrictions thereby clarifying regulatory requirements for the fishery.

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

Alternative 1 has no expected impacts outside of No Action related to NS 6.

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

As described in Section 2.2, the current overlapping management measures result in duplicative restrictions to the fishing industry and therefore No Action does not support NS7. The Cordell Bank GCA prevents all groundfish fishing (noting select gear exclusions) which is already restricted in the area through both the bottom trawl and bottom contact EFHCAs. Alternative 1 would meet NS7 by creating fewer duplicative regulations by removing the Cordell Bank GCA and maintaining the EFHCAs (protecting key habitats) and creating a new GEA with corresponding boundaries with the bottom contact EFHCA. This would minimize enforcement and administrative costs.

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.

Alternative 1 has no expected impacts outside of No Action related to NS 8.

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 2025-2026 Harvest Specifications EA.

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

There are no expected impacts to safety of human life at sea outside of No Action as described in the 2025-2026 Harvest Specifications EA.

6.2 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 EA/RIR prepared for this plan amendment constitutes the fishery impact statement. The likely effects of the proposed action are analyzed and described throughout the EA/RIR. The effects on participants in the fisheries and fishing communities are analyzed in the RIR chapter of the analysis (Chapters 4). The effects of the proposed action on safety of human life at sea are evaluated in Section 3.6, and above under National Standard 10, in Section 5.1. Based on the information reported in this section, there is no need to update the Fishery Impact Statement included in the FMP.

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.

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