

INITIAL REVIEW DRAFT

Preliminary Draft 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

March 2025

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Abstract: This preliminary draft 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 management measure would remove the Cordell Bank Groundfish Conservation Area for all groundfish fisheries and implement a new Groundfish Exclusion Area for all groundfish fisheries within the same footprint as 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
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
FMP	fishery management plan
FR	<i>Federal Register</i>
FRFA	Final Regulatory Flexibility Analysis
fm	fathom
ft	foot or feet
GMT	Groundfish Management Team
GCA	Groundfish Conservation Area
GEA	Groundfish Exclusion Area
EFH	Essential Fish Habitat
EFHCA	Essential Fish Habitat Conservation Area
IFQ	Individual fishing quota
IRFA	Initial Regulatory Flexibility Analysis
lb(s)	pound(s)
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
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
sq. mi.	square miles
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 smaller geographic footprint.

This document is a preliminary draft 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 implements the NEPA statute (42 U.S.C. §§ 4321 et seq.).

1.1 Purpose and Need

The following purpose and need was adopted by the Council in November 2024:

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 remove unnecessary regulations and to reduce 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 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 [sic]. Cordell Banks [sic] 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 recreational fisheries, NMFS did not implement a closure 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 2005-06 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 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 (FMP) ([84 FR 63966](#)). 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.¹ 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 Cordell Bank National Marine Sanctuary (CBNMS) and was extended to the north to cover a section of ground explored by the CBNMS using ROV surveys (see Collaborative proposal). 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 2023-24 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 2023-24 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

¹ 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.

sole in areas outside the bottom contact EFHCA but within the Cordell Bank GCA, the changes in the 2023-24 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 limited fishing inside of state waters; however, due to changes in the California recreational fishery in this area from California quillback rockfish rebuilding, these overlapping areas and corresponding regulations are 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 EFHCAs 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 the PFMC 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 areas. The Council recommended that the proposed action move forward for development.

In November 2024, the Council adopted the purpose and need (Section 1.1), a range of alternatives, and the preliminary preferred alternative (PPA). The Council is scheduled to select a final preferred alternative (FPA) at this meeting (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 CBNMS. This area is entirely in Federal waters.

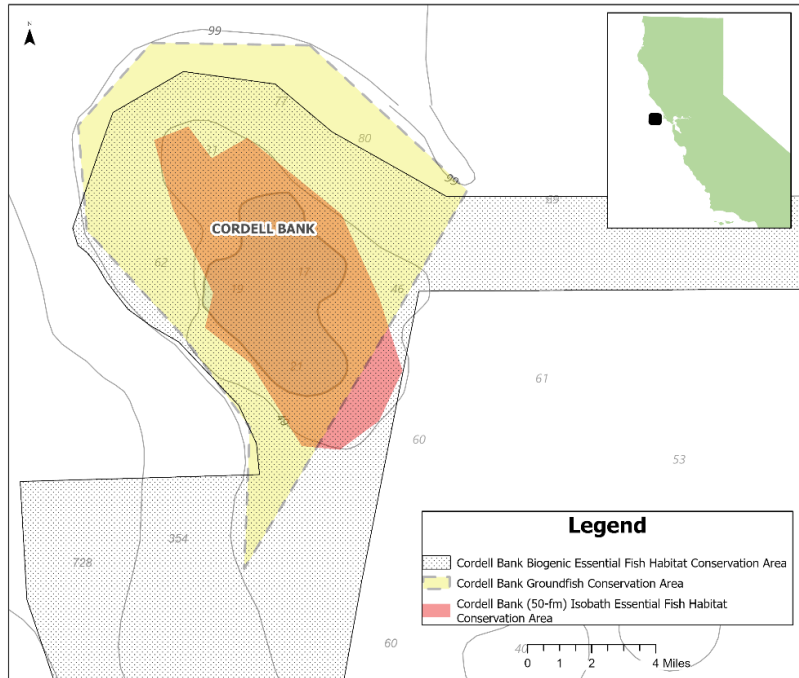


Figure 1. Map of the Cordell Bank Biogenic Essential Fish Habitat Conservation Area (trawl EFHCA), Cordell Bank Groundfish Conservation Area (Cordell Bank GCA) and Cordell Bank (50-fm) Isobath Essential Fish Habitat Conservation Area (bottom contact EFHCA).

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 complex (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)	Trawl and non-trawl commercial and recreational groundfish	Generally, all groundfish, except for non-trawl comm. harvest of Other Flatfish complex and recreational 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)

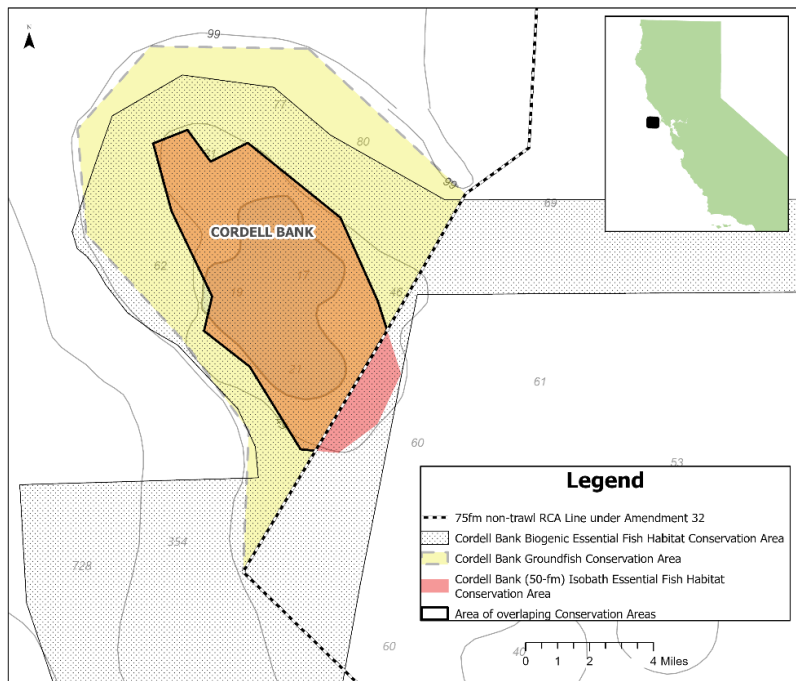


Figure 2. Map of the Cordell Bank Biogenic Essential Fish Habitat Conservation Area (trawl EFHCA), Cordell Bank Groundfish Conservation Area (Cordell GCA), Cordell Bank (50-fm) Isobath Essential Fish Habitat Conservation Area (bottom contact EFHCA) and the 75-fathom non-trawl Rockfish Conservation Area 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 (PPA)

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, the PPA, 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 areas 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. For bottom trawl gear, the use of large footrope gear would still be prohibited south of $46^{\circ} 16'$ N. lat. and shoreward of the 100 fm line (i.e., the action area). Under this action, there would be 10.2 square miles (sq. mi.) of area opened to bottom trawl (no large footrope, 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. GEAs are authorized in the FMP in Section 6.8.10, which notes that new GEAs may be established through rulemaking.

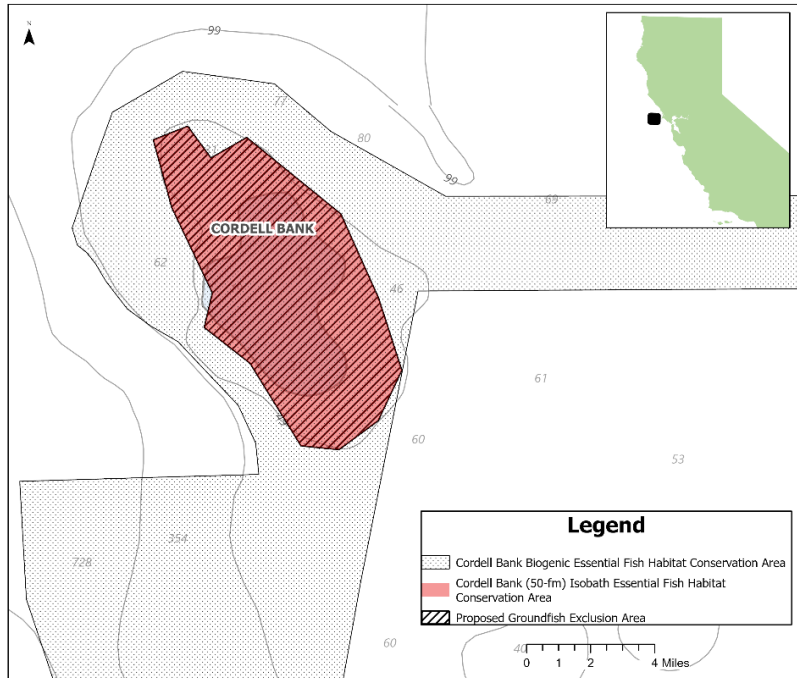


Figure 3. Map depicting the Cordell Bank Biogenic Essential Fish Habitat Conservation Area (bottom trawl EFHCA), the Cordell Bank (50-fm) Isobath Essential Fish Habitat Conservation Area (bottom contact EFHCA) and the proposed new GEA.

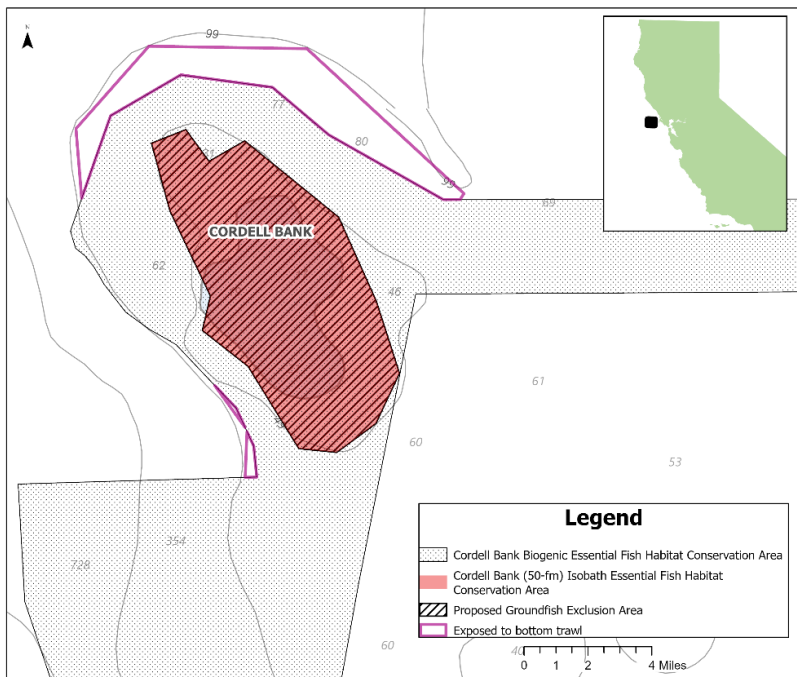


Figure 4. Map of the Cordell Bank Biogenic Essential Fish Habitat Conservation Area (bottom trawl EFHCA), the Cordell Bank (50-fm) Isobath Essential Fish Habitat Conservation Area (bottom contact EFHCA), the proposed new GEA and area that would be exposed to bottom trawl (10.2 sq. mi.)

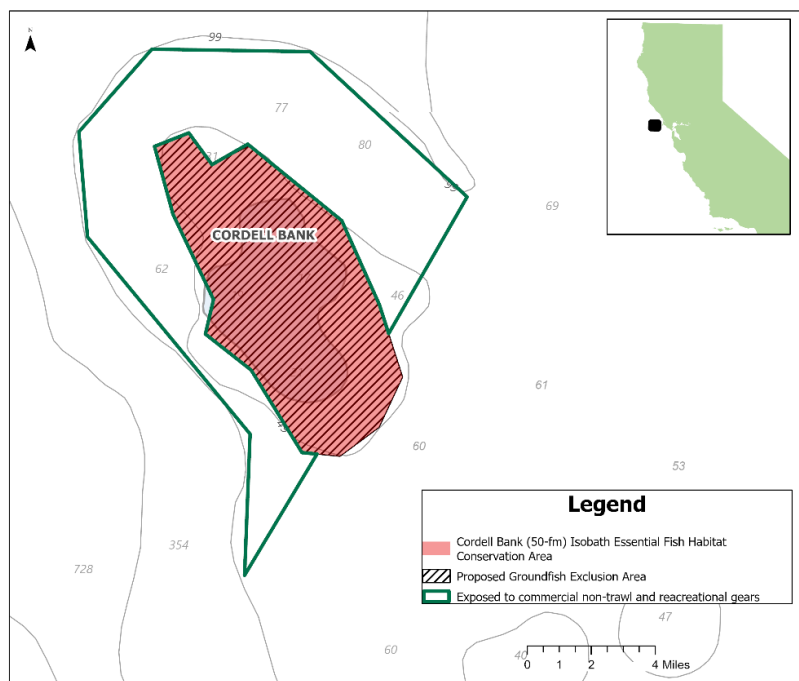


Figure 5. Map of the Cordell Bank (50-fm) Isobath Essential Fish Habitat Conservation Area (bottom contact EFHCA), the proposed new Groundfish Exclusion Area and area that would be exposed to commercial non-trawl and recreational gear (40.1 sq. mi.).

2.2.1 Rationale for the Council’s Preferred Alternative

To be completed after March 2025

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 preliminary draft 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 analyzing habitat impacts from other actions 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 off 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 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.
3. Actions being proposed by NOAA, NMFS or other entities which have been publicly announced, such as in announced with a Notice of Intent.

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 2027-28 groundfish harvest specifications, will be analyzed in future NEPA documents. Therefore, we do not quantify a temporal scope for the effects of the RFFA.

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). This EA includes the 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 in the Southern California Bight for non-trawl commercial and recreational fisheries.
- 2025-26 Harvest Specifications and Management Measures, 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 to utilize non-endorsed gear types in the LEFG fishery.
- Fixed Gear Marking, Expected Rulemaking 2025, implementation 2026. This action would require additional gear and line marking for groundfish fixed gear to assist in entanglement determinations. This action also would create voluntary entanglement risk reduction measures to reduce the number of vertical lines fixed gear is required to use.

3.1 Habitat

3.1.1 Affected Environment

The following analysis describes the potential impacts to seafloor habitat. Substrate classification contained in the Pacific Marine Estuarine Fish Habitat Partnership's (PMEP) West Coast Nearshore Coastal and Marine Ecological Classification Standard (CMECS) Substrate Habitat dataset for cartography detail (CMECS_SC_Cartography_Detail) and the final data quality scores (PMEP 2024) were used to show the current state of habitat. The cartography detail layer shows the most detailed CMECS classification available for that location and the code of the classification. As an example, rock and unconsolidated mineral substrate are substrate classes whereas sand is a substrate group contained within the unconsolidated mineral substrate class. Within the CMECS hierarchy, a substrate group represents two levels of increased resolution compared to a substrate class. Documentation for the CMECS classification can be found at <https://coast.noaa.gov/data/digitalcoast/pdf/cmecs.pdf> and additional details about PMEP can be found on their website (<https://www.pacificfishhabitat.org>). A table of classification hierarchy can be found in Table E1 of Appendix E of Federal Geographic Data Committee (2012). The following is a description of each of the three types of substrate classifications:

- Rock substrate: Igneous, metamorphic, or sedimentary rock with particle sizes greater than or equal to 4.0 meters (4,096 millimeters) in any dimension that cover 50 percent or greater of the Geologic Substrate surface.
- Unconsolidated Mineral Substrate: Geologic Substrates with less than 50 percent cover of Rock Substrate. This class uses Folk (1954) terminology to describe any mix of loose mineral substrate that occurs at any range of sizes—from Boulders (> 80 percent gravel, with a median grain size 256 mm to < 4,096 mm) to Clay (containing no trace of gravel and < 10 percent sand; the remaining clay-silt mix is 67 percent or more clay).

- Sand: Geologic Substrate surface layer contains no trace of Gravel and is composed of > 90 percent Sand (particles 0.0625 millimeters to < 2 millimeters in diameter).

With respect to data quality, there are four scores available with higher scores meaning higher data quality. The scheme for scoring data quality used in this dataset was created for the West Coast Substrate Induration Layer developed for the Bureau of Ocean Energy Management (BOEM) for coral suitability modeling (Poti et al 2020). This scoring scheme has three fundamental components (or categories): data type, interpretation type², and groundtruthing. Further details can be found under the “Lineage” portion of the metadata for the PMEP substrate data quality layer.³ The four scores present in the data layer are defined as follows:

- 19- Low resolution, supervised, no groundtruthing
- 43- Medium resolution, supervised, no groundtruthing
- 62- High resolution, unsupervised, no groundtruthing (note: not present in action area)
- 86- High resolution, supervised, limited groundtruthing

² Two interpretation types are available: supervised (e.g., machine learning or expert interpretation) and unsupervised (e.g., Terrain Ruggedness (VRM))

³ See PMEP website at <https://www.pacificfishhabitat.org/data/nearshore-cmecs-substrate-habitat/> to download

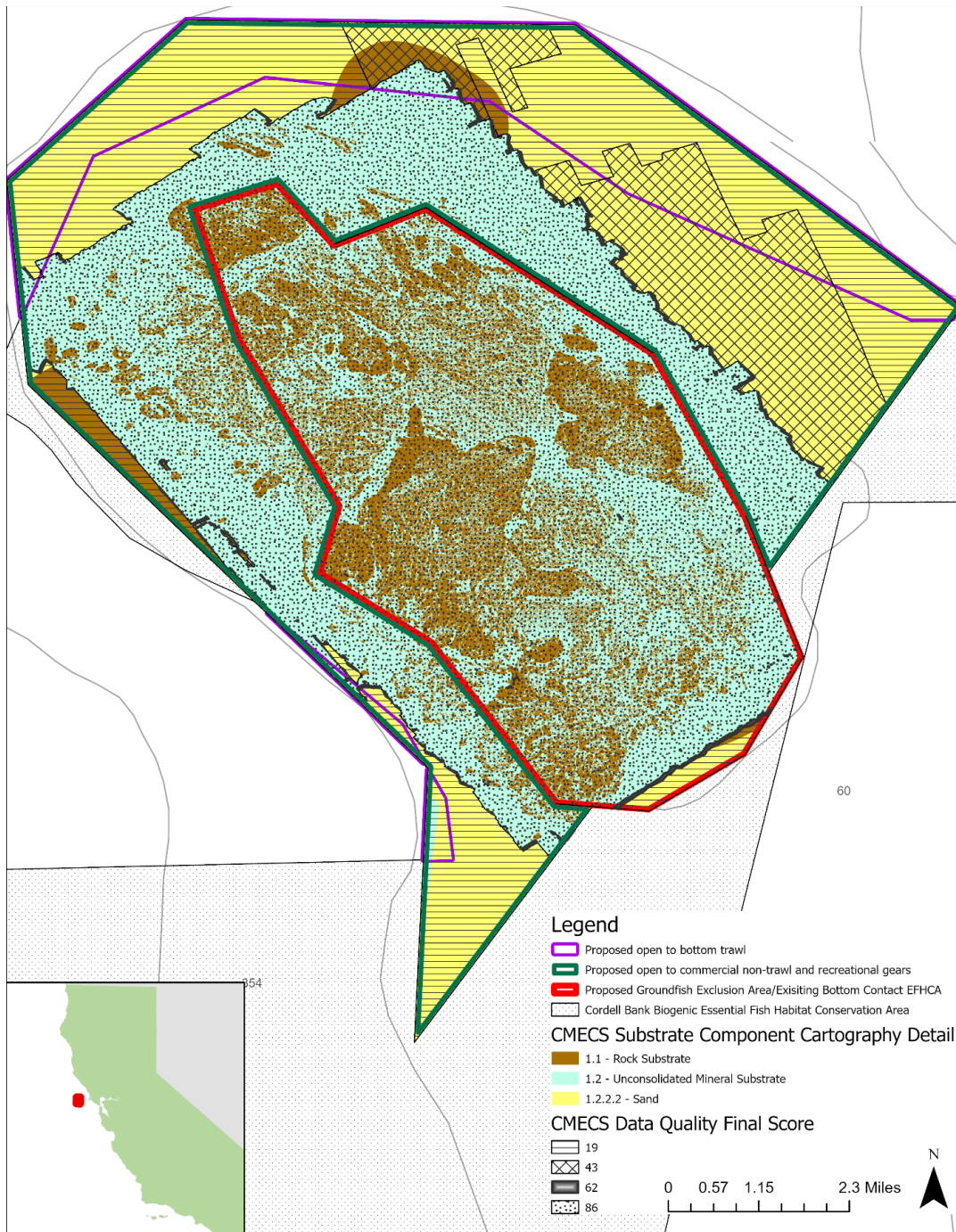


Figure 6. CMECS Substrate Component Cartography Detail and Data Quality Score in relation to the areas proposed to be opened under Alternative 1.

Figure 7 displays the rocky reef habitat present along with substrate data quality scores within the action area based on the different substrate classes shown above. Specifically, of the three substrate classes present in the action area, only areas classified as 1.1 Rock Substrate are identified as rocky reef. 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.⁴ 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 “special 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).”

⁴ Groundfish HAPCs are defined in Section 7.3 of the Pacific Coast Groundfish FMP and include estuaries, canopy kelp, seagrass, and rocky reefs.

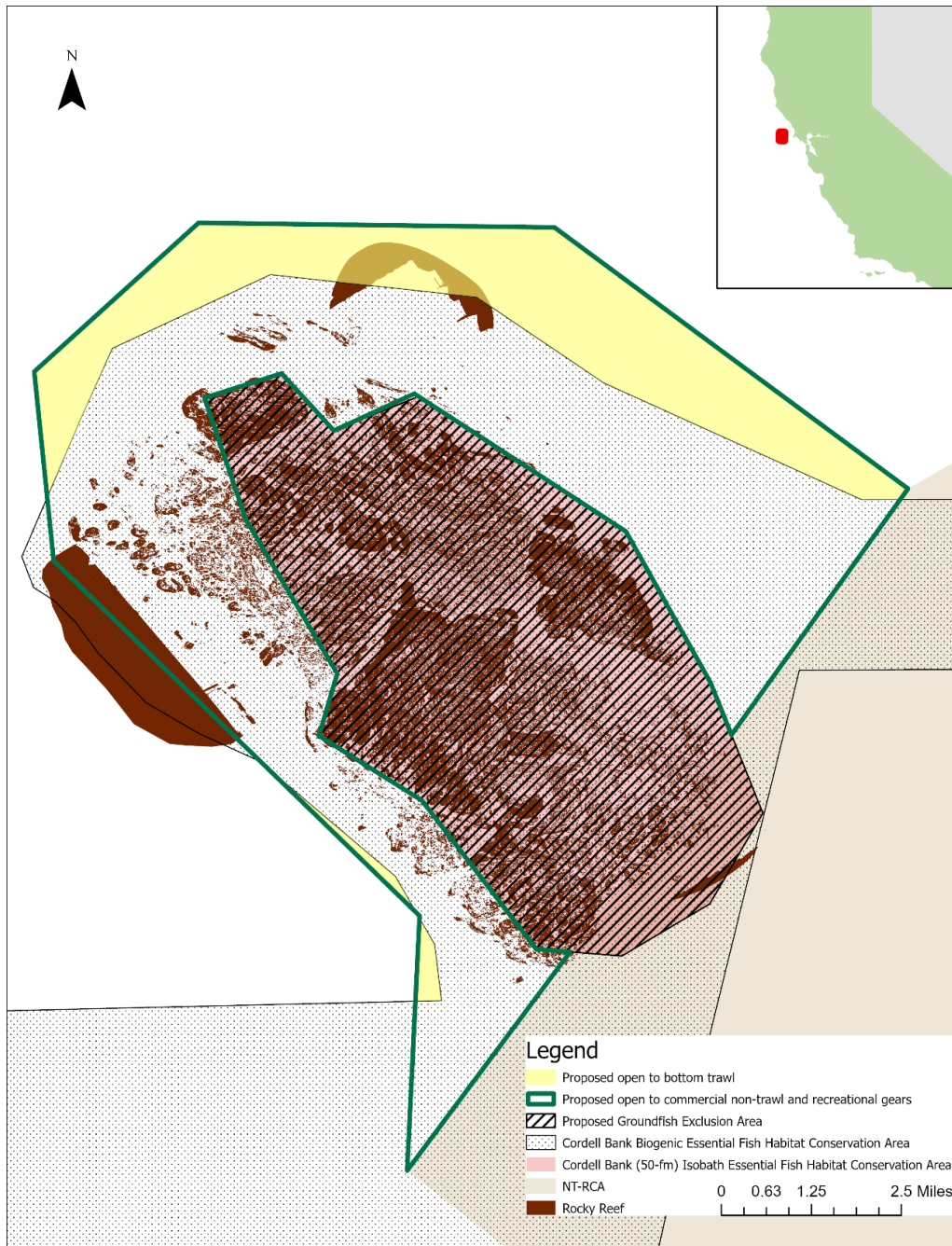


Figure 7. Cordell Bank action area and closed areas compared to rocky reef habitat (based on PMEP dataset).

Office of National Marine Sanctuary (ONMS) staff provided additional habitat, coral, and sponge data to support analysis of potential seafloor habitat impacts, outside of that presented above. While the PMEP database is the best coastwide, standardized representation of known substrate, including data quality scoring, 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. These surveys were located on top of the bank, to the west of the bank and one that runs north/south of the bank. Predicted substratum maps were interpreted from multibeam and backscatter data using methods described in Cochrane (2008). As described in [Supplemental HC Report 1 from November 2024](#), “The analysis is based on the numerical classification of depth, slope and the backscatter, but lacks the rugosity parameter. Ground-truthing data were not available for these surveys to further confirm numerical interpretation (i.e., an “unsupervised” classification). Because the classification was “unsupervised”, habitat interpretations are labeled “predictive” in the map legend. Additionally, the "predicted habitat" does not have an associated data quality layer that the Fig. 6 [now Figure 7] "rocky reef" data has. However, areas identified as "hard sloping" in the predicted habitat data likely contain hard substrate.” Note that while the ONMS has mapping data for the majority of the action area, there is currently no data in the predicted substrate model for the northeast portion of the action area as they have not surveyed that portion. This portion 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 as shown in purple outline. The absence of data should not be interpreted as a lack of rocky reef or sensitive habitats, given the presence of information in the PMEP database. The HC noted this in their report as well that the unmapped region is likely a continuation of the substrate types in the surrounding areas. However, given the absence of data quality from the ONMS model and that confirmation of sediment type can only be achieved by groundtruthing, the Council should consider this in their risk assessment of potential impacts.

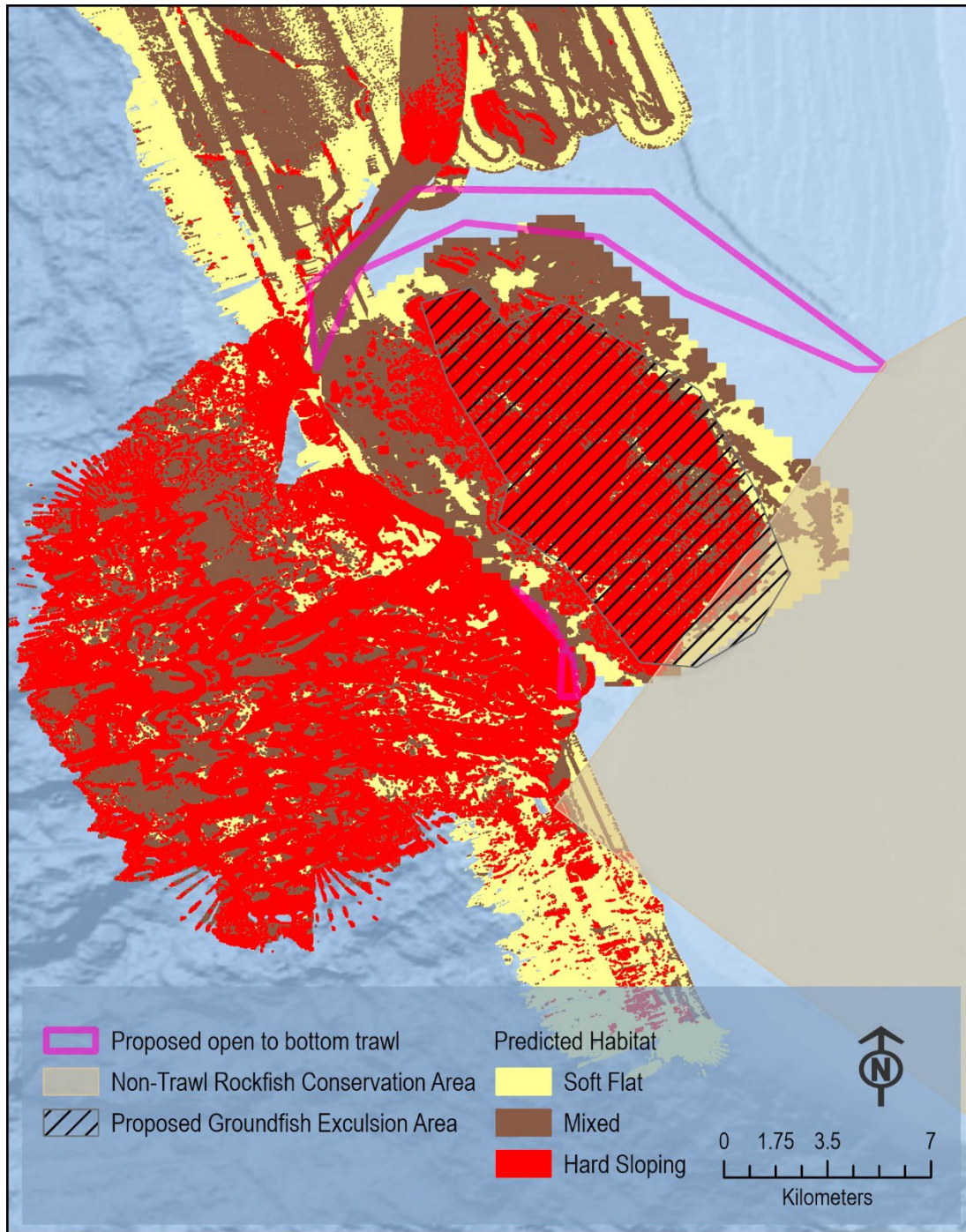


Figure 8. Predicted habitat classification from ONMS compared to the area proposed to be opened to bottom trawl gear under Alternative 1.

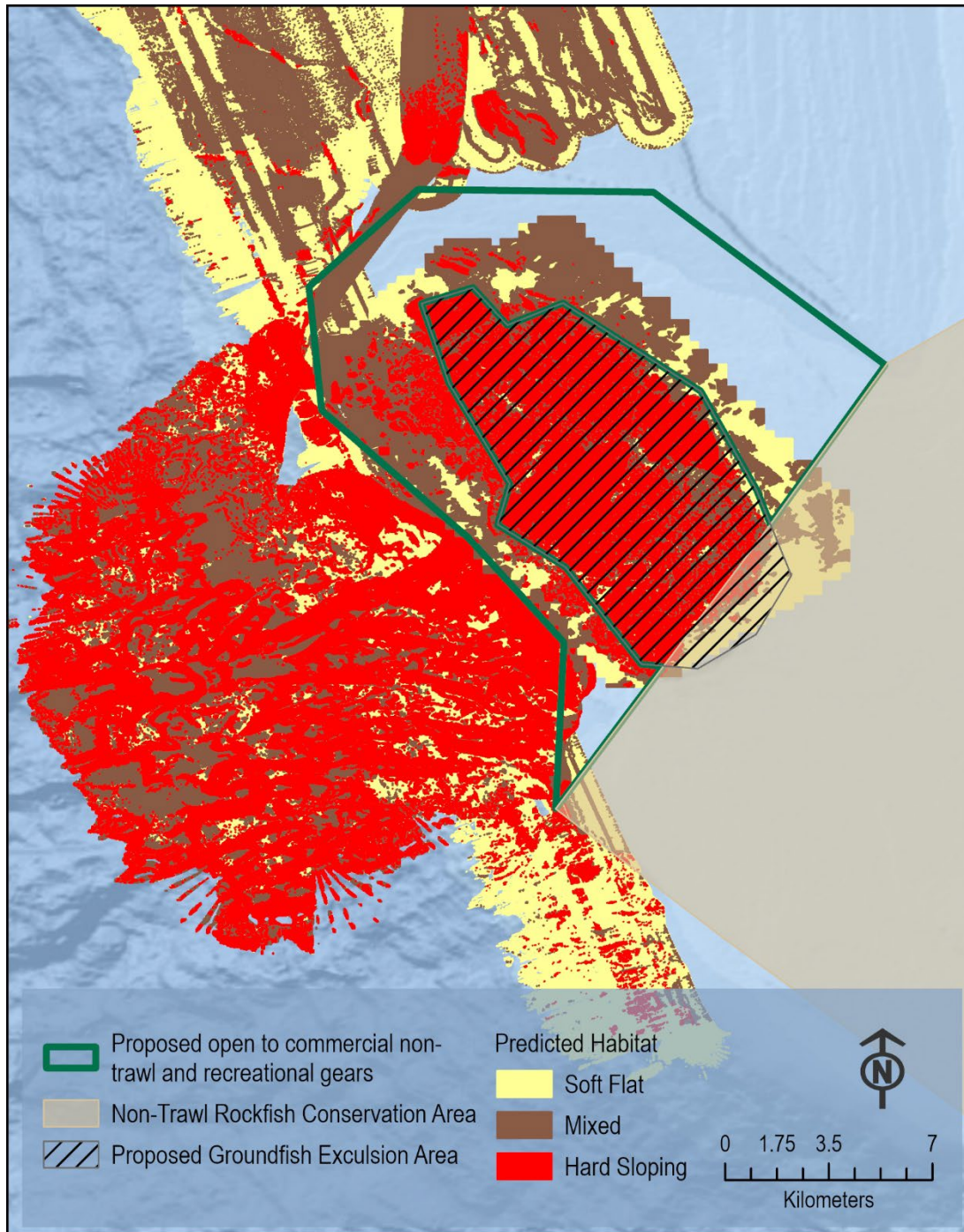


Figure 9. Predicted habitat classification from ONMS compared to the area proposed to be opened to non-trawl commercial bottom contact and recreational gear under Alternative 1.

Deep sea corals and sponge observation data and a 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 10 and Figure 11. 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 BOEM and other entities for potential projects. The lack of habitat suitability model data within the action area resulted in further investigation of the methods used to create those models. As described in Agenda Item I.5.a, Supplemental ONMS Report 2, November 2024:

“The modeling results presented are aggregated layers of 22 DSC taxa known to be associated with hard substrate for the entire study area offshore the continental U.S. West Coast. However, records of *Stylaster* spp. and *Swiftia* spp. were not included in the model, because the analysis only included records identified to species. If the model had included *Stylaster* spp. and *Swiftia* spp. (now known to be *Chromoplexaura marki*), the model would have likely predicted areas on Cordell Bank with high habitat suitability for these taxa (Matthew Poti, pers. comm.).”

Therefore, the deep sea coral modeling data from NOAA should not be used in the assessment of potential impacts for this analysis; however, the observation data does provide context for potential impacts.

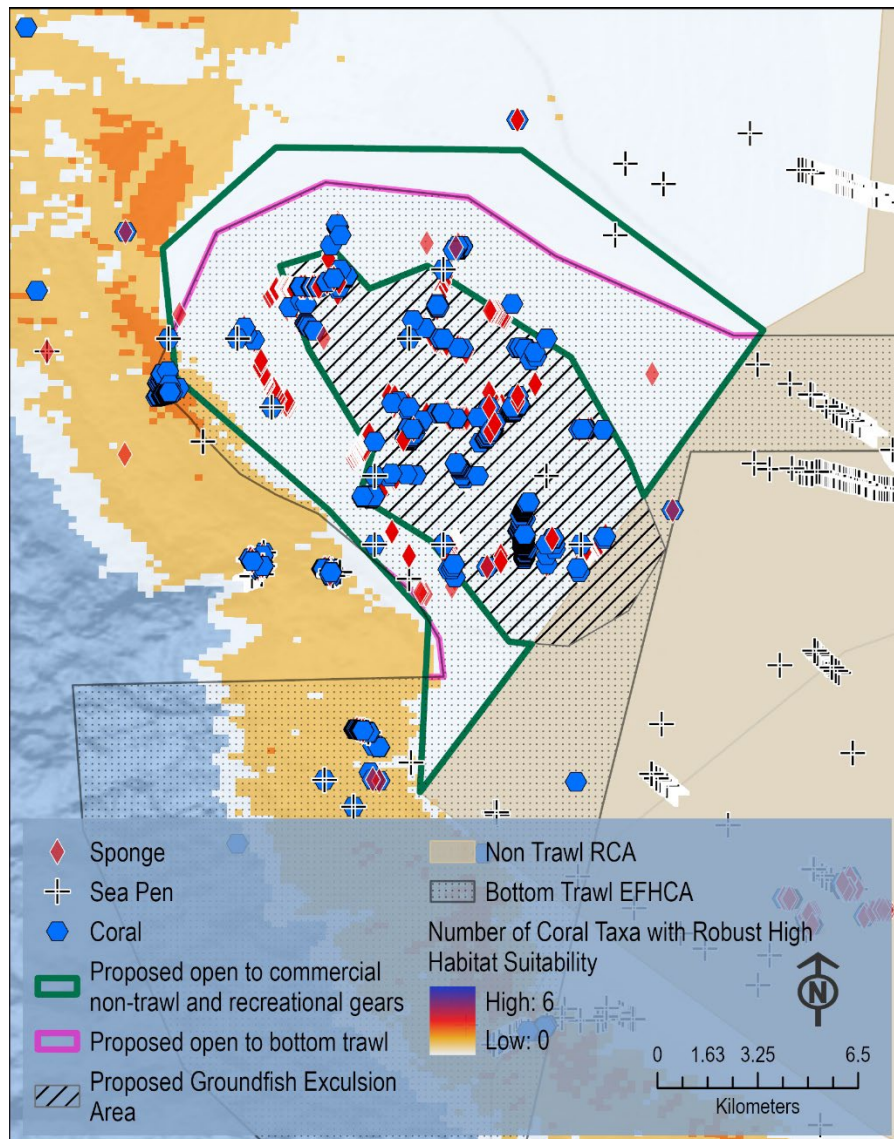


Figure 10. Cordell Bank action area observed corals, sea pens, and sponges (from both NOAA DSC Database and ONMS) and modeled number of coral taxa with robust high habitat suitability (based on NOAA Deep-Sea Coral and Sponge Database).

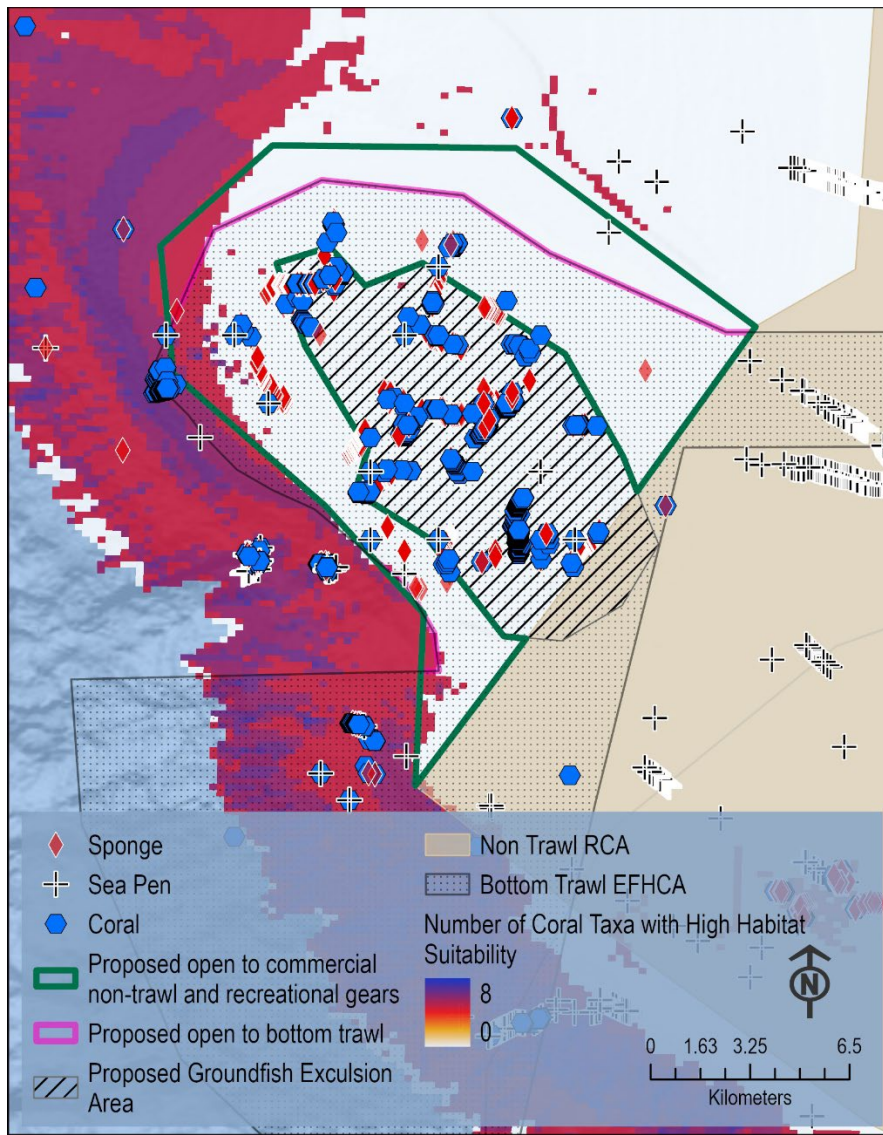


Figure 11. Cordell Bank action area observed corals, sea pens, and sponges (from both NOAA DSC Database and ONMS) and modeled number of coral taxa with high habitat suitability (based on NOAA Deep-Sea Coral and Sponge Database).

ONMS provided additional 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/cbcoralfnl11.pdf>.

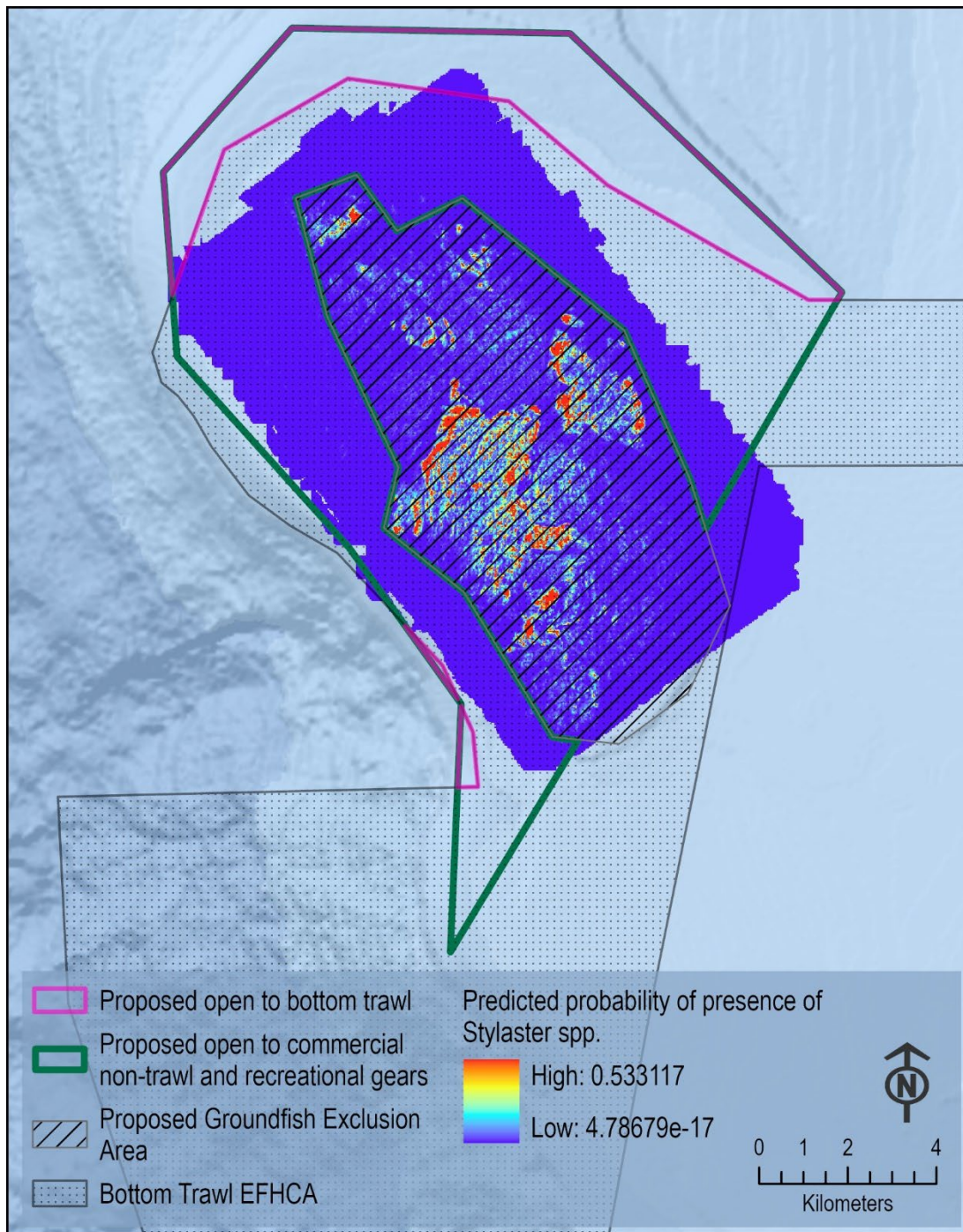


Figure 12. Predicted probability of the presence of *Stylaster* spp compared to Alternative 1 areas proposed to be opened.

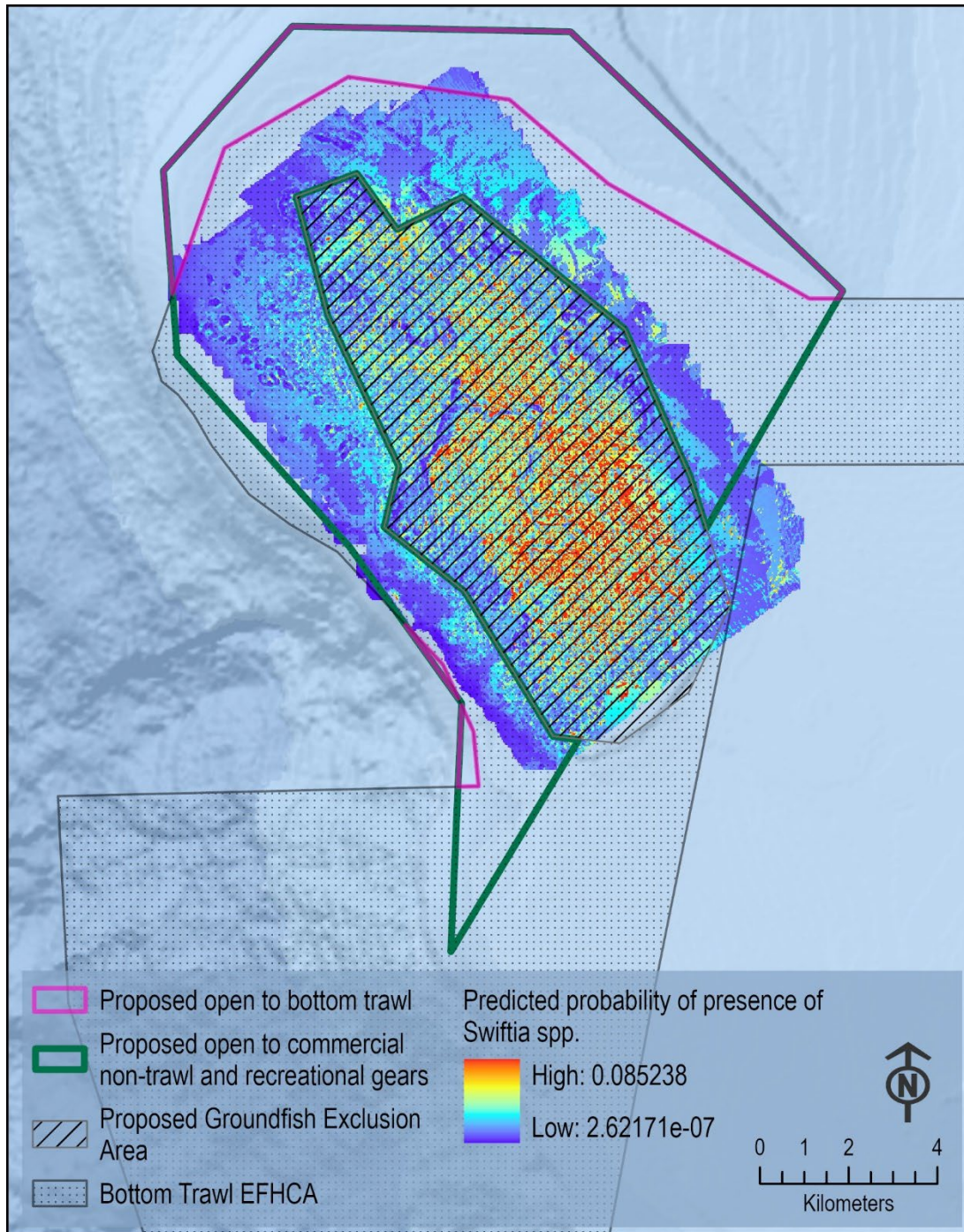


Figure 13. Predicted probability of presence of *Swiftia* spp compared to Alternative 1 areas proposed to be opened.

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. Furthermore, large footrope gear is prohibited in the area and therefore impacts would only be that associated with small footrope trawl gear.

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, rush, 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](#), which states that bottom contact fishing gears may impact benthic habitat and these impacts are mitigated to the extent practicable with gear restrictions and numerous closed areas throughout the EEZ. 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 respectively within 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.

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.

Of the area proposed to be opened to bottom trawl, ~3.3 percent (0.54 sq. mi) of the area is rocky reef habitat (based on the PMEP database) with limited coral and sponge observations present in the area (see Figure 10 and Figure 11). The remaining area is primarily made up of sand substrate with some unconsolidated mineral substrate. The predicted substrate data provided by ONMS shows a higher abundance of non-sandy substrates: ~2.5 sq. mi. of combined hard sloping substrate (0.25 sq. mi) and mixed substrate (2.3 sq. mi) in the area proposed to be opened. Overall, it can be concluded between the two datasets that there would be some rocky reef habitat potentially exposed to bottom trawl gear under Alternative 1. 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- resulting in likely limited impact under Alternative 1 to corals. However, as noted in Section 1.2, Cordell Bank and its surrounding areas were carefully reviewed and considered as part of Amendment 28 and additional bottom trawl EFH protections were added in 2020, accordingly. Therefore, this remaining area is expected to be of lower importance for groundfish habitat.

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 in 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.⁵ 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

⁵ 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.

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. 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 14, 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, the prohibition on large footrope gear, and the tendency to avoid those habitat types, the overall habitat impacts are expected to be minimal and not significant.

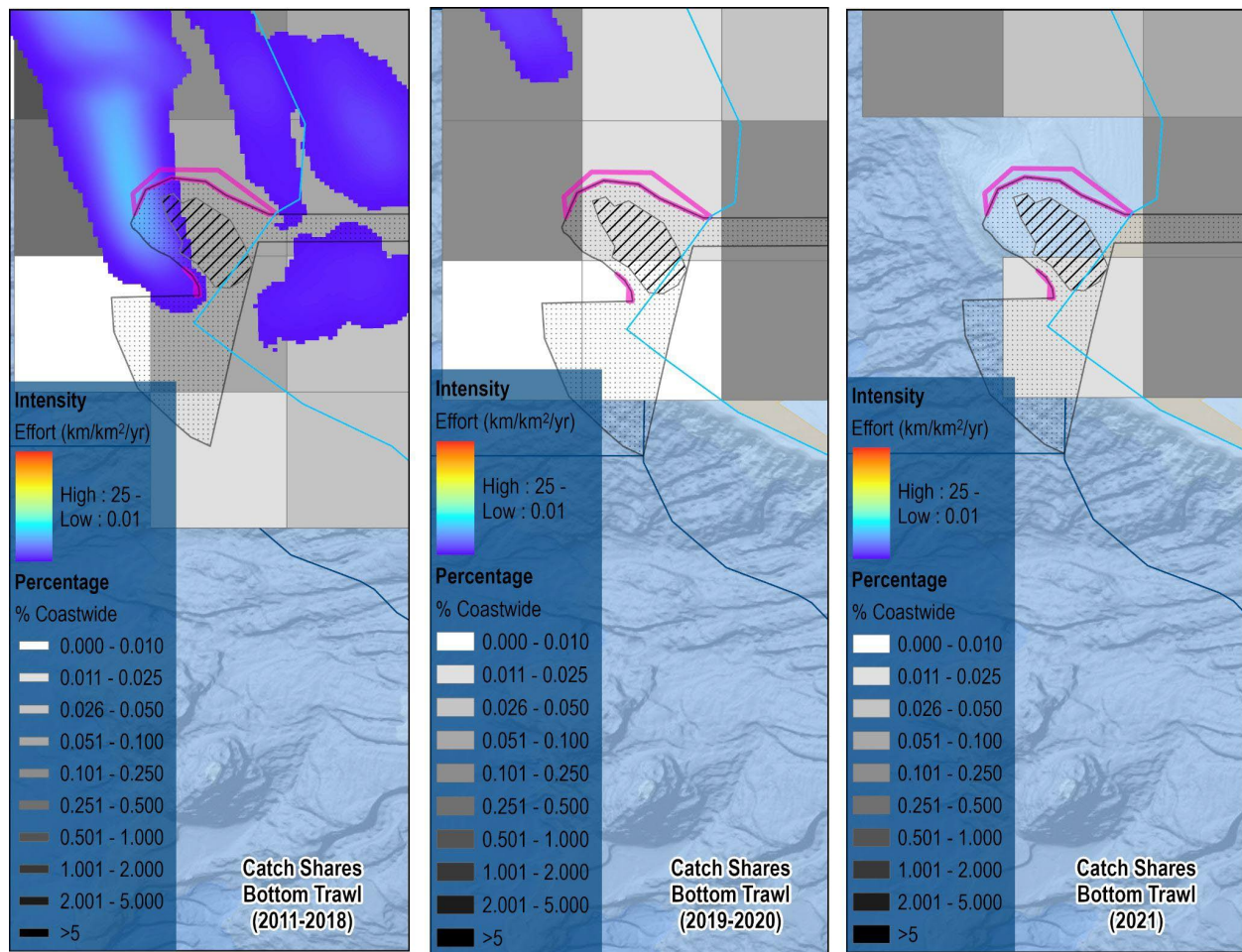


Figure 14. Intensity of fishing effort (km/km²/yr) and footprint (percentage of coastwide effort) for the bottom trawl fishery in 2011-2018, 2019-2020, and 2021. Purple polygon notes area to be opened to bottom trawl gear, dashed polygon is the proposed GEA (and bottom contact EFHCA), blue line represents 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 to non-trawl bottom contact gears (approximately 75 percent of the area) 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 understood to have a lower degree of impact and therefore lower recovery time compared to bottom trawl gears (Appendix C to the Groundfish FMP). Additionally, the bottom trawl 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, 8.9 percent (3.55 sq. mi) of the area is rocky substrate based on the PMEP database with an additional 43.2 percent (17.33 sq. mi) categorized as unconsolidated mineral substrate. The remaining half of the proposed area to be open is categorized as sand. The ONMS predicted substrate model showed estimates of 2.8 sq. mi. of hard substrate and 14.9 sq. mi of

mixed substrate. 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 by ONMS and is not represented in the model. Given the two datasets, it is likely that there would be rocky reef habitat exposed to all non-trawl gear types through Alternative 1. A potential mitigating factor for potential impacts to rocky reef areas is that 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 future fishing activity would 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) 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). The GAP in their November 2024 statement ([Agenda Item I.5.a, Supplemental GAP Report 1](#)) discussed how it is likely that there would be limited pot gear activity in the area due to the habitat features and the fact that the area is too shallow for sablefish (the primary target species for pot gear). Hook-and-line gear for midwater stocks would likely be the targeted fishery occurring in the proposed action area. In relation to the overall footprint of groundfish fishing on the California coast, it is likely that this opening would not create a substantial opportunity to attract a large effort shift.

While we cannot fully 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.

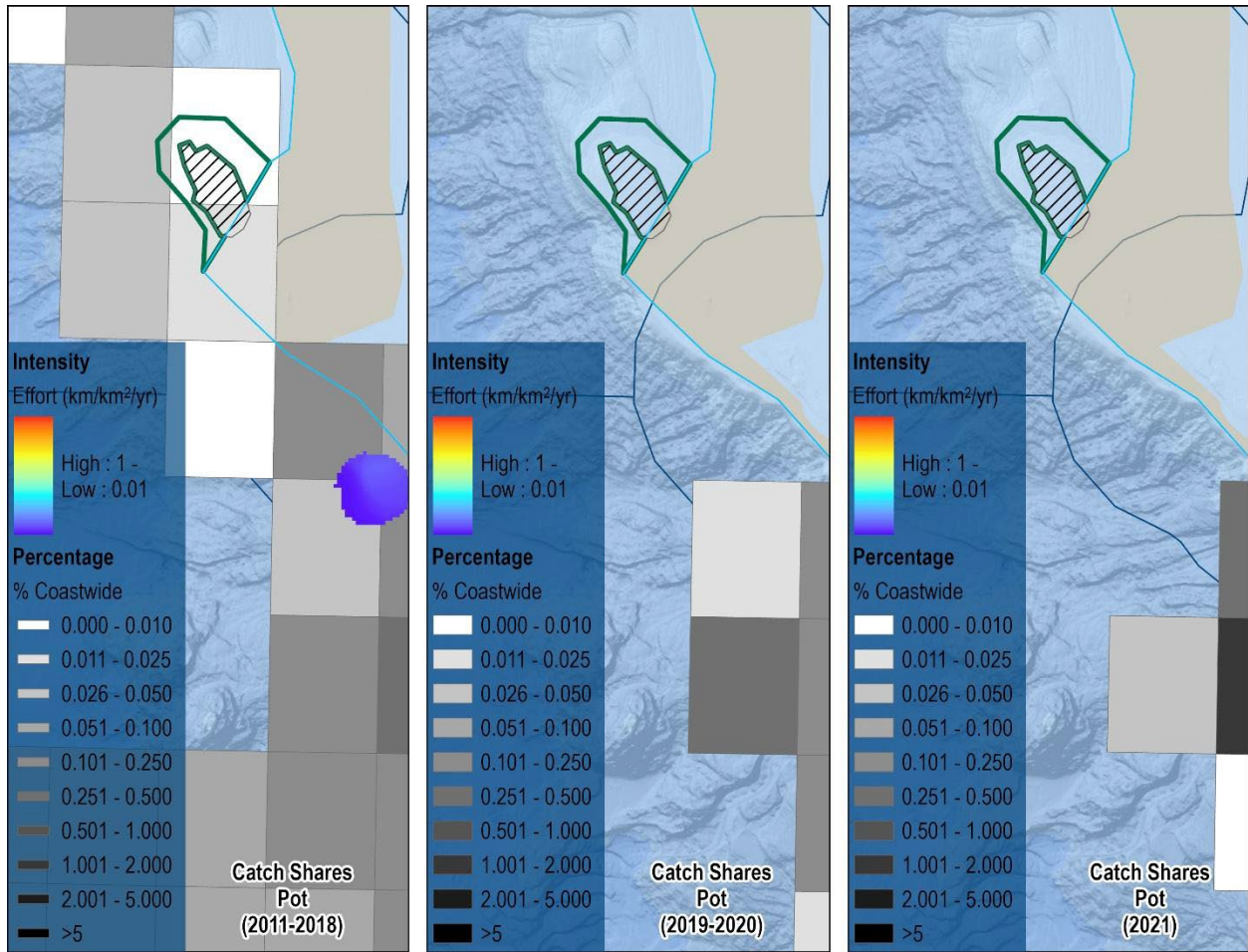


Figure 15. Intensity of fishing effort (km/km²/yr) and footprint (percentage of coastwide effort) for the catch shares pot fishery in 2011-2018, 2019-2020, and 2021. Green polygon notes area to be opened to non-trawl bottom contact gear, dashed polygon is the proposed GEA (and bottom contact EFHCA), blue line represents the 75-fm boundary of the Non-Trawl RCA (shown in tan).

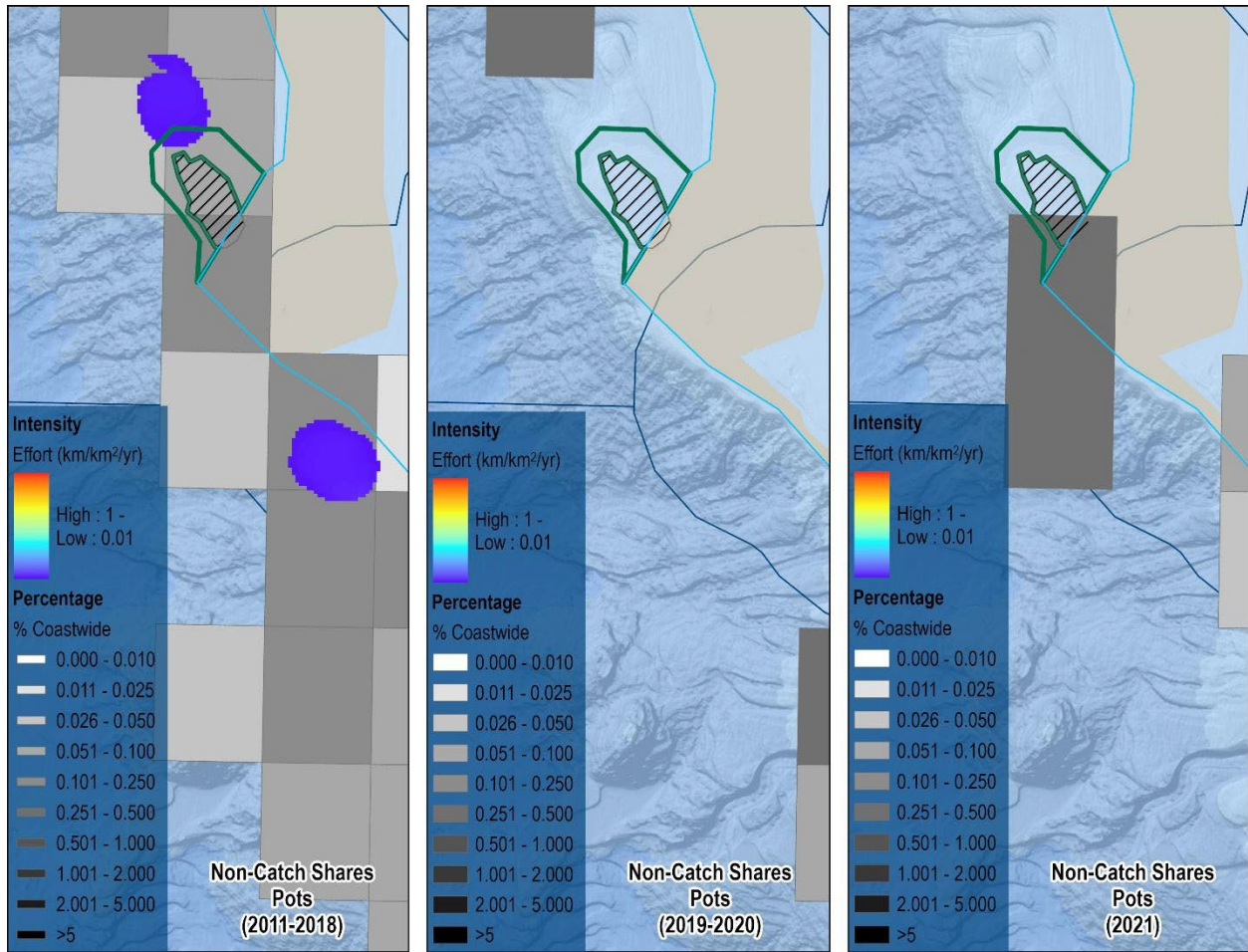


Figure 16. Intensity of fishing effort (km/km²/yr) and footprint (percentage of coastwide effort) for the non-catch shares pot fishery in 2011-2018, 2019-2020, and 2021. Green polygon notes area to be opened to non-trawl bottom contact gear, dashed polygon is the proposed GEA (and bottom contact EFHCA), blue line represents the 75-fm boundary of the Non-Trawl RCA (shown in tan).

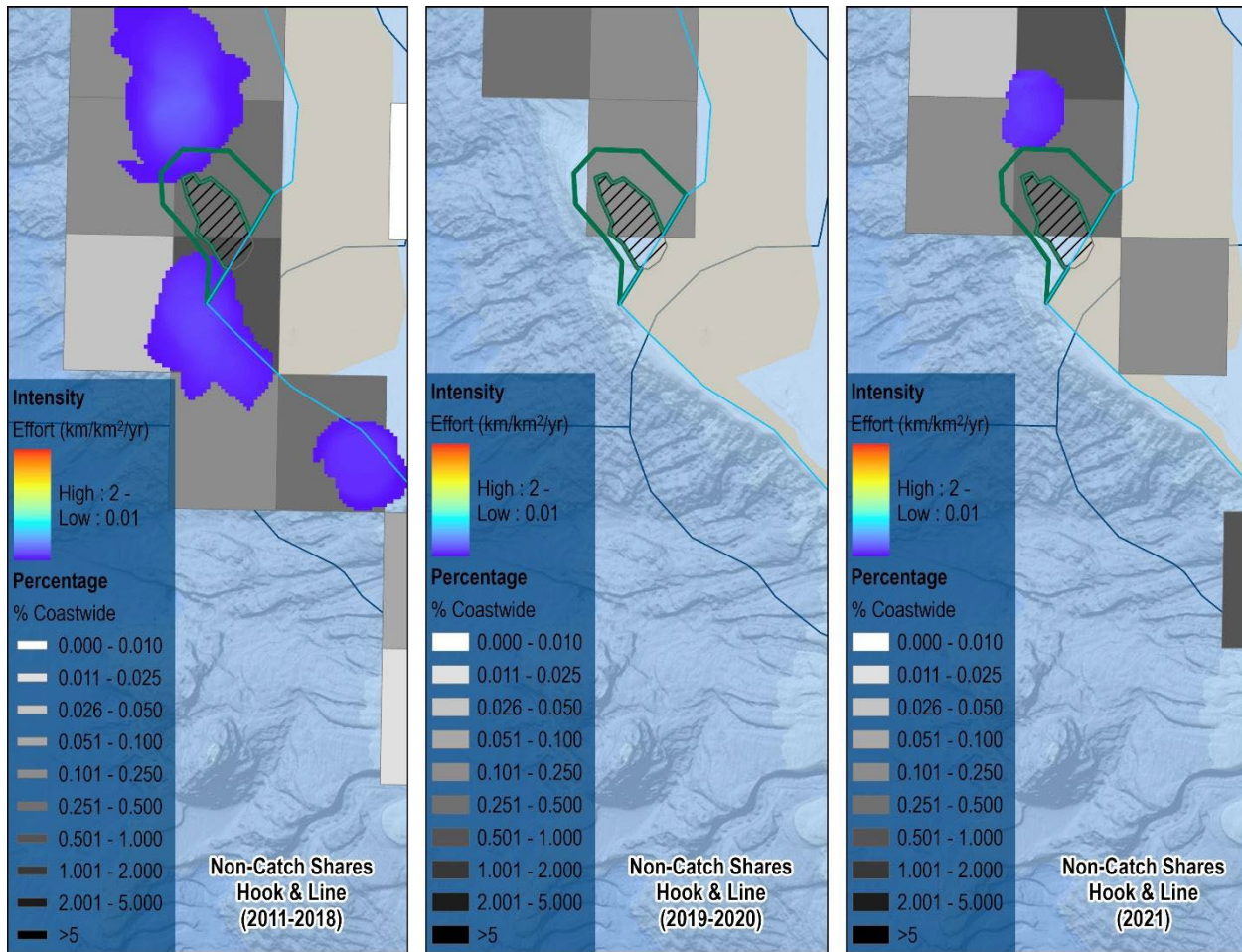


Figure 17. Intensity of fishing effort (km/km²/yr) and footprint (percentage of coastwide effort) for the non-catch shares hook and line fishery in 2011-2018, 2019-2020, and 2021. Green polygon notes area to be opened to non-trawl bottom contact gear, dashed polygon is the proposed GEA (and bottom contact 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 10). 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. 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, which are 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. As described for No Action above, bottom contact fishing gears may impact benthic habitat and these impacts are mitigated to the extent practicable with gear restrictions and numerous closed areas throughout the EEZ. When considering past and present actions and RFFA, there are expected to be no significant impacts to habitat under No Action.

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. This impact would be in addition to very limited fishing that 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).

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 on the U.S. West Coast, 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, and the terrain in that area, the impacts are likely within the range of 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 the area 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, or the ecosystem (including climate change impacts), under No Action would be those described under the 2025-2026 Harvest Specification EA. 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. The alternatives evaluated for this action would not affect how groundfish are managed to stay within allocations or ACLs. Impacts to protected/prohibited species, marine mammals, turtles and seabirds are considered through the harvest specifications process in relation to the other laws (e.g., ESA) that may govern the impacts of the groundfish fishery on select species. The forthcoming fixed gear marking and entanglement risk reduction measures package (anticipated effective date 2026) is intended to increase the certainty in attributing entanglements (positively or negatively) to specific fisheries and gear types, as well as to promote measures to reduce marine mammal and turtle entanglement risks in the fixed gear fishery. Ecosystem impacts associated with the groundfish fishery include effects to the forage fish, water column, and EFH. The overall effort of the groundfish fishery will continue to be constrained by the allocations and management measures set forth in the harvest specifications and not impacted by this action. There are no impacts expected related to any of the ecosystem components, as the adaptive fishery management system applied to the Pacific coast groundfish fishery is structured to respond to ecosystem impacts, such as changes in predator/prey dynamics, impacts to forage fish, and impacts from climate change. Specific to this action, the Cordell Bank GEA would remain in place and vessels would continue to be subject to the current management area restrictions.

Alternative 1

No substantial adverse effects are expected on target species, non-target species, protected/prohibited species, marine mammals, turtles, seabirds, or the ecosystem (including climate change impacts), under Alternative 1. For target species and non-target species, the cumulative impacts are those described for No Action above. Groundfish harvest specifications assume full removal of ACLs in assessing the impacts to target stock and Alternative 1 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).⁶ 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 off the West Coast), expected activity (shifting of effort rather than new effort), and anticipated management measures, it is expected that potential impacts from Alternative 1 would be minimal and within the range of those described in the 2025-2026 Harvest Specification EA. Those impacts are described in the context of the adaptive management system applied to the groundfish fishery, which is based on the best available scientific information, and uses sustainable catch limits for individual stocks and rebuilds stocks if they fall below a minimum stock size threshold. Under Alternative 1, similar impacts to No Action 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 opened under Alternative 1, if effort were to spread into the newly reopened areas, all catch would still be accounted for within the management regime currently in place. Since the implementation of the Cordell Bank GCA, California quillback rockfish have been [declared overfished](#). However, given that the depth of the action area is deeper than where that stock is typically encountered in the groundfish fishery (i.e., 20-50 fm), and that the portion of the area in

⁶<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/>

this depth range would remain closed through the GEA, 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 overall fishing effort and therefore is not expected to increase the potential risk of bycatch or entanglement of these species by any of the groundfish fisheries subject to this action. The 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, due to the small size of the area proposed to be opened and the potential fishery effort shift that may result from the opening, no appreciable adverse impacts to these species are anticipated.

With regards to ecosystem impacts, there are no significant 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 impacts do consider impacts to EFH; however, those were discussed alongside habitat impacts in Section 3.1. Therefore, all other ecosystem impacts are expected to be similar to those as described under No Action which explains that the adaptive fishery management system applied to the Pacific coast groundfish fishery is structured to respond to ecosystem impacts, such as changes in predator/prey dynamics, impacts to forage fish, and impacts from climate change.

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 from other areas may choose to travel to the area to fish, it is uncertain from what ports and to what degree that may occur. However, during Council discussion in November 2024, it was discussed how it would take three hours to transit from the San Francisco Bay with good weather on a recreational boat ([November 2024 Transcripts](#)). Therefore, the likelihood of a large effort shift from other ports to this area is unlikely.

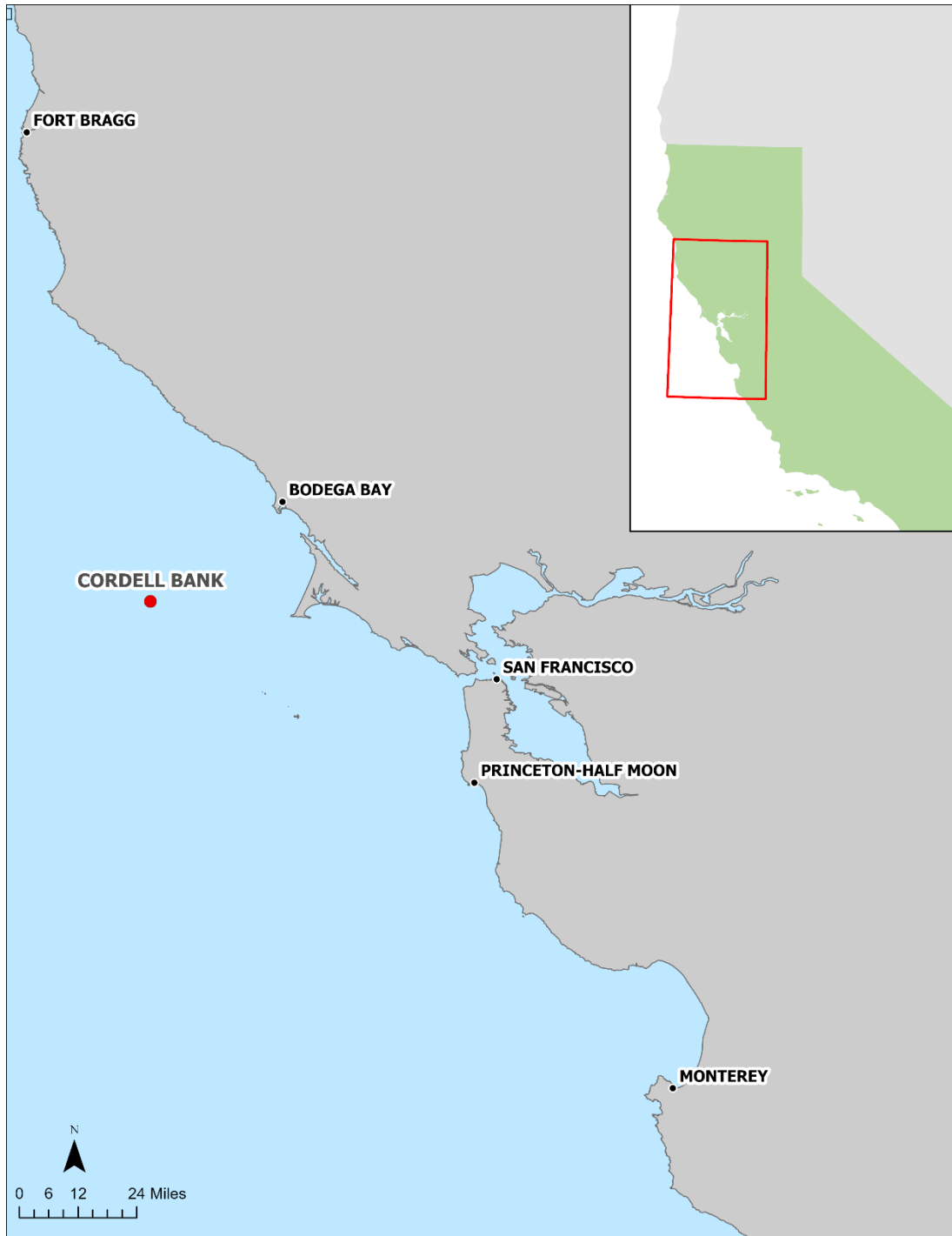


Figure 18. Cordell Bank location compared to fishing ports.

In terms of commercial groundfish fisheries in the action area, the catch area between 40° 30' and 36° N. lat. was used for this analysis. While this latitudinal range is larger than the area proposed to be opened, it is the closest catch area available in the Pacific Fisheries Information Network (PacFIN). From 2019-2024, the sectors with the highest number of participants in this area were the open access (OA) fixed gear and nearshore sectors, the latter of which would not operate in the proposed action area given the deeper depths

and is also outside the scope of this action as a state-managed fishery (Table 3). There was no midwater trawling recorded in the area between 2019 and 2024. Midwater trawl vessels would be exempted from the EFHCAs present in the action area, but subject to the GCA.

Table 3. Average number of vessels by sector and PacFIN port group from 2019-2024. “c” denotes confidential strata.

Sector	Bodega Bay	Ft. Bragg	Eureka	Monterey Bay	Morro Bay	San Francisco
Bottom Trawl	0	6	1	3	0	3
LE Fixed Gear DTL	c	5	0	9	c	2
Limited Entry Sablefish a/	c	9	1	5	0	4
Nearshore	3	22	9	16	2	18
OA Fixed Gear	20	29	10	52	3	44

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 historically, 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 fully 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 in future years, effort could increase near Cordell Bank. However, future angler behavior is dependent on multiple factors and highly uncertain. Table 4 shows anglers sampled, by mode, from 2019-2023 (2024 data was not complete at the time of this analysis). The 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 California 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, 10/22/2024)

Year	Party/Charter Boats	Private/Rental Boats
2019	0	17
2020	0	6
2021	0	16
2022	0	14
2023	116	303

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. The Cordell Bank GCA was put into place to limit bycatch of overfished species, such as canary and yelloweye rockfish, which are all now rebuilt or nearly rebuilt. Therefore, certain vessels would continue to be restricted from fishing in the Cordell Bank GCA, which has been closed for over two decades, for groundfish species that no longer need protection in this area. This would result in a loss of fishing opportunity. The impact of the closure on fishing operations is not quantifiable. Communities would continue to be impacted through changes in market conditions, fishery regulations, and non-fisheries activities, which may impact underserved or dependent communities more than those communities that are not socially vulnerable to changes in fishing opportunities. 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](#)).

Considering past and present actions and RFFA, there are no anticipated impacts under No Action outside the range of the 2025-26 Harvest Specification EA. Economic impacts would be dependent on market conditions, regulatory acts, and other factors that influence fishing opportunities.

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

4.5.2 Analysis of Expected Effects: Alternative 1 (PPA)

Under Alternative 1, the PPA, the Cordell Bank GCA would be removed from regulations and a new GEA would be implemented over the footprint of 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 also 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, including the restrictions implemented for California quillback rockfish and the fact that there are limited other fishing opportunities (such as salmon or crab), any additional opportunities for fishing off the California coast are beneficial. 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 open access (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. The GAP described this limited shift in their November 2024 statement.

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 the California coast. 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 likely 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 2019-2024. The Bodega Bay and San Francisco port groups are the closest to the Cordell Bank area and, 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; however, the GAP noted in November 2024 that the small area to be opened

would not attract a lot of bottom trawl activity. Overall, the degree of impacts of Alternative 1 cannot be precisely quantified, but qualitatively, it is likely positive, given that it would result in 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 gears (2.5 sq. mi.) that would be closed to those gear types through this action. 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 2019-2024.

Sector	Bodega Bay	Fort Bragg	Eureka	Monterey Bay	Morro Bay	San Francisco
Bottom Trawl	0	\$ 2,111.0	\$ 6.3	\$ 338.8	0	\$ 348.2
LE Fixed Gear DTL	\$57.9	\$161.0	0	\$ 735.9	c	\$ 17.7
Limited Entry Sablefish a/		\$ 494.9	\$ 10.3	\$ 268.2	0	\$ 165.64
Nearshore	\$15.0	\$ 474.5	\$ 72.5	\$ 283.7	\$14.8	\$ 162.2
OA Fixed Gear	\$170.3	\$ 307.3	\$ 95.3	\$ 520.1	\$7.3	\$ 438.4

a/ Includes IFQ GS

For recreational fisheries, there could also be potential benefits similar to the non-trawl commercial vessels, with the GCA being removed. In particular, the GAP and public comment ([November 2024 public comments](#)) described how this action could add another fishing location to the rotation for recreational vessels, thereby spreading out activity and opportunity from areas such as Rittenburg Bank. 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, with California quillback rockfish restrictions, recreational fisheries have been prioritizing opportunities in state waters, there is the potential for deep-water (all depth) season structures that could be beneficial to vessels in the area, especially in light of the potential for closed salmon seasons. Similar to commercial participants, it is likely that the action will affect those vessels coming out of Bodega Bay (with the potential for San Francisco port area).

The port communities nearest to the action area, 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](#)).

Considering past and present actions and RFFA, there are positive impacts expected under Alternative 1. While economic impacts will be dependent on market conditions, regulatory acts, and other factors that influence fishing opportunities, as described under No Action, the opening of Cordell Bank is expected to be beneficial to participants.

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 also continue to provide indirect habitat protection from groundfish gears within the Cordell Bank GCA.
- Alternative 1, the PPA, would provide a net increase in fishing grounds for groundfish participants by removing the GCA, which 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. 78.2 percent of the approximately 15 sq. mi. of rocky substrate (as defined by the CMECS substrate classification cartography detail) within the Cordell Bank GCA would remain within the proposed GEA and be afforded enhanced protections.

4.7 Determination of Significant Regulatory Action under EO 12866

As noted above, under E.O. 12866, as amended by E.O. 14094, 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 Council action.

5 Regulatory Flexibility Analysis

For any rule subject to notice and comment rulemaking, the Regulatory Flexibility Act (RFA) requires Federal agencies to prepare, and make available for public comment, both an initial and final regulatory flexibility analysis, unless the agency can certify that the proposed and/or final rule would not have a “significant economic impact on a substantial number of small entities.” These analyses describe the impact on small businesses, non-profit enterprises, local governments, and other small entities as defined by the RFA (5 U.S.C. § 603). This analysis is to inform the agency and the public of the expected economic effects of the alternatives, and aid the agency in considering any significant regulatory alternatives that would accomplish the applicable objectives and minimize the economic impact on affected small entities. The RFA does not require the alternative with the least cost or with the least adverse effect on small entities be chosen as the preferred alternative.

The Initial Regulatory Flexibility Analysis (IRFA) must only address the effects of a proposed rule on entities subject to the regulation (i.e., entities to which the rule will directly apply) rather than all entities affected by the regulation, which would include entities to which the rule will indirectly apply.

Part 121 of Title 13, Code of Federal Regulations (CFR), sets forth, by North American Industry Classification System (NAICS) categories, the maximum number of employees or average annual gross receipts a business may have to be considered a small entity for RFAA purposes. See 13 C.F.R. § 121.201. Under this provision, the U.S. Small Business Administration (SBA) established criteria for businesses in the fishery sector to qualify as small entities. Standards are expressed either in number of employees, or annual receipts in millions of dollars. The number of employees or annual receipts indicates the maximum allowed for a concern and its affiliates to be considered small (13 C.F.R. § 121.201).

- A fish and seafood merchant wholesaler (NAICS 424460) primarily engaged in servicing the fishing industry is a small business if it employs 100 or fewer persons on a full time, part time, temporary, or other basis, at all its affiliated operations worldwide.
- A business primarily engaged in Seafood Product Preparation and Packaging (NAICS 311710) is a small business if it employs 750 or fewer persons on a full time, part time, temporary, or other basis (13 CFR § 121.106), at all its affiliated operations.

In addition to small businesses, the RFA recognizes and defines two other kinds of small entities: small governmental jurisdictions and small organizations. A small governmental jurisdiction is any government or district with a population of less than 50,000 persons. A small organization is any not-for-profit enterprise that is independently owned and operated and not dominant in its field. (5 U.S.C. § 601). There is no available guidance beyond this statutory language regarding how to determine if non-profit organizations are "small" for RFA purposes. The SBA does have provisions for determining whether a business is "small" for RFA purposes and whether it is "dominant in its field," and those provisions can inform how NMFS classifies non-profit organizations for the purposes of RFA analyses in rulemaking. After consultation with the SBA, NOAA Fisheries has decided to use SBA's size standards for non-profit organizations to determine whether a non-profit organization is "small" and, in turn, whether it is "dominant in its field," to apply the statutory definition of a "small organization" in practice:

- A nonprofit organization is determined to be “not dominant in its field” if it is considered “small” under SBA size standards:
- Environmental, conservation, or professional organizations (NAICS 813312, 813920): Combined annual receipts of \$19.5 million or less.
- Other organizations (NAICS 813319, 813410, 813910, 813930, 813940, 813990): Combined annual receipts of \$13.5 million or less.

The SBA size standard for Subsector 487, “Scenic and Sightseeing Transportation, Water”, which includes charter fishing, is \$14 million in gross receipts (13 CFR § 121.201).

Provision is made under the SBA’s regulations for an agency to develop its own industry-specific size standards after consultation with advocacy and an opportunity for public comment (see 13 CFR 121.903(c)). NMFS has established a small business size standard for businesses, including their affiliates, whose primary industry is commercial fishing (80 FR 81194, December 29, 2015). This standard is only for use by NMFS and only for the purpose of conducting an analysis of economic effects in fulfillment of the agency’s obligations under the RFA.

NMFS' small business size standard for businesses, including their affiliates, whose primary industry is commercial fishing is \$11 million in annual gross receipts. This standard applies to all businesses classified under NAICS code 11411 for commercial fishing, including all businesses classified as commercial finfish fishing (NAICS 114111), commercial shellfish fishing (NAICS 114112), and other commercial marine fishing (NAICS 114119) businesses. (50 C.F.R. § 200.2; 13 C.F.R. § 121.201).

5.1 Description of why action by the agency is being considered

The reasons why agency action is being considered are explained in Section 1.1, the “Problem Statement”.

5.2 Statement of the objectives of, and legal basis for, the proposed rule

The statement of the objectives of the proposed rule are explained in the “Problem Statement” Section 1.1 above.

Under the MSA (16 U.S.C. 1801, *et seq.*), the United States has exclusive fishery management authority over all marine fishery resources found within the EEZ. The management of these marine resources is vested in the Secretary of Commerce (Secretary) and in the regional fishery management councils. In the West Coast Region, the Council has the responsibility for preparing FMPs and FMP amendments for the marine fisheries that require conservation and management, and for submitting its recommendations to the Secretary. Upon approval by the Secretary, NMFS is charged with carrying out the Federal mandates of the Department of Commerce with regard to marine and anadromous fish.

The groundfish fisheries in the EEZ off the West Coast are managed under the Pacific Coast Groundfish FMP. The proposed action under consideration would amend Federal regulations at 50 CFR 660. Actions taken to implement regulations governing these fisheries must meet the requirements of applicable Federal laws, regulations, and Executive Orders.

5.3 A description and, where feasible, estimate of the number of small entities to which the proposed rule will apply; and a description and estimate of economic effects on entities, by entity size and industry.

All commercial and recreational groundfish participants in the EEZ off Washington, Oregon, and California managed under the Pacific Coast Groundfish FMP may be affected by this action. However, the likely impact would be to those that fish in the action area.

A detailed description of the fishery and affected entities is available in the [Stock Assessment and Fishery Evaluation document](#). This includes a description of the fishery (Chapter 1); description of management,

and economic characteristics of harvesting vessels, processors, and communities (Chapter 2); and summary of historic landings and revenue (Chapter 3).

For commercial participants, Table 7 shows the number of distinct vessels by sector potentially affected by this action, the range of vessels, and average from 2019-2024 between the latitudes of 40° 30' to 36° N. lat. As described in Section 4.3, this is the catch area that encompassed the action area. The majority of vessels participate in the OA Fixed Gear fishery. Due to confidentiality, IFQ gear switching vessels were combined with LEFG vessels.

Given the amount of proposed area to be opened, depths of the areas to be opened, and distance from ports, these values are expected to be the maximum number of vessels potentially affected by this action with the likely participants only coming from the Bodega Bay and San Francisco port areas. Looking at vessels that landed into these ports (not taking into account vessels that may be homeported in this or other locations), the potential number of impacted vessels declines substantially.

Table 7. Number of distinct vessels, range of vessels, and average vessels for PacFIN catch area 1b (40° 10 to 36° N. la) in total and only from the Bodega Bay/San Francisco port groups, 2019-2024.

Fishery Sector	All Port Groups			Bodega Bay/San Francisco		
	Distinct Vessels	Range	Average	Distinct Vessels	Range	Average
Bottom Trawl	17	8-11	10	4	<3	3
LE Fixed Gear DTL	35	11-23	17	8	<5	3
Limited Entry Sablefish a/	32	16-21	19	9	4-6	5
OA Fixed Gear	445	99-177	149	178	37-71	59

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

All directed OA vessels are assumed to be small entities, with ex-vessel revenues for all landings (groundfish and non-groundfish) averaging \$88,386. In 2024, 25 of the 28 LEFG permits associated with vessels that would likely be subject to this action (required to fish in the primary or LE trip limit fisheries) were owned by small entities (self-reported). For gear switching vessels likely affected by this action, all reported as small entities in 2024.

Note that there is not a strict one-to-one correlation between vessels or permits and entities, therefore, some persons or firms likely have ownership interests in more than one vessel or permit. Given these factors, the actual number of entities regulated by this action could be lower than the preceding estimates.

For recreational participants, as described in Section 4.3, it is likely that the participants impacted by the action would be from Bodega Bay. Only the number of angler trips are available, which is likely to overestimate the number of participants as multiple angler trips could occur from an individual in the time frame. The maximum number of participants that may therefore be affected would be 419 (total of angler trips in 2023, Table 4), but is likely substantially lower given the likelihood of multiple angler trips per participant in the counts. All recreational participants are assumed to be small entities.

5.4 An explanation of the criteria used to evaluate whether the rule would impose “significant” economic effects.

The criteria used to evaluate this rule are disproportionality and profitability.

Given that the proposed action is opening areas to fishing with the exception of 2.5 sq. mi. of the bottom contact EFHCA within the Non-Trawl RCA that will be closed to non-bottom contact gears, there are no anticipated significant economic effects that would disproportionately impact small entities or affect their profitability. The PPA would increase opportunity overall.

5.5 An explanation of the criteria used to evaluate whether the rule would impose effects on “a substantial number” of small entities.

While this action would apply to the entirety of all entities fishing groundfish off the U.S. West Coast, and the majority of those entities are considered small entities, this rule is expected to have an impact on a minimal number of small entities given its limited geographic scope and the limited anticipated effort shift into the area.

5.6 A description of, and an explanation of the basis for, assumptions used.

Section 5.3 describes the data sources and methods used to determine the population of potential affected entities and those that would classify as small entities. Overall, fishing participation levels can change over time, leading to uncertainty in the number of affected entities. However, it is likely that the estimates provided are representative of the potential affected parties.

5.7 Reporting and recordkeeping requirements

There are no reporting or recordkeeping requirements associated with this action.

5.8 Relevant Federal rules that may duplicate, overlap or conflict with the proposed rule:

There are no relevant federal rules that duplicate, overlap, or conflict with the proposed rule.

5.9 A description of any significant alternatives to the proposed rule that accomplish the stated objectives of applicable statutes and that minimize any significant economic impact of the proposed rule on small entities

No additional alternatives were considered by the Council for full evaluation in this EA/RIR/RFAA/MSA.

5.10 Certification statement by the head of the agency.

To be completed after final Council action.

6 Magnuson-Stevens Act and FMP Considerations.

6.1 Substantive Authority for Action

This action is consistent with the authority provided in the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) Section 303(b)(2)(A) such that an FMP may “designate zones where, and periods when, fishing shall be limited, or shall not be permitted, or shall be permitted only by specified types of fishing vessels or with specified types and quantities of fishing gear [...]”.

6.2 Magnuson-Stevens Act National Standards

Below are the 10 National Standards (NS) as contained in the 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 NS 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 off the coast of California.

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 related to fishing allocations or privileges outside of those that fall within the scope of No Action, which are 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 NS 5. Alternative 1, the PPA, would result in more efficient management of groundfish fisheries by creating fewer overlapping management 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 Alternative 1 better meets NS 7. 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. The PPA would meet NS 7 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, the PPA, 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 those associated with No Action, which are 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 those associated with No Action, which are described in the 2025-2026 Harvest Specifications EA.

6.3 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 Pacific Coast Groundfish 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.

7 Preparers and Persons Consulted

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