

DRAFT
**Environmental Assessment/Regulatory Impact Review/
Regulatory Flexibility Analysis/MSA Analysis
for a Proposed Amendment
to the Pacific Groundfish Fishery Management Plan for
Non-Trawl Sector Area Management Measures**

SEPTEMBER 2022

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Abstract: This draft environmental analysis and proposed measures were developed to provide fishery access to areas that are currently closed to groundfish fishing inside the Non-Trawl Rockfish Conservation Area (NT_RCA) and the East and West Cowcod Conservation Areas (CCAs). The proposed actions would increase the overall potential economic value of the groundfish fishery and help diversify fishing strategies when there are restrictive opportunities in other groundfish and non-groundfish fisheries. These actions would provide a more stable, year-round fishing opportunity, expand opportunities to supply seafood, and increase potential financial benefit to fishermen, communities, and the infrastructures they support. The proposed actions include moving or modifying the existing NT_RCA, allowing groundfish fishing inside the NT_RCA using only select gears that minimize bottom contact, removal of the CCAs, the development of new closed areas that may restrict some fishing activity, and the development of a block area closure tool for preseason or inseason bycatch management.

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List of Acronyms and Abbreviations

Acronym or Abbreviation	Meaning	Acronym or Abbreviation	Meaning
ACL	annual catch limit	ITS	Incidental Take Statement
ACT	annual catch target	MSA	Magnuson-Stevens Fishery Conservation and Management Act
AMP	adaptive management plan	MMPA	Marine Mammal Protection Act
BAC	Block Area Closure	NEPA	National Environmental Policy Act
CCA	Cowcod Conservation Area	NMFS	National Marine Fishery Service
CDFW	California Department of Fish and Wildlife	NOAA	National Oceanic and Atmospheric Administration
CEQ	Council on Environmental Quality	QP	Quota pound
CFR	Code of Federal Regulations	QS	Quota share
Council	Pacific Fishery Management Council	RCA	Rockfish Conservation Area
E.O.	Executive Order	RFA	Regulatory Flexibility Act
EA	Environmental Assessment	RFFA	reasonably foreseeable future action
EEZ	Exclusive Economic Zone	RIR	Regulatory Impact Review
EFH	essential fish habitat	VMS	vessel monitoring system
ESA	Endangered Species Act	WCGOP	West Coast Groundfish Observer Program
FMP	fishery management plan	YRCA	Yelloweye Rockfish Conservation Area
GAP	Groundfish Advisory Subpanel		
GCA	Groundfish Conservation Area		
GESW	Groundfish Endangered Species Workgroup		
GMT	Groundfish Management Team		
HAPC	Habitat area of particular concern		
IBQ	Individual bycatch quota		
IFQ	Individual fishing quota		
IOA	incidental open access		
IPHC	International Pacific Halibut Commission		

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Introduction

This draft Environmental Assessment/Regulatory Impact Review/Regulatory Flexibility Act Analysis/Magnuson-Stevens Act Analysis (EA/RIR/RFAA/MSA; hereafter referred to as the “integrated analysis”) 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 integrated analysis addresses the statutory requirements of the MSA, the National Environmental Policy Act (NEPA), Presidential Executive Order 12866, and the RFAA. An integrated analysis 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.

The proposed measures described were developed to provide access to areas that are currently closed to groundfish fishing inside the Non-Trawl Rockfish Conservation Area (NT_RCA) and the East and West Cowcod Conservation Areas (CCA). The proposed actions could increase the overall potential economic value of the groundfish fishery and help diversify fishing strategies considering restrictive opportunities in other groundfish and non-groundfish fisheries. It may provide a more stable, year-round fishing opportunity, expand opportunities to supply seafood, and increase potential financial benefit to fishermen, communities, and the infrastructures they support. The actions proposed include moving and/or modifying the existing NT_RCA and/or CCA boundaries, allowing groundfish fishing inside the NT_RCA and/or CCA using only select gears that minimize bottom contact, the development of new closed areas that may restrict some fishing activity to protect habitat, and development of a block area closure (BAC) tool for preseason or inseason management of bycatch.

1.1 Purpose and Need

Per the Council’s direction and guidance during the April 2022 Council meeting, the following purpose and need statement was modified with underlined text to include potential alternatives or suboptions that would be applicable to the non-tribal directed commercial Pacific halibut fishery (directed halibut fishery) and could mitigate fishery impacts to habitat, including essential fish habitat conservation areas (EFHCAs).

“The purpose of the proposed actions is to provide access to additional areas that are currently closed to groundfish fishing inside the Non-Trawl Rockfish Conservation Area (RCA) and Cowcod Conservation Area (CCA). In addition, the proposed actions minimize adverse effects on designated Essential Fish Habitat (EFH) and sensitive benthic habitats exposed to fishing activity, mitigate bycatch of groundfish and protected and prohibited species, and continue to protect fishery resources and their habitats.”

The non-trawl sector is presently unable to access many target species where they are most abundant. The actions are needed to provide increased access to non-overfished shelf rockfish stocks and other important target stocks that can be found in the existing non-trawl groundfish conservation areas (GCAs), thereby increasing the overall potential economic value of the groundfish and non-tribal directed commercial Pacific halibut fishery. The actions are also needed to help diversify fishing strategies in light of restrictive opportunities in other groundfish and non-groundfish fisheries, and to provide more stable, year-round fishing opportunity, expand opportunities to supply seafood, and increase potential financial benefit to fishermen, communities, and the infrastructures they support. The proposed actions include moving or modifying the existing NT_RCA, allowing groundfish fishing inside the NT_RCA using only select gears that minimize bottom contact, removal of the CCAs, the development of new closed areas that may restrict some fishing activity, and the development of a block area closure tool for preseason or inseason bycatch

management. The discretionary authorities under Section 303(b)(2)(A)&(B) of the Magnuson/Stevens Act may be used to protect species and habitats, including deep-sea corals and overfished species.”

1.2 History of this Action

In November 2019, the Pacific Fishery Management Council (Council) directed the Groundfish Advisory Subpanel (GAP) to develop the scope of action and draft a purpose and need statement for non-trawl area management during the GAP’s March and April 2020 meetings. The GAP then submitted [Informational Report 4](#) in June 2020 for Council consideration and scheduling of further scoping of the issues. In April 2021, the Council initiated a scoping process to address modifying existing the NT_RCA and developing measures to allow groundfish fishing inside the NT_RCA using only select gears that minimize bottom contact ([Agenda Item F.3, Attachment 2](#)).

At that meeting, the Council adopted a draft [purpose and need statement](#) and directed staff to analyze items related to relaxing restrictions in the NT_RCA as specified in [Agenda Item F.3 Motion 3](#) to: 1) allow limited entry fixed gear (LEFG) and/or open access (OA) fishery sectors to operate within the current boundaries of the NT_RCA with approved hook-and-line gear, and; 2) modify the current seaward and shoreward boundaries of the NT_RCA in specific management areas and allow LEFG vessels to fish within those boundaries.

In [November 2021](#) and [April 2022](#) the Council further refined the purpose and need statement as well as the range of alternatives (ROAs). The Council expanded the action to include changes to the CCA (East and West) off California, including commercial and recreational fisheries, added specific measures that would include access to the NT_RCA off Washington, and included consideration of new closed areas and consideration of changes to EFHCAs that may be exposed to fishing activity under the alternatives.

At the April 2022 meeting, the Council eliminated an alternative which would have removed the NT_RCA from 46° 16’ N. latitude to 34° 27’ N. latitude from the range of alternatives due to the lack of data available for analysis. This alternative was moved to the groundfish workload prioritization list instead, for consideration at a later date. Additionally, the Council recommended developing BACs for non-trawl gears for mitigating bycatch of other groundfish stocks, as well as protected or prohibited species. The Council also recommended that staff revise the Purpose and Need Statement to reflect the development of new area management measures that provide for the protection and conservation of sensitive habitats and considers potential measures that would be applicable to the directed halibut fishery.

While not directly a part of the proposed action, during the June 2022 Council meeting in Vancouver, WA, the [Council recommended](#) a management measure that allows limited use of non-bottom contact hook-and-line gear inside the NT_RCA and defines the allowable gear (Agenda Item F.6, Exempted Fishing Permits, Harvest Specifications, and Management Measures for 2023-2024 Fisheries – Final Action). The measure is intended to be implemented on January 1, 2023. This information is incorporated into this analysis to provide the description of the measure, the allowable gear, and how it relates to this action. During the meeting, the Council also provided guidance to staff that Alternative 4 that was developed off Washington should remain in the document as part of the range of alternatives but not further analyzed at this time. Therefore, we did not include maps or analysis for Alternative 4.

This document provides a description of the current range of alternatives with a preliminary impact analysis to assist the Council in the selection of preliminary preferred alternatives. We include maps that will assist the Council and the public to see the current area management measures available (i.e., NT_RCA, yelloweye rockfish conservation areas [YRCAs], EFHCAs, and CCAs) as well as proposed areas that would be opened under all alternatives and new closed areas. Additionally, we provide maps and some statistics

that show the overlap between the NT_RCA and the CCA with EFHCAs and habitat substrate that may be exposed to fishing if portions of the NT_RCA are removed and if the CCA is repealed.

1.3 Description of Management Area

Generally, the action area is the Pacific Coast of the United States Exclusive Economic Zone (EEZ), primarily seaward of Washington, Oregon, and California state territorial waters (3 nautical miles from shore; herein referred to as “state waters”), with some exceptions. The EEZ and state waters can be seen in Figure 1. Some areas within the EEZ are not considered part of the action area because direct and indirect impacts are not anticipated from any of the alternatives described in Chapter 2. Because the Council relies on depth-based closures that do not necessarily align with the EEZ, there are some areas of the NT_RCA and the CCAs that are closed under Federal regulation and areas inside state waters that are closed under state regulation through conforming state actions. This action only includes changes in the EEZ, though the states may take conforming action to adopt similar modifications to those contemplated here.

The Council and NMFS do not intend for any of the action alternatives described in Chapter 2 to revise state-issued regulations for state-managed species in state waters. Additionally, the Council and NMFS do not intend for any of the action alternatives described in Chapter 2 to apply to tribal fisheries in usual and accustomed fishing areas off Washington.

1.4 Current Area-based Management Tools

The Council has several different management tools that are based on closing defined areas off to specific fishing activities (i.e., gear types, sectors) to mitigate impacts to groundfish, protected species, or habitat. This section provides an overview of the two main area-based management tools applicable to non-trawl fisheries that are proposed for change under this agenda item (NT_RCA and CCA) as well as two other area-based tools that are used for mitigating impacts to certain groundfish species (YRCAs) and habitat (EFHCAs).

1.4.1 Non-Trawl Rockfish Conservation Area

The NT_RCA was initiated as part of an [emergency rule in January 2003](#) to mitigate impacts to overfished groundfish species (Section 6.8 of the Groundfish Fishery Management Plan (FMP)). As of July 2022, with one exception, the groundfish species that were the main driver for creation of the NT_RCA have been rebuilt. The only species currently under a rebuilding plan is yelloweye rockfish and, based on the most recent stock assessment, it is projected to be rebuilt by 2029. Additionally, while the NT_RCA was not designed to mitigate impacts to habitat, it is likely this closure has had a positive impact on habitat.

The NT_RCA is a coastwide, contiguous area bounded by specific latitude and longitude coordinates that approximate depth contours along the West Coast continental shelf and around the islands off California (Figure 1).¹ NT_RCA boundaries are not consistent along the coast, varying by management area with some portions in state waters. At present, the NT_RCA covers approximately 13,651 sq. mi. of the West Coast continental shelf, where it largely prohibits Directed OA, LEFG and individual fishing quota (IFQ) gear switching fishing operations from fishing on groundfish stocks, mainly midwater and shelf rockfish stocks.

¹ NT_RCA coordinates that approximate depth contours specified at [CFR 50 §§ 660.71-660.74](#).

The depth range covered by the NT_RCA varies by management area. Washington has the widest depth closure range, from 0 to 100 fm, whereas the area south of $34^{\circ} 27'$ N. lat. has the narrowest closure range, from 100-150 fm. However, as shown in Table 1, the depth range does not necessarily equate to area coverage as shelf width varies along the coast. For example, just south of Cape Mendocino, CA, the NT_RCA is approximately 0.75 mile wide whereas at Pt St. George, CA, the NT_RCA is approximately 10 miles wide. These two geographic points are within the same management area, approximately 90 miles apart.

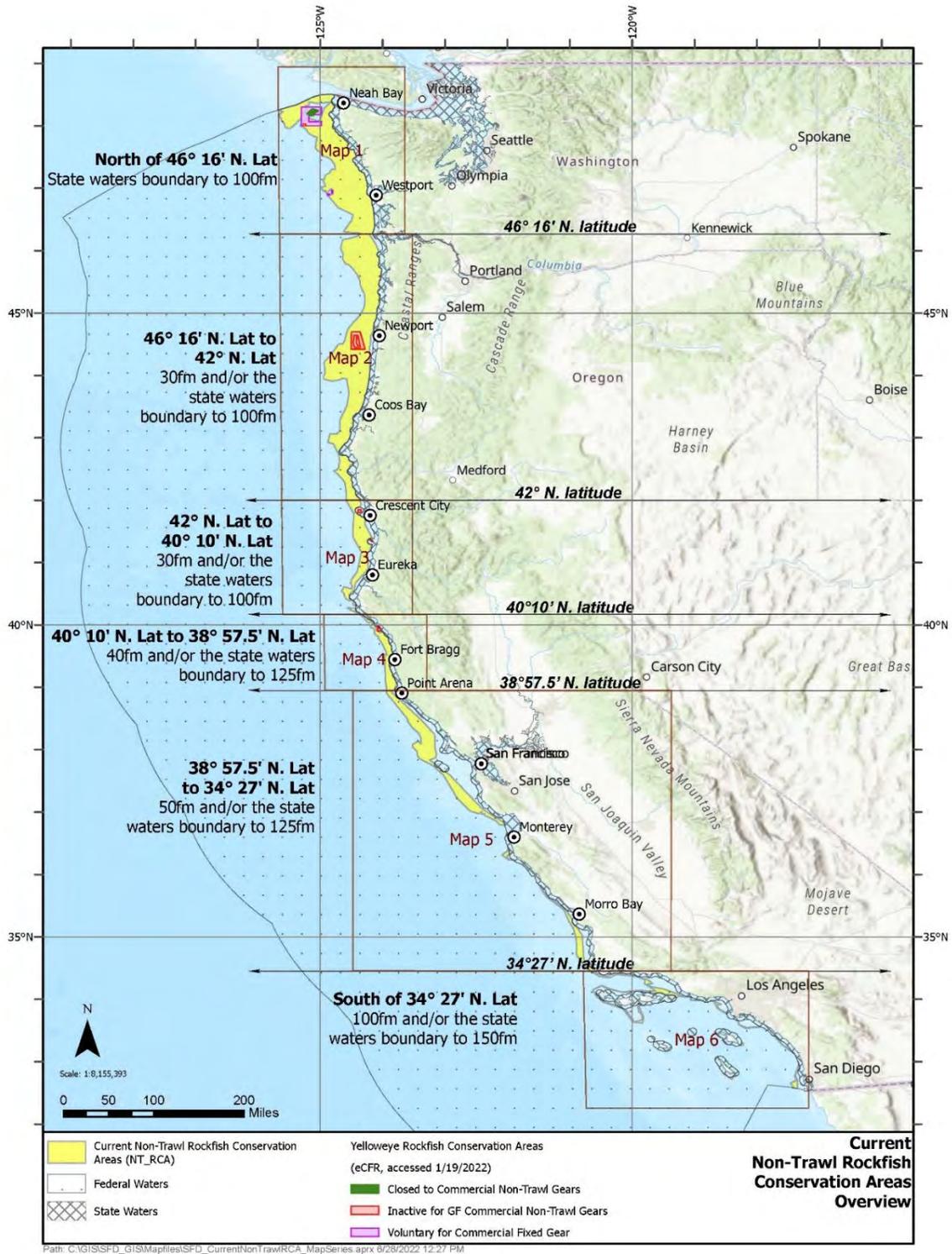


Figure 1. Current NT_RCA Boundary by management area

Table 1. Non-trawl management areas and the current (2022) NT_RCA boundaries.

Management Area	Current NT_RCA boundaries a/	Approximate Area of NT_RCA (sq mi)	Map Area
North of 46°16' N. lat.	Shoreline (0 fm) to 100fm	3,615	1
46°16' N. lat. to 42° N. lat. b/	30 fm to 100 fm	4,970	2
42° N. lat. to 40°10' N. lat. b/	30 fm to 100 fm	878	3
40°10' N. lat. to 38°57.5' N. lat.	30 fm to 125 fm	459	4
38°57.5' N. lat. to 34°27' N. lat.	50 fm to 125 fm	1,904	5
South of 34°27' N. lat.: c/	100 fm to 150 fm	460	6

a/ Current NT_RCA boundary coordinates at 86 Federal Register 14379, see Tables 2 & 3 -coordinates at §§ 660.71-660.74; the shoreward boundary of the NT_RCA will be the designated fathom line or the state waters boundary, whichever is more seaward.

b/ Between 46°16 N. lat. and 40°10' N. lat., 30 to 40 fm fishing is only allowed with hook-and-line gear except bottom longline and dinglebar (§660.11), however this exception will be removed under the forthcoming 2023-2024 Harvest Specifications – intended to be effective Jan 1, 2023.

c/ Also applies around islands.

1.4.2 Cowcod Conservation Area

The Cowcod Conservation Area (CCA) is composed of two distinct areas- the Western and Eastern CCA (Figure 2). In 2001, both CCAs were first established in Federal regulations as an overfished species rebuilding measure. They were then formally incorporated into the FMP (Section 4.5.4.6) via Amendment 16-3 and established in Federal regulation in 2005 to reduce the bycatch of cowcod taken incidentally in all commercial and recreational fisheries for groundfish. Boundaries of the CCA have not changed since their implementation.

Within the CCA, recreational and commercial vessels are prohibited from fishing outside of 40 fathoms from the islands. Similar to the NT_RCA, the species that caused the implementation (i.e., cowcod) was declared rebuilt in 2019 and while the CCA was not designed for habitat mitigation, it has also resulted in habitat protection for these areas for nearly two decades. [Agenda Item G.6.a, Supplemental CDFW Report 1, June 2021](#) notes that the current boundaries of the CCA “include a considerable portion of the Southern California Bight, and many species of healthy fish stocks live there that could be accessed if the CCAs are repealed.”

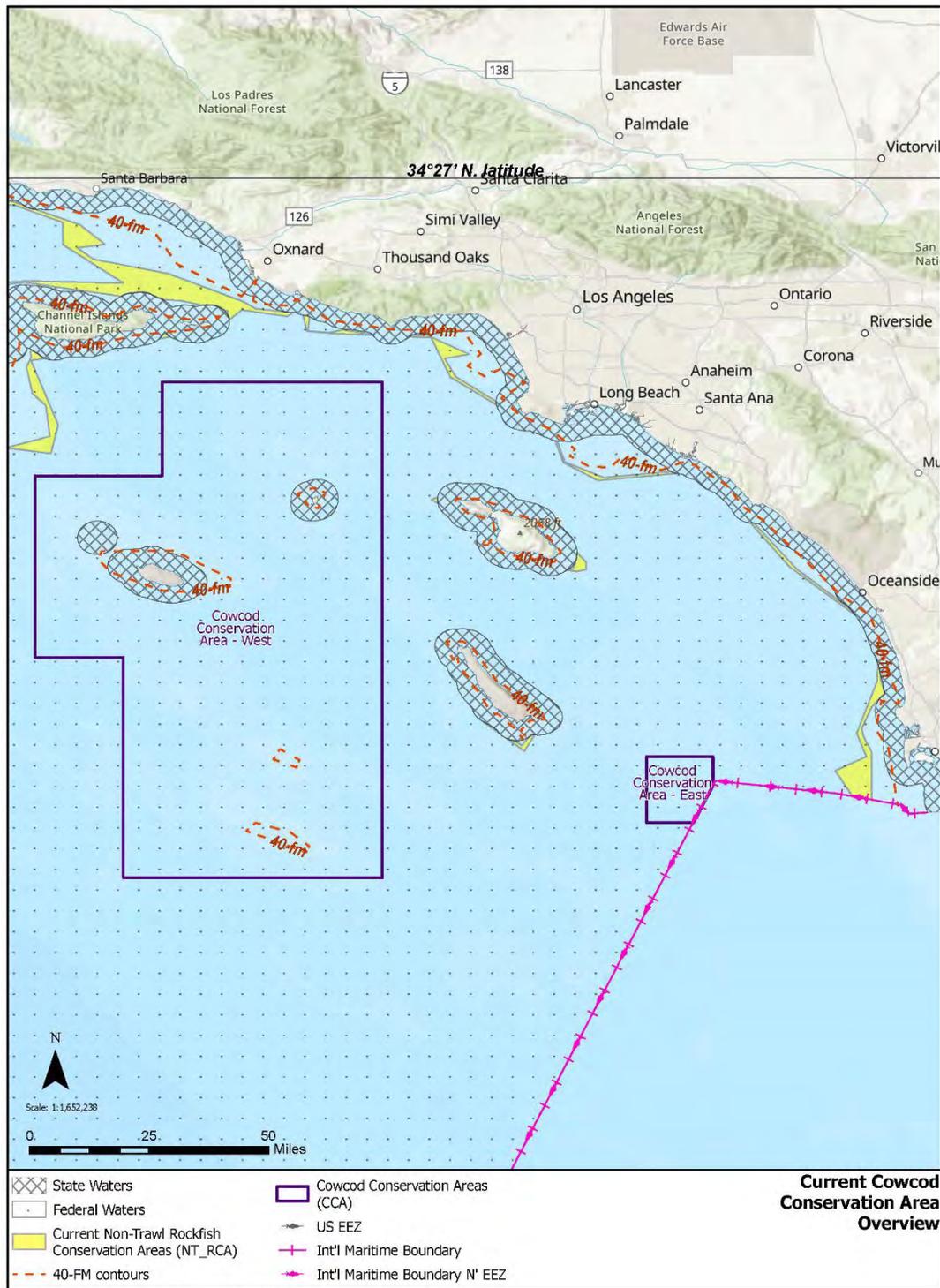


Figure 2. Western and Eastern CCA Boundaries

1.4.3 Yelloweye Rockfish Conservation Areas

YRCAs were first established via *Federal Register* notice in 2003 and then formally established in the groundfish FMP and Federal regulation in 2005 to assist in the conservation and rebuilding of yelloweye rockfish as an overfished species rebuilding measure. While the primary purpose for these closures is yelloweye protection, they may also provide additional conservation benefits to protect other depleted species.

The first YRCA to be established was the “C-Shaped” North Coast Recreational YRCA off the north Washington coast for recreational fisheries in 2004. A YRCA has been in place on Stonewall Bank off Oregon since 2006 and was expanded under the 2009-2010 biennial specifications ([2009-2010 Final Environmental Impact Statement](#)); currently, the Stonewall Bank YRCAs only prohibit recreational fishing for groundfish and Pacific halibut in the area. The North Coast Commercial YRCA was implemented in 2007 and fixed gear vessels have been prohibited from fishing in this area since that time. The South Coast and Westport Recreational YRCAs were developed during the 2007-2008 harvest specifications. In addition, the Council developed the salmon troll YRCA off Washington in the southeast corner of the North Coast Recreational YRCA that only prohibits salmon trolling at the same time ([2007-2008 Final Environmental Impact Statement](#)). In 2008, four YRCAs (Point St. George, South Reef, Reading Rock, and Point Delgada North & South) were adopted as management tools in the 2009-2010 biennial specifications. However, these area management measures have never been implemented in California. Some of these YRCAs occur either partially or wholly in state waters and would require state action to be in effect.

Under the 2021-2022 groundfish specifications package, the South Coast and Westport Offshore YRCAs off Washington were re-opened to allow for year-round recreational fishing for groundfish and Pacific halibut. However, the commercial fixed gear fisheries are still asked to voluntarily avoid these areas to prevent impacts to yelloweye rockfish.

Figure 3 through Figure 6 show the YRCAs available to the Council in three general categories: 1) YRCAs that are closed to commercial groundfish non-trawl gear; 2) YRCAs that are areas to be voluntarily avoided by commercial fixed gear fishermen; and 3) YRCAs that are available, but not active, for commercial groundfish non-trawl gear. Only one YRCA is currently active for the fisheries affected by this action, the North Coast Commercial YRCA (Figure 3). This YRCA is located outside of the NT_RCA and would not be affected by any of the proposed alternatives. Also, it is important to note that the Stonewall Bank YRCA is within the boundaries of the NT_RCA and currently not listed as an available YRCA for commercial non-trawl gear; it is only available to recreational gear. If the NT_RCA were opened in this area in the future, then this YRCA could be incorporated into the Federal regulations for commercial LEFG and OA fisheries as an available mitigation measure to protect yelloweye rockfish. Note that no YRCAs exist south of 38° 57.5' N. lat. as that area is south of the primary range of yelloweye rockfish.

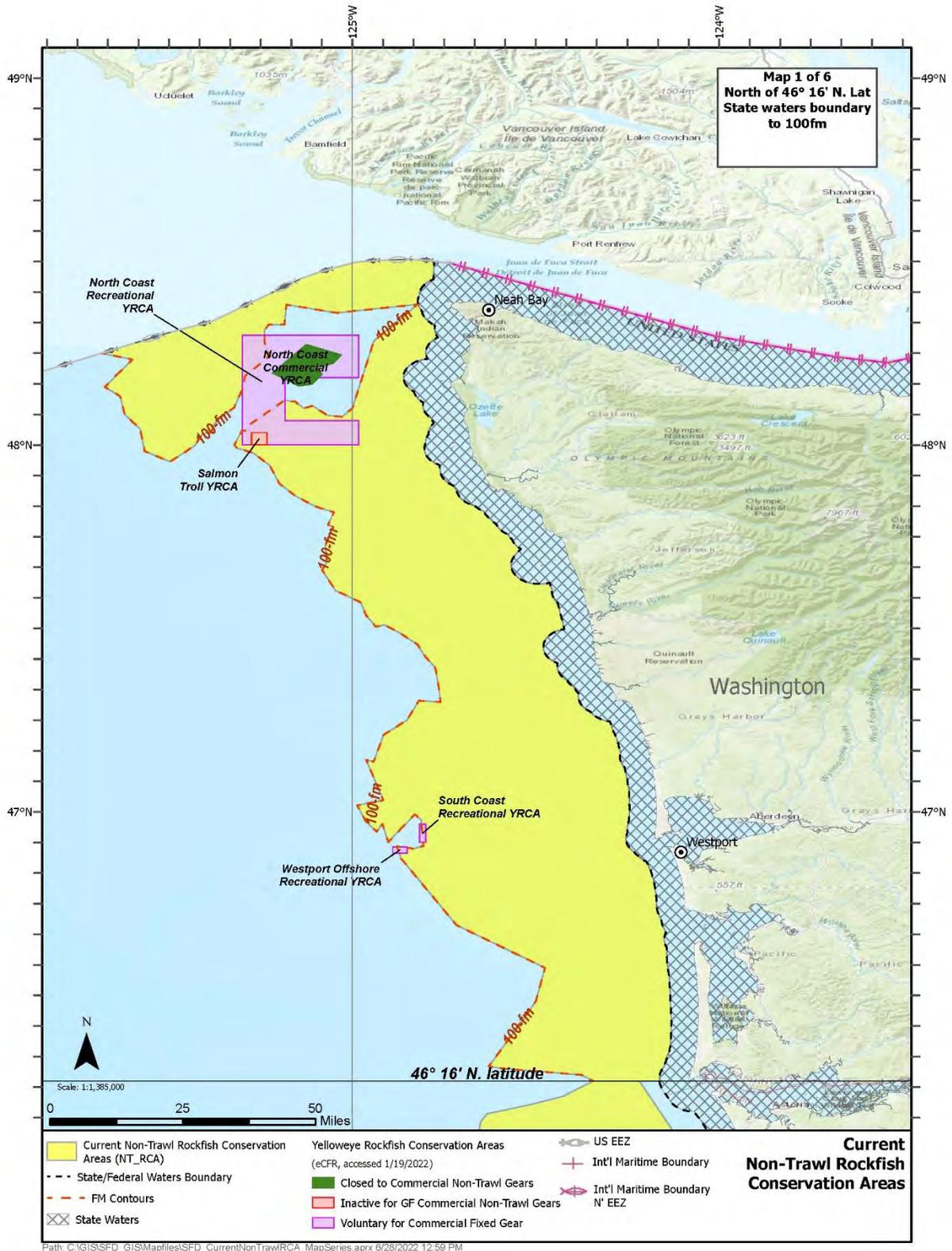


Figure 3. Current NT_RCA boundary and YRCAs available in regulation off Washington



Figure 4. Current NT_RCA boundary and YRCAs available in regulation off Oregon from 42° to 46° 16' N. lat.

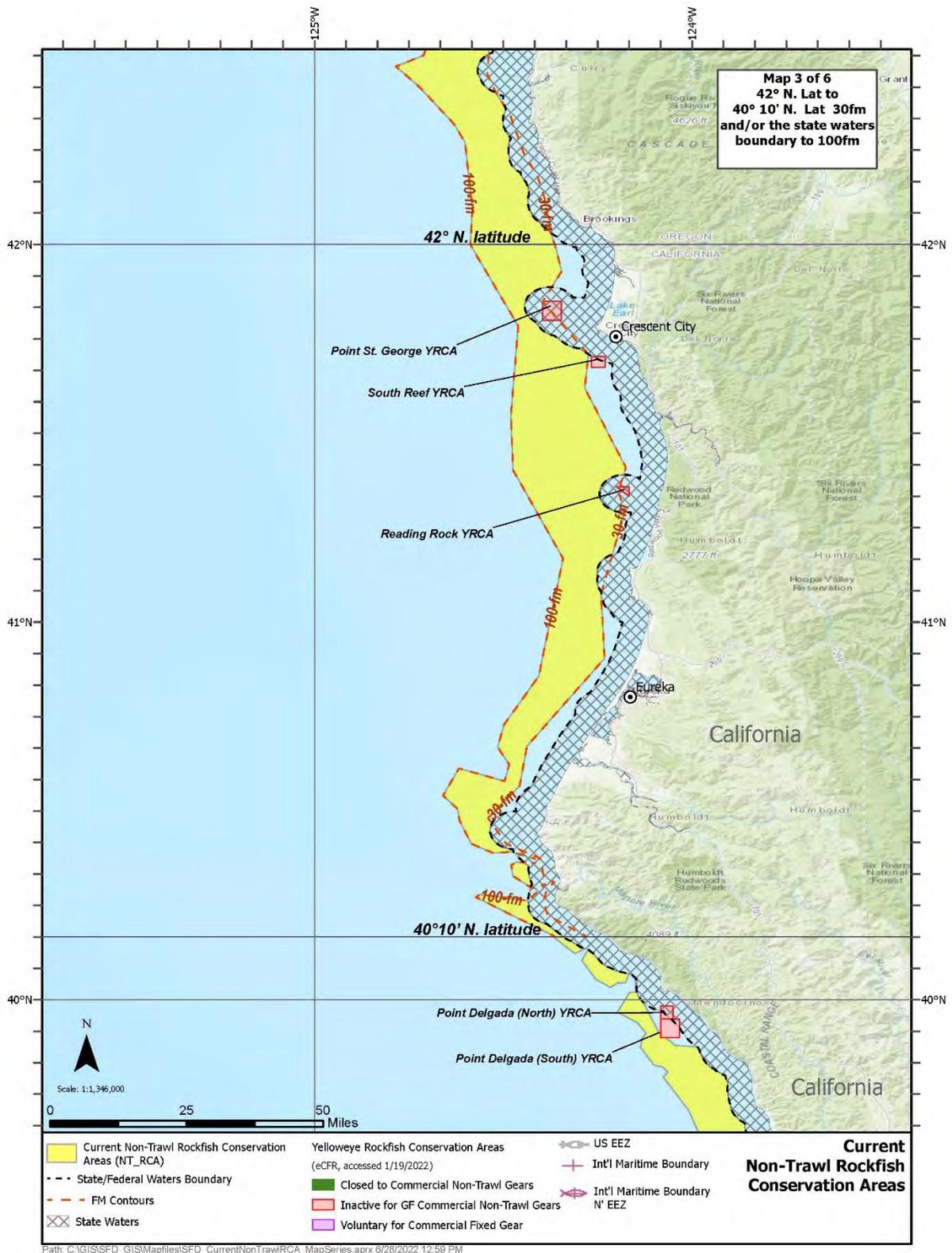


Figure 5. Current NT_RCA boundary and YRCAs available in regulation off California from 42° to 40° 10' N. lat.

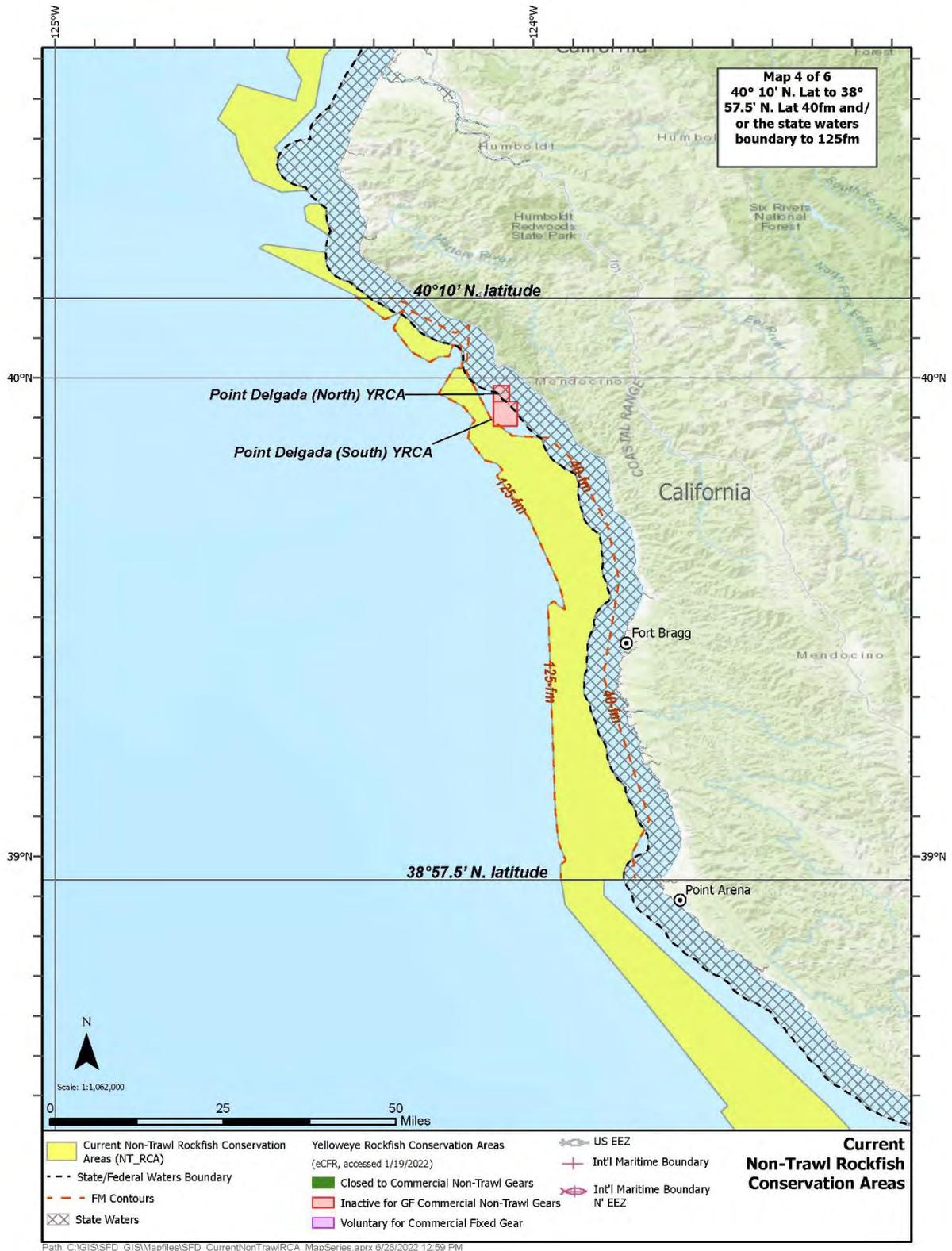


Figure 6. Current NT_RCA boundary and YRCAs available in regulation off California from 40° 10' to 38° 57.5' N. lat.

1.4.4 Essential Fish Habitat Conservation Areas (EFHCAs)

The Council has a primary tool available for use to mitigate habitat impact, EFHCAs. EFHCAs are areas closed to certain types of fishing for the purpose of conserving and protecting designated EFH. The Council has identified and created these discrete area closures starting in 2005 to mitigate the adverse effects of fishing on groundfish EFH ([FMP Section 6.86](#)), established under [Amendment 19](#).

There are two types of EFHCAs that are currently in place on the West Coast- bottom trawl and bottom contact. Bottom trawl fishing is prohibited in EFHCAs² defined at 50 CFR (Code of Federal Regulations) 660.112(a)(5)(v) and 50 CFR 660.112(a)(5)(vi) and were most recently assessed during Amendment 28. The non-trawl fisheries under consideration in this package would be permitted to fish in bottom trawl EFHCAs if the area were exposed to non-trawl fishing under an Alternative (e.g., if an NT_RCA boundary change were to newly expose part of a bottom trawl EFHCA to non-trawl gear). Bottom contact gear as defined at § 660.11 is prohibited in the following EFHCAs (defined at §§ 660.78 and 660.79): Thompson Seamount, President Jackson Seamount, Cordell Bank (50-fm (91-m) isobath), Harris Point, Richardson Rock, Scorpion, Painted Cave, Anacapa Island, Carrington Point, Judith Rock, Skunk Point, Footprint, Gull Island, South Point, and Santa Barbara and deeper than 500-fm (914-m), within the Davidson Seamount. Bottom contact EFHCAs would be opened only to non-bottom contact gears (e.g., troll gear). In other words, if a bottom contact EFHCA were exposed through a boundary change to the NT_RCA, pot or longline gear would not be allowed to be fished in that area. There are only a select number of bottom contact EFHCAs currently defined in regulation and were last looked at during Amendment 19. The Council is expected to take up a holistic view of EFHCAs during the next required review process which is estimated to be sometime in 2025. However, as described in Section 2.3, the Council is considering adding additional EFHCA designations in certain bottom trawl EFHCAs to provide continued habitat protection from non-trawl fishing for select areas. In those considerations, the Council may want to look at the proposed substrate types that may be opened to fishing activity and what elements within current bottom trawl EFHCAs should continue to be protected (see section 3.7.2.1 for more discussion and maps).

1.5 Fishery Sector Overview

Within the broader non-trawl sector, there are multiple fishery sectors that may be affected by this action. This section attempts to characterize each of those sectors and provide an overview of key management measures that regulate those sectors.

1.5.1 Limited Entry Fixed Gear Fishery Sector

To fish in the LEFG sector, vessels are required to be registered to an LEFG permit. Each LEFG permit has a gear endorsement which designates the allowable gear type(s), longline or pot/trap ([§660.25\(3\)\(ii\)](#)), that can be used by the vessel. Meaning, if an LEFG vessel is to harvest the LEFG trip limit for a particular species or complex, it must use the gear for which it is endorsed. Specific management measures for the

² Olympic 2, Biogenic 1, Biogenic 2, Quinault Canyon, Grays Canyon, Willapa Canyonhead, Willapa Deep, Biogenic 3, Astoria Deep, Astoria Canyon, Nehalem Bank/Shale Pile, Garibaldi Reef North, Garibaldi Reef South, Siletz Deepwater, Daisy Bank/Nelson Island, Newport Rockpile/Stonewall Bank, Hydrate Ridge, Heceta Bank, Deepwater off Coos Bay, Arago Reef, Bandon High Spot, Rogue Canyon, and Rogue River Reef, Brush Patch, Trinidad Canyon, Mad River Rough Patch, Samoa Deepwater, Eel River Canyon, Blunts Reef, Mendocino Ridge, Delgada Canyon, Tolo Bank, Navarro Canyon, Point Arena North, Point Arena South Biogenic Area, The Football, Gobbler's Knob, Point Reyes Reef, Cordell Bank/Biogenic Area, Rittenburg Bank, Farallon Islands/Fanny Shoal/Cochrane Bank, Farallon Escarpment, Half Moon Bay, Pescadero Reef, Pigeon Point Reef, Ascension Canyonhead, South of Davenport, Monterey Bay/Canyon, West of Sobranes Point, Point Sur Deep, Big Sur Coast/Port San Luis, La Cruz Canyon, West of Piedras Blancas State Marine Conservation Area, East San Lucia Bank, Point Conception, Hidden Reef/Kidney Bank (within Cowcod Conservation Area West), Catalina Island, Potato Bank (within Cowcod Conservation Area West), Cherry Bank (within Cowcod Conservation Area West), Cowcod EFHCA Conservation Area East, and Southern California Bight.

LEFG sector are defined at [50 CFR subpart E](#) with LEFG groundfish trip limits found under the same subpart in Table 2 [North](#) and [South](#).³ There are two fisheries within the LEFG sector:

1. LEFG sablefish primary (tier) fishery, which is managed with tier limits (§660.25(b)(vi)(A)) rather than cumulative trip limits (§660.231)
2. LEFG trip limit fishery, which is managed by cumulative trip limits.⁴

In addition to endorsed longline and pot gear, LEFG vessels can fish with non-trawl “open access gear to target groundfish, such as vertical hook-and-line” ([§660.11](#)⁵, [§660.330 \(b\)](#)). For clarity, OA gear is defined under §660.11 as “all gear types except 1) longline or trap (or pot) gear fished with a vessel that has a limited entry permit affixed with a gear endorsement for that gear 2) Groundfish trawl.” However, if an LEFG vessel switches to an OA gear when fishing, or only fishes OA gear on a trip, crossover provisions apply ([§660.60\(h\)\(7\)](#)). This means that if vessels registered to an LEFG permit fish with OA gear at any time, they would be subject to the lower, more restrictive trip limit. In most cases, this would be the OA trip limits ([§660.230 \(b\)\(2\)](#)). In select situations, if the OA trip limit is higher than the LEFG limit, LEFG vessels would be restricted to the LEFG trip limit([§660.60\(h\)\(7\)\(ii\)](#)).

Regardless of the gear type used by a vessel registered to an LEFG permit, any groundfish retained while using OA gear and/or during a crossover trip would count against the LEFG trip limit for that vessel in the designated period ([§660.60\(h\)\(7\)\(ii\)\(A\)](#)). Finally, vessels are not allowed to retain two separate (i.e., LEFG and OA) trip limits (§660.60(h)(7)(ii)(A)) on the same trip. For example, if an LEFG vessel targets sablefish using its endorsed gear (e.g., longline) and then switches to OA gear (e.g., hook-and-line gear) to target yellowtail rockfish on the same trip, the vessel could only retain the OA trip limit of yellowtail and sablefish (if applicable) (§660.60(h)(7)(ii)(A)).

LEFG fishery participants are prohibited from operating within the boundaries of the NT_RCA and other specified Groundfish Conversation Areas (GCAs) and EFHCAs regardless of gear type, unless transiting (§§660.212(c) and 660.230(d)(11)(iii)) or fishing for the “other flatfish complex” in the NT_RCA (§660.330(d)(12)(iv)). Vessels may also fish within the CCA boundaries shoreward of the 40 fathom depth contour for rockfish and lingcod. Under [§660.230\(d\)](#), LEFG vessels allowed to operate “within a GCA (e.g., fishing for “other flatfish” with hook-and-line gear only) may not simultaneously have other gear on board the vessel that is unlawful to use in the [LEFG] fishery.” LEFG vessels are required to use vessel monitoring systems (VMS; [§660.14\(b\)\(1\)](#)) as well as carry an observer if selected for coverage ([§660.18](#)).

³ See [§660.11 Conservation Measures 1\(vi\)\(B\)](#)

⁴ See [Agenda Item G2, Attachment 1, June 2021](#) for a complete description of the primary tier fishery and its relationship with other fisheries, including the daily trip limit (DTL) fisheries.

⁵ Refer to open access gear in the definitions list.

Table 2. Summary of limited entry fixed gear fishery management measures in 2023 (based on Council recommendations in June 2022).

Category	Regulation
Cumulative limits	<ul style="list-style-type: none"> • Cumulative trip limits for most species, specific to geographic area (See regulations Table 2 North and South to Part 660, Subpart E). • Primary sablefish fishery managed with tier limits • Yelloweye rockfish landings prohibited coastwide • South of 40° 10' N. lat. landings of cowcod and bronzespotted rockfish are prohibited
Size limits	<ul style="list-style-type: none"> • Lingcod north of 42° N. lat. minimum size limit 22 inches total length • Lingcod south of 42° N. lat. minimum size limit 24 inches total length
Gear restrictions and definitions	<ul style="list-style-type: none"> • Longline, trap or pot marked at the surface, at each terminal end, with a pole, flag, light, radar reflector, and a buoy • Buoy used to mark gear must be marked with number clearly identifying the owner or operator of vessel • Must be attended at least once every seven days • Traps must have biodegradable escape panels <p>Fishing gear, including bottom contact gear, defined at 50 CFR § 660.11⁶</p>
Seasons	<ul style="list-style-type: none"> • Primary sablefish fishery from noon 4/1 to noon 12/31 • Permit stacking of up to 3 permits is allowed in primary sablefish fishery • Limited exemptions available for ownership limit of three limited entry sablefish endorsed permits <p>Additional seasonal restrictions may be implemented via routine action or the fishery may “close” for some species or some areas during the year through inseason action to keep landings within previously announced harvest levels.</p>
GCA: YRCA (active)	<ul style="list-style-type: none"> • North Coast Commercial YRCA (WA) closed to commercial fixed gears • North Coast Recreational YRCA (WA) is a voluntary area to be avoided by commercial fixed gears • Westport Offshore Recreational YRCA (WA) is a voluntary area to be avoided by commercial fixed gears
GCA: CCA	<p>Fishing is prohibited in CCAs with the following exceptions:</p> <ul style="list-style-type: none"> • Fishing for “Other Flatfish” with hook-and-line gear only • Fishing for rockfish, cabezon, greenling, California scorpionfish and lingcod shoreward of 40 fm
GCA: Other	<ul style="list-style-type: none"> • Farallon Islands: Commercial fishing for groundfish is prohibited shoreward of 10 fm with the following exceptions: Fishing for “Other Flatfish” with hook-and-line gear only • Cordell Bank: Commercial fishing for groundfish is prohibited in depths less than 100 fm with the following exceptions: Fishing for “Other Flatfish” with hook-and-line gear only
EHFCA	<ul style="list-style-type: none"> • Fishing with bottom contact gear is not permitted within the EEZ in the following EFHCAs (50 CFR §§ 660.78 and 660.79): Thompson Seamount, President Jackson Seamount, Cordell Banks (50-fm (91-m) isobath), Harris Point, Richardson Rock, Scorpion, Painted Cave, Anacapa Island, Carrington Point, Judith Rock, Skunk Point, Footprint, Gull Island, South Point, and Santa Barbara Island • Fishing with bottom contact gear or any other gear that is deployed deeper than 500-fm (914-m) is not permitted within the Davidson Seamount EFHCA (50 CFR § 660.79). • Fishing with bottom contact gear is not permitted in the Deep-sea Ecosystem Conservation Area (DECA), 50 CFR § 660.11).
Monitoring and Reporting	<ul style="list-style-type: none"> • VMS required in Federal waters⁷ • West Coast Groundfish Observer Program (WCGOP) observer when selected for coverage • Electronic fish tickets within 24-hour reporting required when sablefish are landed. • Logbooks

1.5.2 Open Access Fishery Sector

OA commercial fishing vessels are those that are not registered to an LE permit “which takes and retains, possesses or lands groundfish.”⁸ The OA sector is poorly delineated, as this sector is comprised of vessels fishing multiple gear types (§660.330(b)), ranging from non-groundfish trawl gear to fixed gear and includes both directed groundfish operations and incidental open access fisheries (IOA). Therefore, any vessel certified to commercially fish on the West Coast can fish under the OA trip limit regulations. Additionally, each state may have specific licensing requirements for OA vessels (e.g., state nearshore permits, salmon troll) that may further classify vessels in those states.

The following fisheries may fish under the category of OA and either target groundfish or retain groundfish incidentally:

- a. Directed Open Access⁹
- b. Incidental Open Access
 - ii. Salmon Troll
 - iii. Non-tribal Directed Commercial Pacific Halibut Fishery
 - iv. Non-groundfish trawl (pink shrimp, ridgeback prawn, California halibut, and sea cucumbers)

The OA sector has specific trip limits that, in general, are lower than LEFG trip limits; however, the OA sector can fish to those limits with a wider variety of gear types (§660.30(b)). The current OA sector management measures and regulations are found at [50 CFR 660 subpart F](#) with trip limits found in Table 3 [North](#) and [South](#) under the same subpart. OA vessels are also subject to crossover provisions (§660.60(h)(7)) though vessels cannot fish to LEFG limits without an LEFG permit.

Similar to LEFG vessels, directed groundfish OA vessels are prohibited from operating within the NT_RCA, and applicable GCAs (§660.330(d)(1-11) unless transiting (§660.33(d)(12)(I & ii)), or fishing for “other flatfish” complex (§660.330(d)(12)(iv)) with hook-and-line gear. Vessels may also fish within the CCA boundaries shoreward of the 40-fathom depth contour for rockfish and lingcod. Additionally, OA vessels are required to carry an observer when fishing groundfish in the EEZ ([§660.14\(b\)\(3\)](#)) if selected for coverage by WCGOP ([§660.18](#) and [§660.316](#)) and must also use a VMS if fishing in Federal waters ([§660.14](#)).

IOA fisheries are fisheries that do not directly fish on or target groundfish but can retain groundfish incidentally caught. These incidental fisheries include both Federal-managed and state-managed fisheries. The pink shrimp, sea cucumber, ridgeback prawn, and CA halibut fisheries are not restricted by the NT_RCA; therefore, changes to the NT_RCA would not affect their fishing operations (i.e., fishing locations, available harvest, or effort). Consequently, we eliminated these fisheries from further discussion.

⁶ Bottom contact gear means fishing gear designed or modified to make contact with the bottom. This includes, but is not limited to, beam trawl, bottom trawl, dredge, fixed gear, set net, demersal seine, dinglebar gear, and other gear (including experimental gear) designed or modified to make contact with the bottom.

⁷ When fishing in Federal waters or transiting through Federal waters with groundfish on board.

⁸ [§660.11](#) Open Access fishery means the fishery composed of commercial vessels using open access gear fished pursuant to the harvest guidelines, quotas, and other management measures governing the harvest of open access allocations (detailed in §660.55) or governing the fishing activities of open access vessels (detailed in subpart F of this part). Any commercial vessel that is not registered to a limited entry permit and which takes and retains, possesses or lands groundfish is a participant in the open access groundfish fishery.

⁹ Directed Open Access means that a fishing vessel is target fishing for groundfish under the requirements of 50 CFR 660 Subpart F, is only declared into an open access groundfish gear type or sector as defined at 50 CFR 660.13(d)(4)(iv)(A) and has not declared into any other gear type or sector. This gear definition is not yet posted in Federal regulations. It’s intended that this definition will be added for use on January 1, 2023.

Two IOA fisheries may be impacted through this action with potential modifications of the NT_RCA boundaries - salmon troll and directed halibut fishery. Salmon troll vessels are allowed to retain incidental limits of yellowtail rockfish while fishing both inside and outside the NT_RCA coastwide, lingcod while fishing in the NT_RCA north of 40° 10' N. lat., and are subject to OA trip limits when retaining groundfish on trips completely outside of the NT_RCA. Salmon troll vessels cannot participate in the salmon troll fishery within the NT_RCA and then fish in the OA groundfish fishery or retain groundfish other than lingcod or yellowtail on the same trip (660.330(d)(12)(iii)). If retaining groundfish, vessels are required to have VMS.

The directed halibut fishery is transitioning from being permitted by the International Pacific Halibut Commission (IPHC) to being permitted by NMFS and is not a limited entry fishery; however, the fishery is managed by trip limits and closure of the fishery based on attainment of the available harvest that is provided by the IPHC. The directed halibut fishery is prosecuted in the area south of Point Chehalis, WA (46°53.30' N lat.) and may incidentally catch and retain groundfish. The fishery is managed through a series of fishing periods with fishing period limits based on the directed commercial fishery allocation distributed by vessel class. In recent years the fishery has operated under 58-hour openings every other week starting the fourth week in June. The fishery is also prohibited from fishing in the NT-RCA under the Federal regulations implemented via the Northern Pacific Halibut Act of 1982 (Halibut Act; [50 CFR 300.63\(e\)\(1\)](#)) and must abide by continuous transit rules when traveling through the NT_RCA. As with salmon trollers, if the vessel retains any groundfish, they must have VMS.

Table 3. Summary of open access fishery management measures in 2023 (based on Council recommendations in June 2022).

Category	Regulation
Cumulative limits	<ul style="list-style-type: none"> ● Cumulative trip limits for most species, specific to gear type and geographic area (See regulations Table 3 North and South to Part 660, Subpart E) ● Yelloweye rockfish landings prohibited coastwide ● South of 40°10' N. lat. landings of cowcod and bronzespotted rockfish prohibited
Size limits	<ul style="list-style-type: none"> ● Lingcod north of 42° N. lat. minimum size limit 22 inches total length ● Lingcod south of 42° N. lat. minimum size limit 24 inches total length
Gear restrictions and definitions	<ul style="list-style-type: none"> ● Longline, trap, pot, hook-and-line (fixed or mobile), setnet (anchored gillnet or trammel net (south of 38° N. lat. only), spear, and non-groundfish trawl gear for: pink shrimp, ridgeback prawn, and California halibut or sea cucumbers (south of Pt. 38° 57.50' N. lat.) ● Non-groundfish trawl gear is exempt from the limited entry trawl gear restrictions; however, footrope (<19”) is prohibited in EFH closed areas. ● Fishing gear, including bottom contact gear, is defined at 50 CFR § 660.11¹⁰ ● Fixed gear <ul style="list-style-type: none"> ○ Must be marked at the surface, at each terminal end, with a pole, flag, light, radar reflector, and a buoy; vertical hook-and-line gear that is closely tended may be marked only with a single buoy of sufficient size to float the gear ○ Must be attended at least once every 7 days ○ Fishing for groundfish with set nets is prohibited in the area north of 38° N. lat. ○ Traps must have biodegradable escape panels
Seasons	Seasonal restrictions may be implemented via routine action or the fishery may “close” for some species or some areas during the year through inseason action to keep landings within previously announced harvest levels.
GCA: YRCA (active)	<ul style="list-style-type: none"> ● North Coast Commercial YRCA (WA) closed to commercial fixed gears ● North Coast Recreational YRCA (WA) is a voluntary area to be avoided by commercial fixed gears ● Westport Offshore Recreational YRCA (WA) is a voluntary area to be avoided by commercial fixed gears
GCA: CCA	Fishing is prohibited in CCAs with the following exceptions: <ul style="list-style-type: none"> ● Fishing for “Other Flatfish” with hook-and-line gear only ● Fishing for rockfish, cabezon, greenling, California scorpionfish, and lingcod shoreward of 40 fm
GCA: Other	<ul style="list-style-type: none"> ● Farallon Islands: commercial fishing for groundfish is prohibited shoreward of 10 fm with the following exceptions: Fishing for “Other Flatfish” with hook-and-line gear only ● Cordell Bank: Commercial fishing for groundfish is prohibited in depths less than 100 fm with the following exceptions: Fishing for “Other Flatfish” with hook-and-line gear only
EHFCA	<ul style="list-style-type: none"> ● Fishing with bottom contact gear is not permitted within the EEZ in the following EFHCAs (50 CFR §§ 660.78 and 660.79): Thompson Seamount, President Jackson Seamount, Cordell Bank (50-fm (91-m) isobath), Harris Point, Richardson Rock, Scorpion, Painted Cave, Anacapa Island, Carrington Point, Judith Rock, Skunk Point, Footprint, Gull Island, South Point, and Santa Barbara Island ● Fishing with bottom contact gear or any other gear that is deployed deeper than 500-fm (914-m) is not permitted within the Davidson Seamount EFHCA (§ 660.79). ● Fishing with bottom contact gear is not permitted in the DECA, (§ 660.11).
Monitoring and Reporting	<ul style="list-style-type: none"> ● VMS required in Federal waters¹¹ ● WCGOP observer coverage when vessel selected by NMFS ● Electronic fish tickets within 24-hour reporting required when sablefish are landed. ● Logbooks

1.5.3 Shorebased Individual Fishing Quota (IFQ) Gear Switching

Shorebased IFQ trawl vessels utilizing non-trawl gear (i.e., “gear switchers”) may also be impacted by this action ([§660.24\(k\)](#)). These vessels may use any legal non-trawl gear to participate in the trawl groundfish fishery but do not need fixed gear endorsements as do LEFG vessels. Gear switching vessels are required to follow the same prohibitions ([§616.212](#)) and management measures ([§660.230\(d\)](#)) in place for LEFG, including any applicable gear restrictions (§§[660.219](#) and [660.230\(b\)](#)). These vessels are subject to GCA fixed gear provisions, including the NT_RCA, when fishing with the non-trawl gear. However, gear switching vessels are subject to other provisions that are required of the Shorebased IFQ program, including 100 percent monitoring (see [660.140\(k\)](#)).

¹⁰ Bottom contact gear means fishing gear designed or modified to make contact with the bottom. This includes, but is not limited to, beam trawl, bottom trawl, dredge, fixed gear, set net, demersal seine, dinglebar gear, and other gear (including experimental gear) designed or modified to make contact with the bottom.

¹¹ When fishing in Federal waters or transiting through Federal waters with groundfish on board.

Table 3. Summary of IFQ fishery management measures for gear switching vessels in 2023 (based on Council recommendations in June 2022).

Category	Management Measure
Catch controls	Individual Bycatch Quota (IBQ) for Pacific halibut north of 40° 10' N. lat. and IFQ quota pounds are debited from IFQ vessel accounts based on any catch that is landed or discarded. "Survival credits" are provided for Pacific halibut, lingcod, and sablefish discards. Vessels are prohibited from participating in the IFQ fishery if the vessel exceeded any quota allocation for the prior year. The vessel must purchase QPs to fill the deficit from the previous year in order to fish the following year.
Landing limits	Cumulative bi-monthly landing limits (hereinafter "trip limits") for non-IFQ species and Pacific whiting outside of the primary season dates apply to each vessel. Once a vessel reaches a limit, the species or species complex can no longer be retained and sold.
Accumulation limits	The maximum number of quota share (QS) and quota pounds (QPs) an entity may control in the shorebased IFQ fishery and the maximum amount of QP in a vessel account (used and unused) are limited by accumulation limits (defined in regulation at 50 §CFR 660.111). These limits vary according to the stock or stock complex.
Adaptive Management Program (AMP) pass throughs	Ten percent of the non-whiting QS is to be reserved for the AMP and each year the QP issued for that QS is available for use in the AMP. AMP-related criteria for AMP-QP distribution has not been developed, it is issued (i.e., passed through) to permit owners in proportion to their non-whiting QS.
Carryover provision	Allows a limited amount of surplus QP or IBQ pounds in a vessel account to be carried over from one year to the next or allows a deficit in a vessel account in one year to be covered with QP or IBQ pounds from a subsequent year, up to a carryover limit. The eligible percentages used for the carryover provision may be modified during the biennial specifications and management measures process or based on a Council inseason recommendation, pending NMFS approval. Species eligible for potential issuance of surplus carryover include those where the acceptable biological catch is larger than the annual catch limit (ACL) and issuance of surplus carryover can occur up to the level where ACL = acceptable biological catch.
Monitoring and reporting	100 percent of trips in the shorebased IFQ fishery are monitored at sea by either WCGOP observers or on-board electronic monitoring, landings are tracked by electronic fish tickets and verified by catch monitors. Logbooks must be submitted that show estimated catch and discards for each haul and trip.
RCAs	Vessels harvesting IFQ stocks must abide by applicable RCA closures, which are specified by gear type. "Gear switching" vessels in the Shorebased IFQ fishery using non-trawl gear to catch IFQ QP are subject to the non-trawl RCA.
Other Groundfish Conservation Areas (GCAs)	Other GCAs exist to protect overfished species and habitat, including Essential Fish Habitat Conservation Areas (EFHCAs), a deep-water (>700 fathom) bottom trawl closure area, bottom contact closure areas, cowcod conservation areas (CCAs), and yelloweye rockfish conservation areas (YRCAs),

1.5.4 Recreational Fishery off California

While recreational fisheries are not subject to the NT_RCA described in Section 1.4.1 above, recreational vessels participating in southern California would be impacted by Alternative 3 and are therefore discussed here. Recreational vessels may be private vessels or commercial passenger fishing vessels. Currently, recreational fishing is prohibited within the CCA, except for petrale sole, starry flounder, and the other flatfish complex (as specified in 50 CFR 660.360(c)(3)(iv)). Similar to commercial vessels, recreational participants may fish within the 40 fathom depth contours when permitted for nearshore rockfish, cabezon, kelp greenling, lingcod, California scorpionfish, and shelf rockfish. State regulations also permit the

retention of California sheephead, ocean whitefish, and all greens of the genus *Hexagrammos* in this area when the rockfish-cabezon-greenling complex is open for fishing. Vessels targeting groundfish typically use hook-and-line gear such as rod and reel.

1.5.5 Applicable Gear Types

The NT_RCA is applicable to vessels utilizing any legal non-trawl gear, including fixed gears and hook-and-line gear (Table 2).

Table 4. Non-Trawl Gears Used to Catch Groundfish (directed and incidentally).

Gear	Definition	Types
Bottom Contact Gear	Gear designed, or modified, to make contact with the bottom	Includes, but not limited to: <ul style="list-style-type: none"> • Fixed gear • Set net • Dinglebar gear • Experimental gear designed/modified to make contact with the bottom
Fixed Gear	Anchored non-trawl gear	<ul style="list-style-type: none"> • Longline • Trap or pot • Set net • Stationary hook-and-line (includes vertical hook-and-line)
Hook-and-Line Gear	Gear with one or more hooks attached to one or more lines, may be stationary or trolled.	<ul style="list-style-type: none"> • Bottom longline ^{a/ b/} • Commercial vertical hook-and-line • Dinglebar • Troll gear for salmon • Non-bottom contact hook-and-line gear (groundfish troll gear and vertical hook-and-line attached to vessel/not anchored to bottom) ^{c/}

a/ Means a stationary, buoyed, and anchored groundline with hooks attached, so as to fish along the seabed. It does not include pelagic hook-and-line or troll gear.

b/ Snap gear means a type of bottom longline gear where the hook and gangion are attached to the groundline using a mechanical fastener or snap.

c/ This gear type and definition is not yet posted in Federal regulations. It's intended that it will be allowed for use on January 1, 2023.

At the June 2022 Council meeting the Council recommended that non-bottom contact hook-and-line gear types be defined; therefore, these gears are included in the table (these gears are intended to be of legal use starting on January 1, 2023). Legal non-bottom contact hook-and-line gear means stationary vertical jig gear attached to the vessel and not anchored to the bottom, and groundfish troll gear. The following requirements apply to stationary vertical jig gear: 1) must be a minimum of 50 feet between the bottom weight and the lowest fishing hook; 2) no more than 4 vertical mainlines may be used at one time with no more than 25 hooks on each mainline; and 3) no more than 100 hooks may be in the water at one time, with no more than 25 extra hooks on board the vessel.

Groundfish troll gear includes a horizontally suspended monofilament mainline attached to a troll wire. The following requirements apply to groundfish troll gear: 1) must be a minimum of 50 feet between the bottom weight and the troll wire's connection to the horizontal mainline; 2) no more than 1 mainline may be used at one time, and 3) no more than 500 hooks may be in the water at one time, with no more than 25 extra hooks on board the vessel; hooks must be spaced apart by a visible marker (e.g., floats, line wraps, colored lines splices), with no more than 25 hooks between each marker and no more than 20 markers on the mainline. Both stationary vertical jig gear and groundfish troll gear may be equipped with artificial lures and flies.

Description of Alternatives

The following sections describe the No Action (Status Quo) and the range of alternatives adopted by the Council.

2.1 No Action

The No Action Alternative would retain the current suite of GCAs (See Tables 1 through 3, [50 CFR 660.330\(d\)](#)) including Cordell Banks, CCAs, Farallon Islands, YRCAs and all rockfish conservation areas (trawl, non-trawl, non-groundfish trawl, and recreational). The non-trawl groundfish regulations are incorporated by reference, though are found in detail at [660 Subpart E](#) and [Subpart F](#). Under No Action, non-trawl groundfish and directed halibut fishing would remain prohibited in the NT_RCA.

The No Action Alternative would retain the current NT_RCA configuration coastwide from U.S./Canada border to the U.S. Mexico border to control the bycatch of overfished species and other groundfish species (see Figure 1 and Table 1). Fisheries currently subject to the restrictions of the NT_RCA are commercial groundfish vessels using non-trawl gears (Directed OA, LEFG, IFQ gear switching) and the directed halibut fishery.¹² However, based on Council action at the June 2022 Council meeting for the 2023-2024 Harvest Specifications and Management Measures, the directed open access groundfish fleet fishing off Oregon and California is allowed to access the NT_RCA when using allowable non-bottom contact gear on a declared trip and when using artificial bait. Therefore, if approved by NMFS, starting January 1, 2023 under No Action, vessels declared into the Directed OA fishery would be allowed to carry only approved non-bottom contact hook-and-line gear on-board a vessel when fishing occurs in the NT_RCA; vessels that fish in the LEFG fishery and gear switching vessels under the IFQ program would be allowed to utilize this measure only if they declared into the directed OA fishery (see Section 1.5.5 for a description of the allowable gear). In addition, vessels would be allowed to operate inside and outside the current NT_RCA boundaries (Table 1, Figure 1) on the same trip but must carry only the approved hook-and-line gear and fish with artificial bait, not switch gears during a fishing trip and must declare their intent to fish within the NT_RCA prior to departure. Bottom longline, vertical hook-and-line anchored to the bottom, and dinglebar gears would be prohibited from use in the NT_RCA. Vessels fishing in the LEFG or IFQ sector would have to declare into the OA fishery to utilize this management measure and would be subject to the lower OA trip limits. Directed halibut vessels would still operate under the same regulations and process described above in Section 1.5.2, including being restricted outside of the NT_RCA and any applicable bottom contact EFHCAs.

Under No Action, regulations relating to VMS, declaration, observer coverage, continuous transiting, etc. are not expected to change. Further, regulations that prohibit fishing inside the NT_RCA off Washington would remain in place.

In addition, No Action would retain all EFHCAs and the Deep-sea Ecosystem Conservation Area (DECA). A description of EFHCAs on the West Coast can be found in Section 1.4.4. The DECA prohibits bottom contact gear within the EEZ deeper than 3,500 m.

2.2 Alternative 1

Alternative 1: Allow non-trawl fishery vessels (directed open access and limited entry fixed gear) and vessels that use non-trawl gear in the individual fishing quota program (“IFQ gear switchers”)

¹² See discussion of exceptions in Section 1.5.2

to use approved non-bottom contact hook-and-line gear in the Non-Trawl Rockfish Conservation Area between 46°16' and the border of Mexico.

- Vertical hook-and-line gear anchored to the bottom, longline, and dinglebar gear would be prohibited for use under this measure.
- Vessels can only carry approved hook-and-line gear on-board a vessel when fishing occurs in the NT_RCA.
- Vessels shall not switch gears during a fishing trip.
- Vessels must declare their intent to fish within the NT_RCA prior to departure.
- Vessels may fish inside and outside the NT_RCA on the same trip.
- Vessels may use artificial and natural bait.

- **Suboption 1:** Limited Entry Fixed Gear (LEFG) vessels targeting groundfish to fish in the NT_RCA using approved hook-and-line gear may fish up to LEFG trip limits.

Alternative 1 continues to allow vessels declared into the directed open access fishery to use approved non-bottom contact hook-and-line gear and artificial bait inside and outside the NT-RCA as described under No Action. Other restrictions and regulations as noted under the No Action would also apply. However, under Alternative 1, LEFG and IFQ gear switching vessels could utilize non-bottom contact gear while fishing in their designated sector (i.e., not needing to declare into the open access fishery). Additionally, vessels would be allowed to use natural bait while fishing inside the NT_RCA and other potential gear configurations may be permitted. These measures would only apply in waters off Oregon and California.

Sub option 1

Alternative 1 includes a suboption that could be added to allow LEFG vessels to fish up to their LEFG limits when using the approved hook-and-line gear in the NT_RCA. LEFG trip limits would remain consistent with current regulations and continue to prohibit the retention of prohibited species (e.g., cowcod, yelloweye rockfish, etc.). Additionally, regulations relating to VMS, fishery declaration, observer coverage, continuous transiting, etc. are expected to remain in place.

Under current regulation, crossover provisions require LEFG to fish to the lower limits when fishing with OA gear. Therefore, if the Council were to allow LEFG to fish to their limits within the NT_RCA, crossover provisions ([50 CFR 660.60\(h\)\(7\)\(ii\)\(A\)](#)) would need to change.

Alternative 1, including the suboption, would require a regulatory amendment to implement the action. Regulations would be revised to include the option to allow vessels to fish inside the NT_RCA, prohibit certain gear types inside the NT_RCA, require new declaration codes for fishing inside the NT_RCA, allow a vessel to use natural bait, and allow LEFG vessels to fish up to their limits using the approved hook-and-line gear. We do not expect any changes to the groundfish FMP under this alternative and suboption.

2.3 Alternative 2

Alternative 2: Adjust the seaward boundary of the NT_RCA to 75 fathoms from 46° 16' North Latitude to 34° 27' North Latitude for both commercial groundfish and directed halibut fishing activity.

- **Suboption 1a:** Prohibit all groundfish bottom contact gear in bottom trawl EFHCAs that would otherwise be reopened under this action.
- **Suboption 1b:** Prohibit all groundfish bottom contact gear in the entire EFHCA for bottom trawl EFHCAs with small portions outside the existing non-trawl RCA seaward boundary.

- **NEW STAFF Suboption 1c:** Create a groundfish bottom contact EFHCA over the entire bottom trawl EFHCA- both in the area to be exposed and in the current NT_RCA (i.e., EFHCA areas not exposed). Some areas may overlap with state waters and require conforming action to enforce any boundaries in state waters.
- **Suboption 2:** Prohibit groundfish bottom contact gear in the area west of the Heceta Bank EFHCA.
- **Suboption 3:** Identify potential new Yelloweye Rockfish Conservation Areas that could be used to mitigate impacts to yelloweye rockfish resulting from this action, which could be implemented in biennial management measures or inseason action.

Under Alternative 2, the seaward boundary of the NT_RCA would be changed to 75 fathoms from 46° 16' N. lat. to 34° 27' N. lat. (see Figure 7 for overview). The seaward boundaries in areas to the north (off the coast of Washington; Figure 8) and south of that range (Figure 13) would not change. Overall, Alternative 2 would open 2,351 square miles to fishing with legal non-trawl groundfish and Pacific halibut gear.¹³ This action would allow vessels fishing in the Directed OA, LEFG, IFQ gear switching, and directed halibut sectors to fish in this area. Salmon troll vessels retaining groundfish in the NT_RCA would still be held to current trip limits; however, there would be additional fishing area (e.g., from 75-100 fm or 75-125 fm) where salmon troll vessels would be subject only to OA trip limit regulations as currently allowed outside the NT_RCA. Vessels would continue to be subject to any bottom contact EFHCA restrictions (i.e., Cordell Bank (50-fm (91-m) isobath)) or other GCAs (i.e., Cordell Banks) in areas that are exposed by adjustment of the boundary; however, vessels *would* be allowed to fish in areas of bottom trawl EFHCAs that are exposed that are not otherwise closed to groundfish fishing.

¹³ This statistic includes 62.33 sq. mi. that would remain closed to groundfish fishing in the portion of the Cordell Bank GCA that overlaps with the proposed area to be opened under Alternative 2.

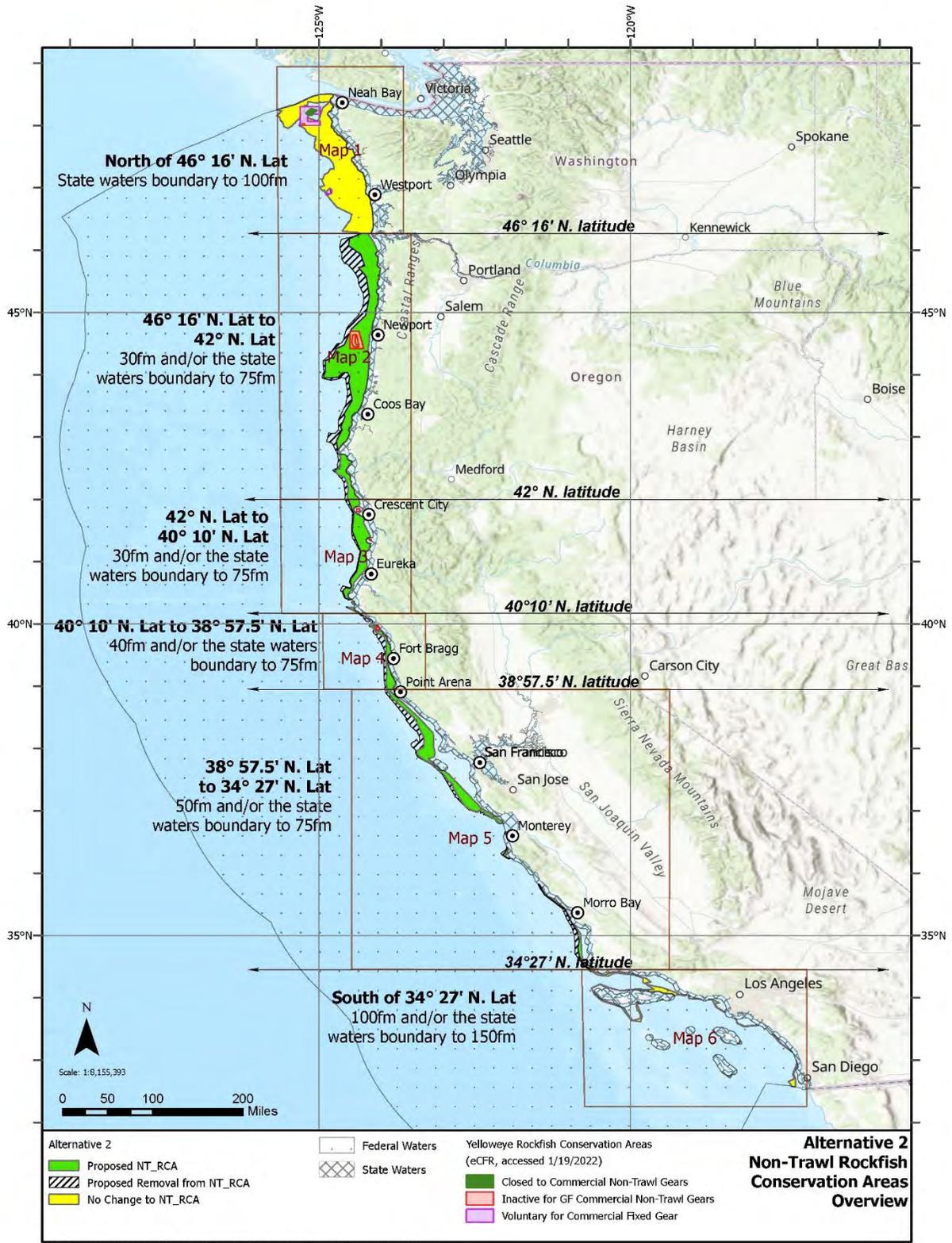


Figure 7. Overview of Alternative 2

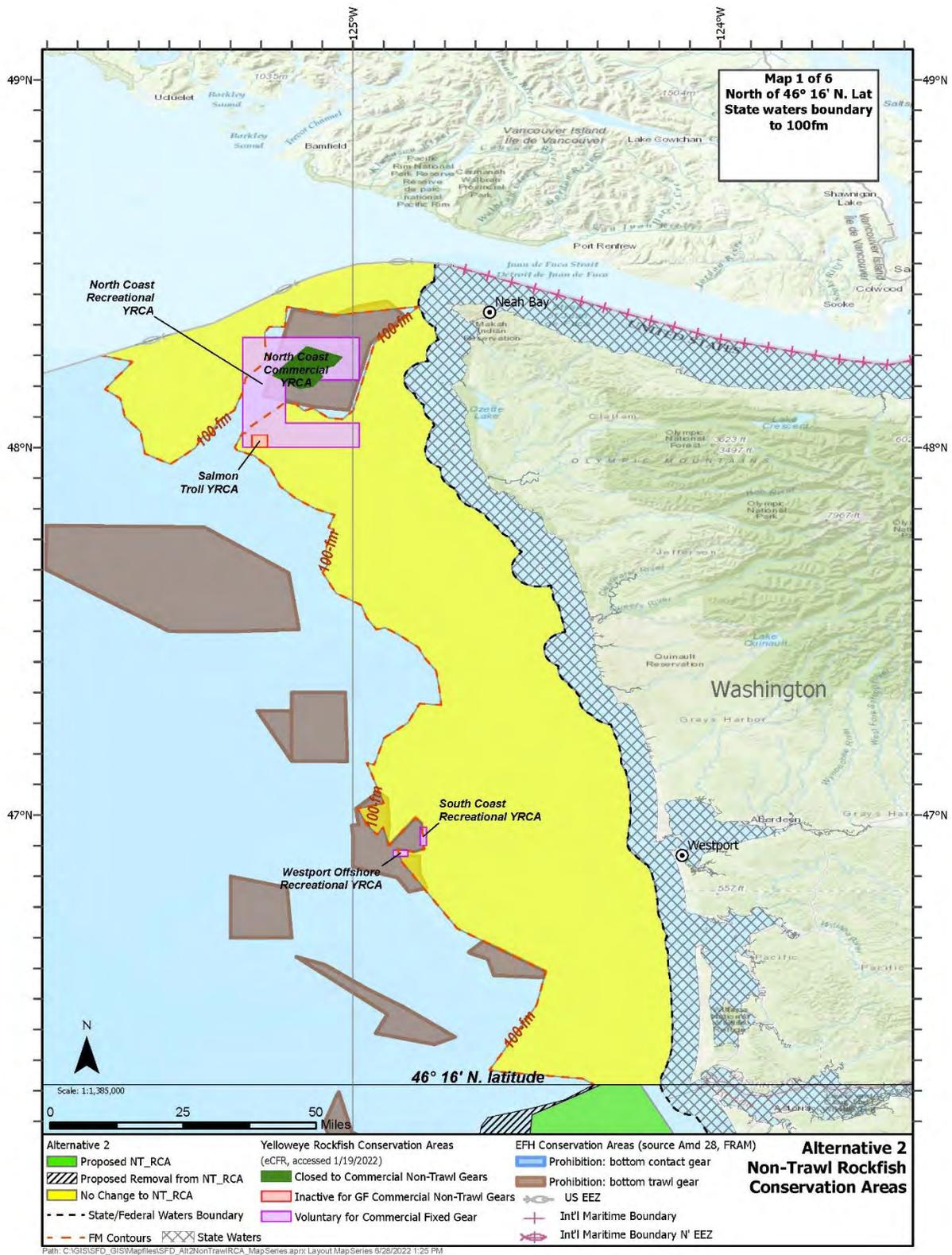


Figure 8. Alternative 2- Off Washington (No Changes Proposed)

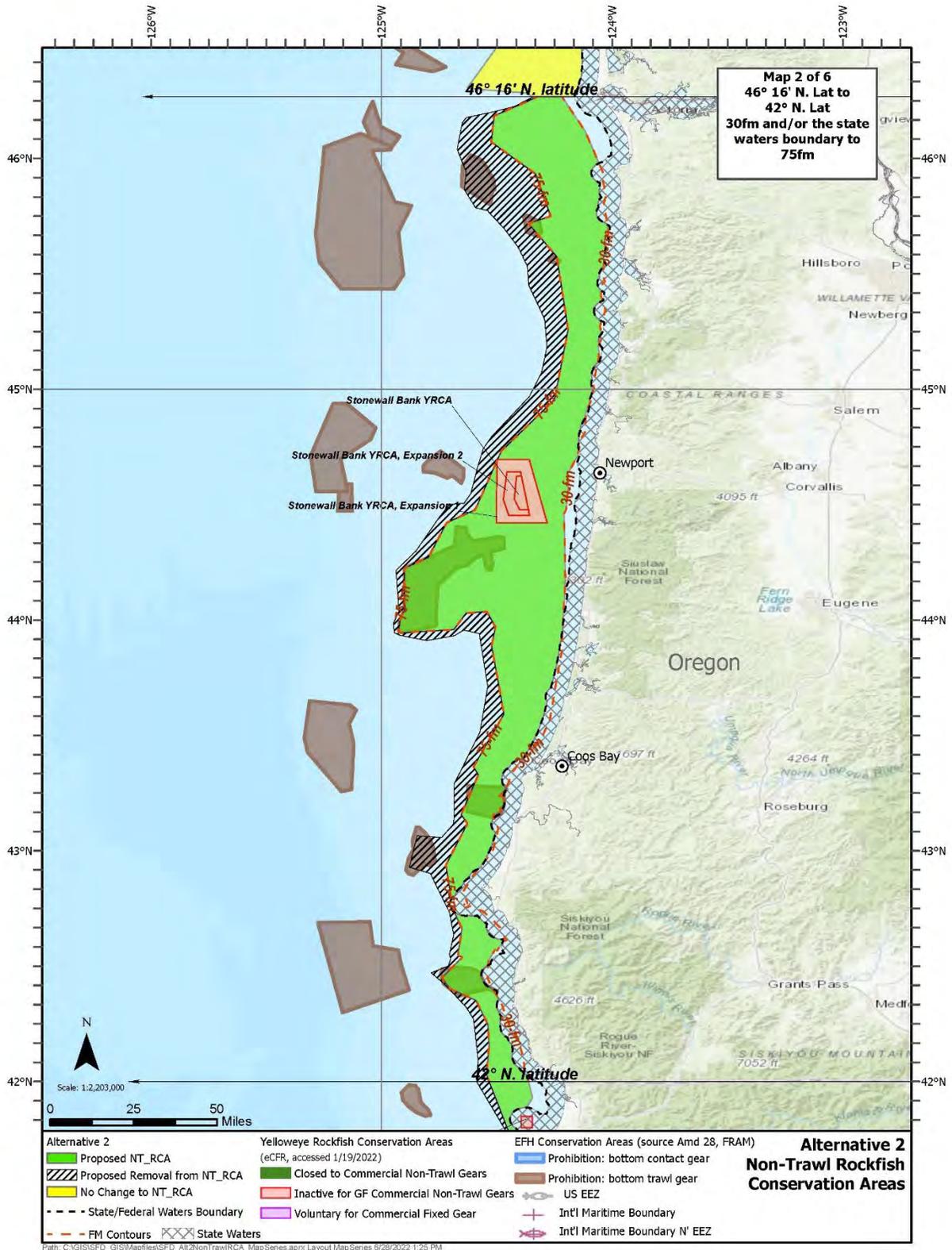


Figure 9. Alternative 2- Proposed Changes to NT_RCA off Oregon (46° 16' to 42° N. lat.)

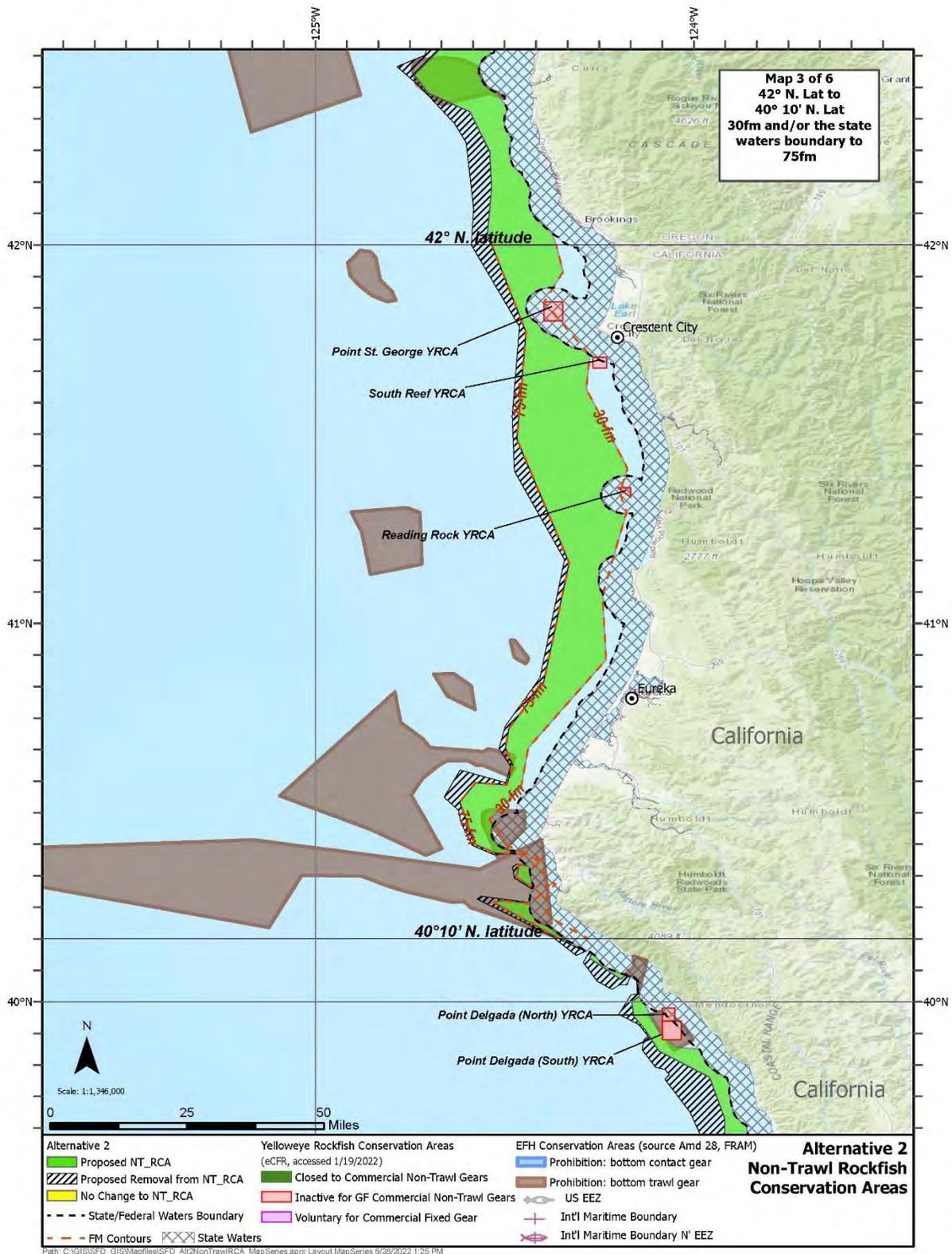


Figure 10. Alternative 2- Proposed changes to NT_RCA off California from 42° to 40° 10' N. lat.

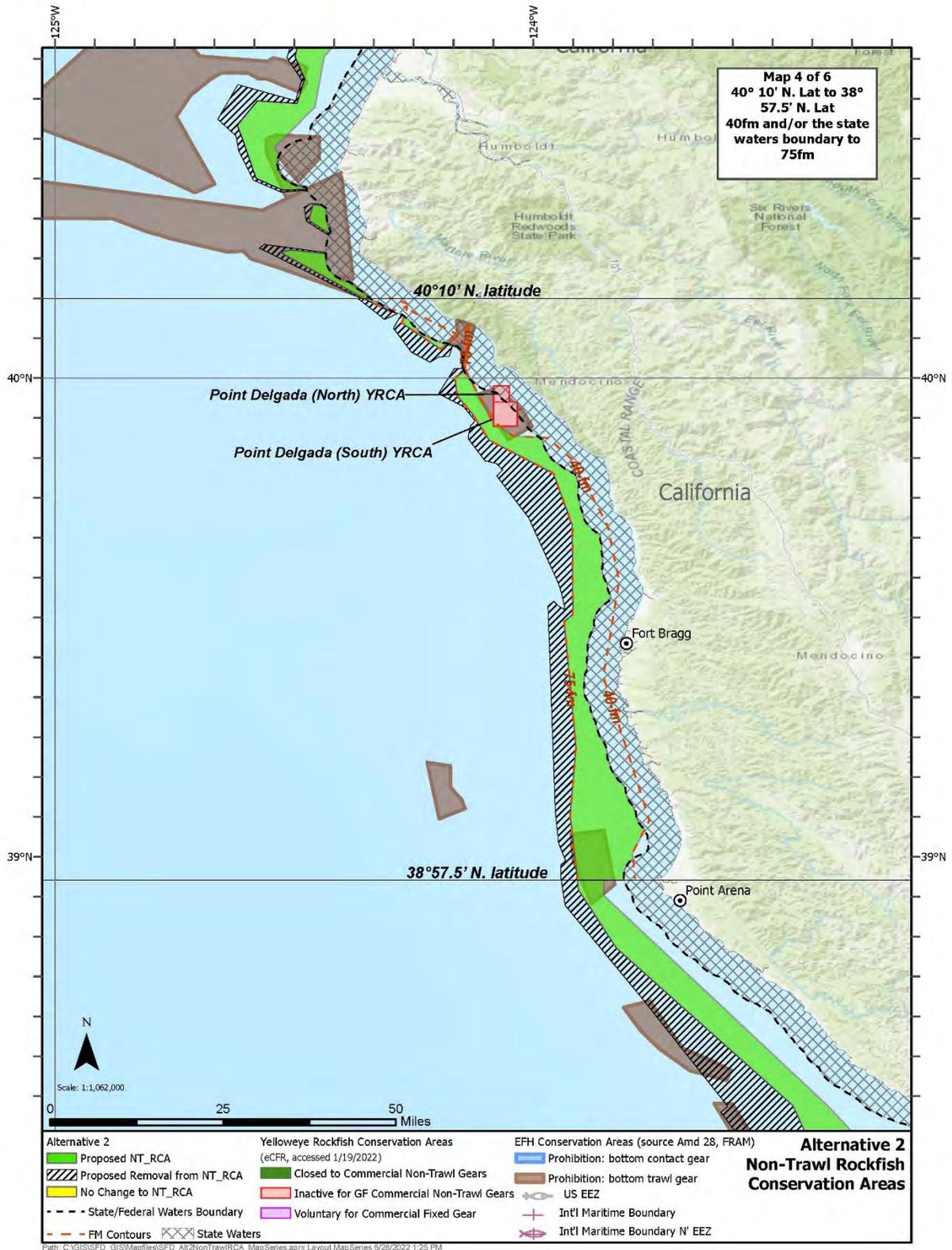


Figure 11. Alternative 2- Proposed changes to NT_RCA off California from 40° 10' to 38° 57.5' N. lat.

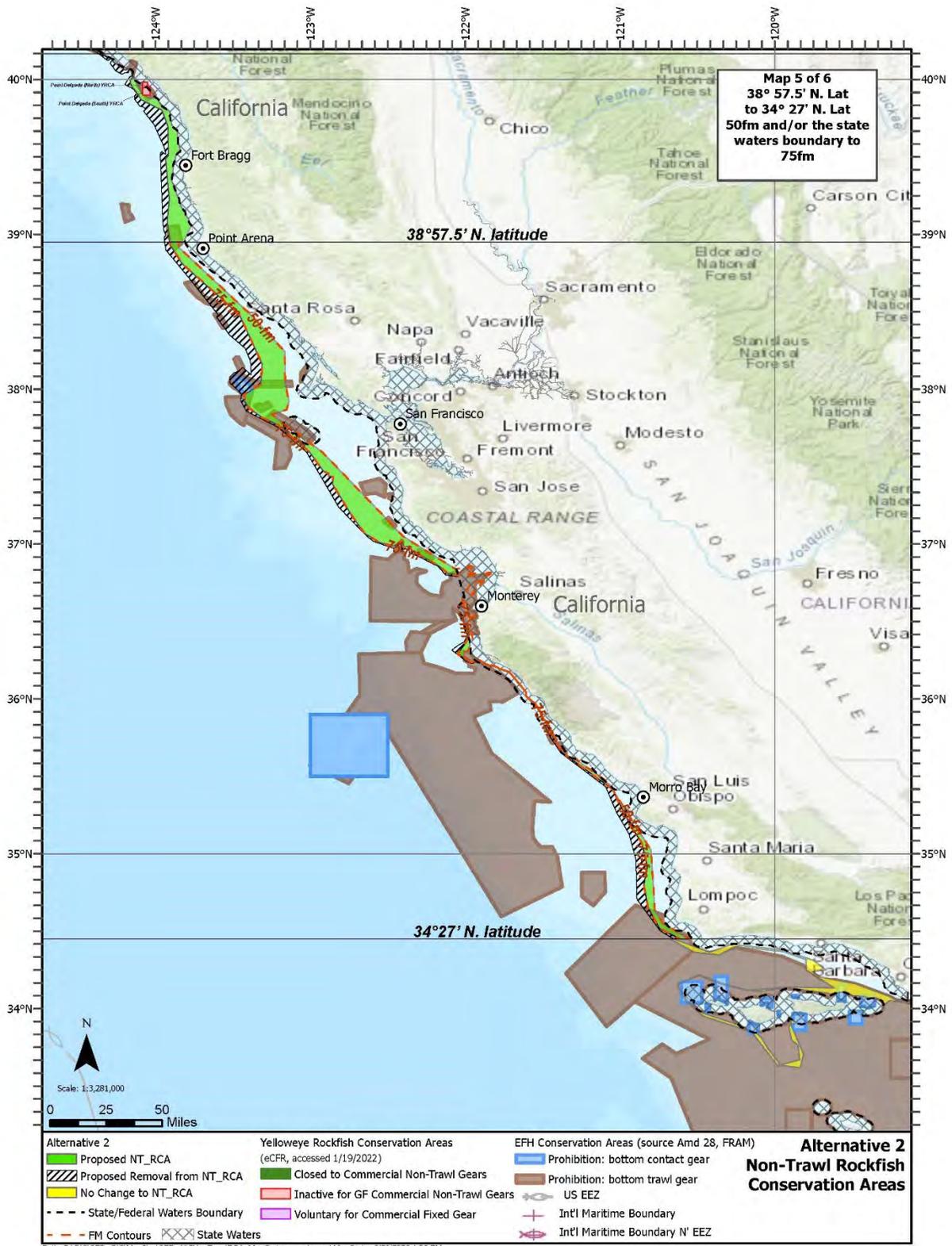


Figure 12. Alternative 2- Proposed changes to NT_RCA off California from 38° 57.5' to 34° 27' N. lat.

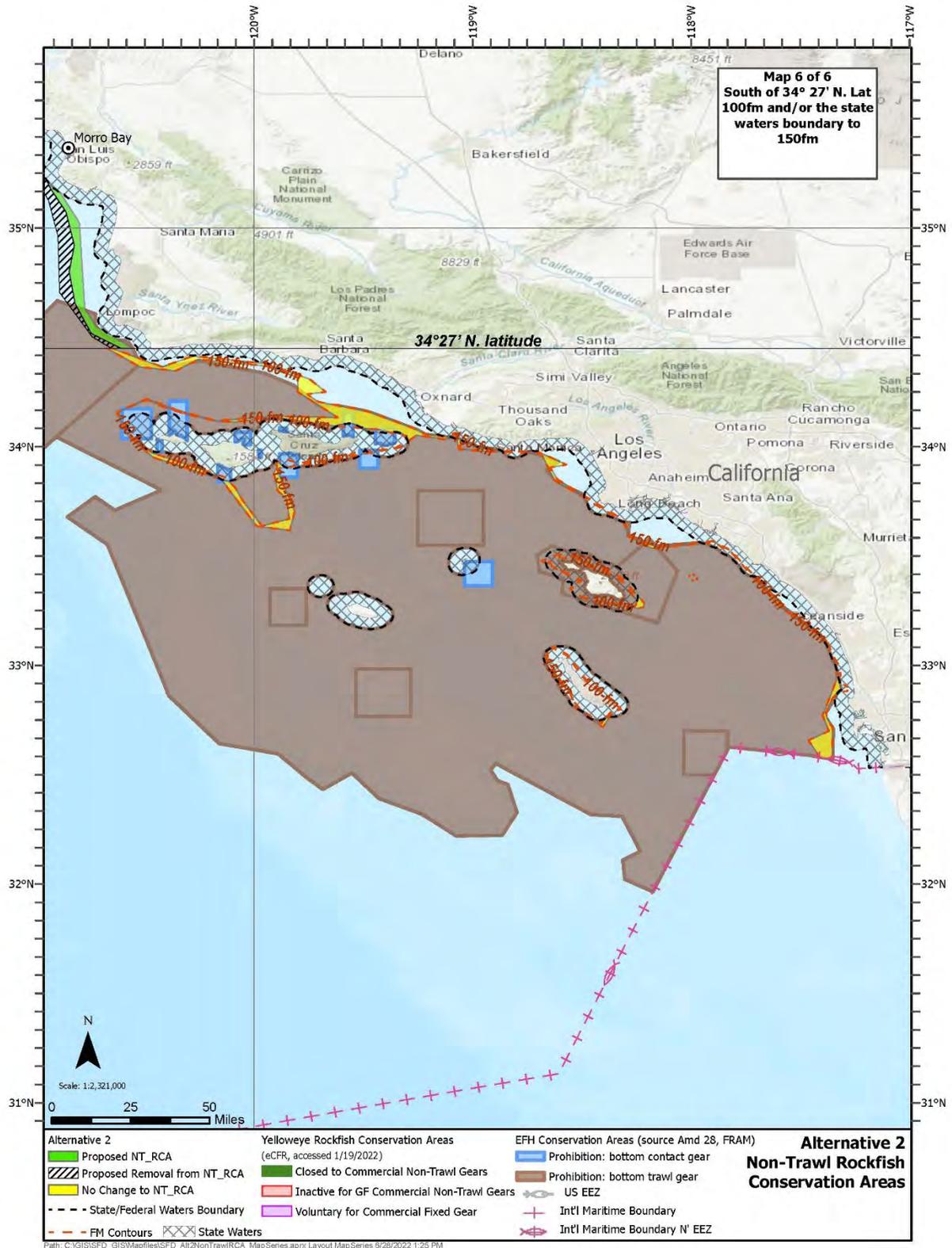


Figure 13. Alternative 2- Off California south of 34° 27' N. lat. (No Changes Proposed)

Alternative 2 includes several suboptions to protect habitat and/or rebuilding species in areas exposed by the NT_RCA boundary changes; therefore, we expect that these new closed areas would require an FMP amendment to establish language that identifies the new closed areas, explains the purpose of them, and provides the authority for the Council to implement the closures through a preseason or inseason action. In addition, Federal regulations would be developed to define the areas with coordinates and the fishery prohibitions that would apply for each area.

The directed halibut fishery is managed under regulations at 50 CFR 300 promulgated in accordance with the Northern Pacific Halibut Act of 1982; therefore, implementation of Alternative 2 and any suboption chosen would require an amendment of Federal regulations through the authority of the Act. In addition, it's expected that the Council's Pacific Halibut Catch Sharing Plan would need to be updated to reflect these changes.

Suboption 1a

In many instances, moving the seaward NT_RCA boundary exposes portions of EFHCAs that are closed only to bottom trawl gear, but received default protection from non-trawl gears because of their overlap with the NT_RCA. This suboption would prohibit bottom contact groundfish gear from being used inside those specific portions of bottom trawl EFHCAs that are exposed via movement of seaward boundary of the NT_RCA to 75 fm. The EFHCA areas that would be exposed would need to be regulated to prohibit these gears through the development of a new regulatory layer on top of the bottom trawl EFHCA and would only encompass only the "overlapping area" (See Figure 26 – Garibaldi Reef North). However, coordinates of these areas may not always be sufficient for the purposes of effective management or enforcement to meet the objectives of the closed area. Further discussion and identification of the closed areas that meet the intent of this suboption is provided in Section 3.7.2.1.

Bottom contact gear that would be prohibited in the new closed areas include fixed gear (including bottom longline, trap, pot, stationary hook-and-line (includes vertical hook-and-line that is anchored to the bottom)), set net, dinglebar, and experimental gear designed/modified to make contact with the bottom. Allowable gear in the new closed areas would be non-bottom contact hook-and-line gear (vertical gear attached to the vessel and groundfish troll gear). Note that at the time of development of this document, it was unknown of whether directed halibut vessels not retaining groundfish could be prohibited from fishing in an area using a new type of EFHCA. Furthermore, the Council's language was not specific to the directed halibut fishery. Given these factors, this analysis assumes that directed halibut vessels not retaining groundfish would be allowed to fish within bottom trawl EFHCAs exposed under Alternative 2.

Suboption 1b

This suboption is similar to suboption 1a in that non-trawl bottom contact groundfish gear would be prohibited from being used inside of bottom trawl EFHCAs that are exposed through movement of seaward boundary of the NT_RCA fathom line to 75 fm. As in noted in suboption 1a, prohibited gear would include fixed gear (including bottom longline, trap, pot, stationary hook-and-line (includes vertical hook-and-line that is anchored to the bottom)), set net, dinglebar, and experimental gear designed/modified to make contact with the bottom. Allowable gear in the new closed areas would be non-bottom contact hook-and-line gear (vertical gear attached to the vessel and groundfish troll gear). Directed halibut vessels not retaining groundfish would not be subject to this closure.

However, under Suboption 1b, areas of bottom trawl EFHCAs that are exposed would trigger consideration of closing the *entire* EFHCA to fishing versus just the areas that are exposed if only "small" areas were outside the current NT_RCA. In other words, if removal of the NT_RCA exposes the majority of an EFHCA but a small portion was already exposed to fishing prior to the boundary move, then the new closure would apply to the entire EFHCA (See Figure 30-Bandon High Spot). Application of this suboption would

therefore potentially close small areas of existing non-trawl fishing grounds. Further discussion and identification of the closed areas that meet the intent of this suboption is provided in Section 3.7.2.1.

Suboption 1c

In development of the analysis, staff identified a third suboption (1c) that may warrant consideration by the Council. Suboption 1c would create a groundfish bottom contact EFHCA over the entire bottom trawl EFHCA, both in the area to be exposed and in the current NT_RCA (i.e., not exposed) with the idea that this would lead to less enforcement and administrative burden as the closure boundary would remain as currently described in regulation. Further, if the Council were to change the seaward boundary of the NT_RCA in the future, these protections would already be in place, resulting in fewer complexities in determining how to protect any exposed areas. Discussion of this option can be found in Section 3.7.2.1 and 4.5.3.

Suboption 2

This suboption would prohibit commercial groundfish fishing with non-trawl bottom contact gear in the area west of the Heceta Bank EFHCA. Staff identified that the most effective method to close this area was through the development of a YRCA (Figure 14). Prohibited gears include fixed gear (including bottom longline, trap, pot, stationary hook-and-line (includes vertical hook-and-line that is anchored to the bottom)), set net, dinglebar, and experimental gear designed/modified to make contact with the bottom. Allowable gear in the new closed areas would be non-bottom contact hook-and-line gear (vertical gear attached to the vessel and groundfish troll gear). While not specified in the motion language, the Council could implement this as a YRCA for directed halibut vessels not retaining groundfish; however, this YRCA could not be changed inseason and would require a separate rulemaking to be removed for directed halibut. In addition, the Council could consider creation of a YRCA for the entire area of the Heceta Bank EFHCA. If the Council further reduces or removes the NT_RCA in a future action, the YRCA would already be in place for that area.

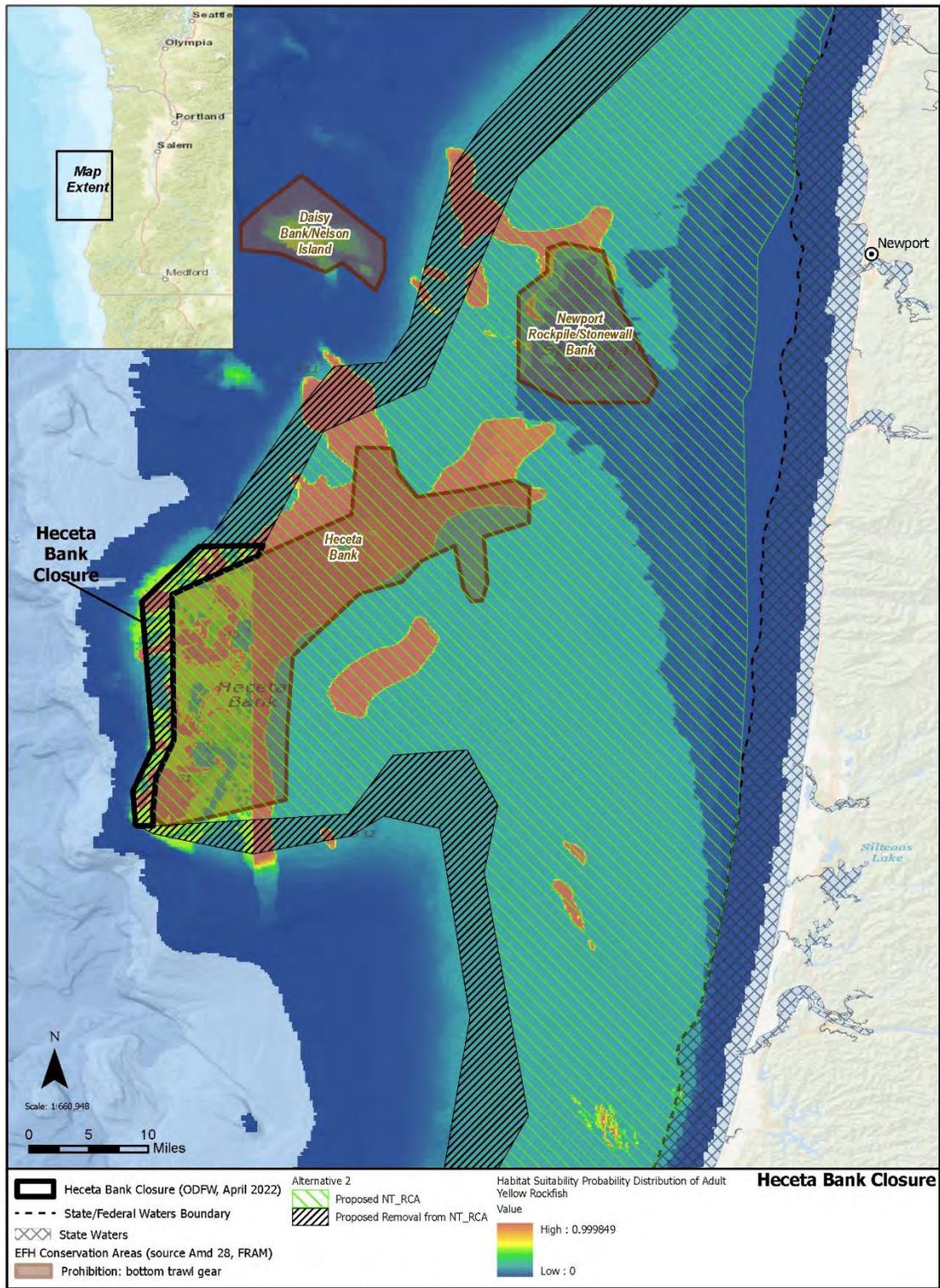


Figure 14. Proposed YRCA for Heceta Bank under Alternative 2, Suboption 2

Suboption 3

This suboption identifies potential new YRCAs that could be used to mitigate impacts to yelloweye rockfish in areas that would be open to fishing via movement of the seaward boundary of the NT_RCA line to 75 fm (Figure 15; coordinates listed in Table 3). In addition, these new YRCAs could be implemented when setting biennial harvest specifications and management measures via a rulemaking package (for a certain period of time or permanently) or be implemented through a Council-recommended inseason action.

Staff defined the YRCA's coordinates based on presence of yelloweye habitat suitability modeling, overlap with areas that may be impacted via the removal of the NT_RCA, overlap with existing bottom trawl EFHCA areas, and enforceability of the area. We assumed that each area would prohibit fishing with commercial non-trawl gear. As described for suboption 2, if a YRCA was implemented for directed halibut, it would be in place until another rulemaking removed it and could not be adjusted inseason as could be done for groundfish. However, after further analysis the Council may choose to specify the applicable regulatory requirements in each area separately to ensure the appropriate harvest controls are in place and the conservation of yelloweye rockfish habitat.

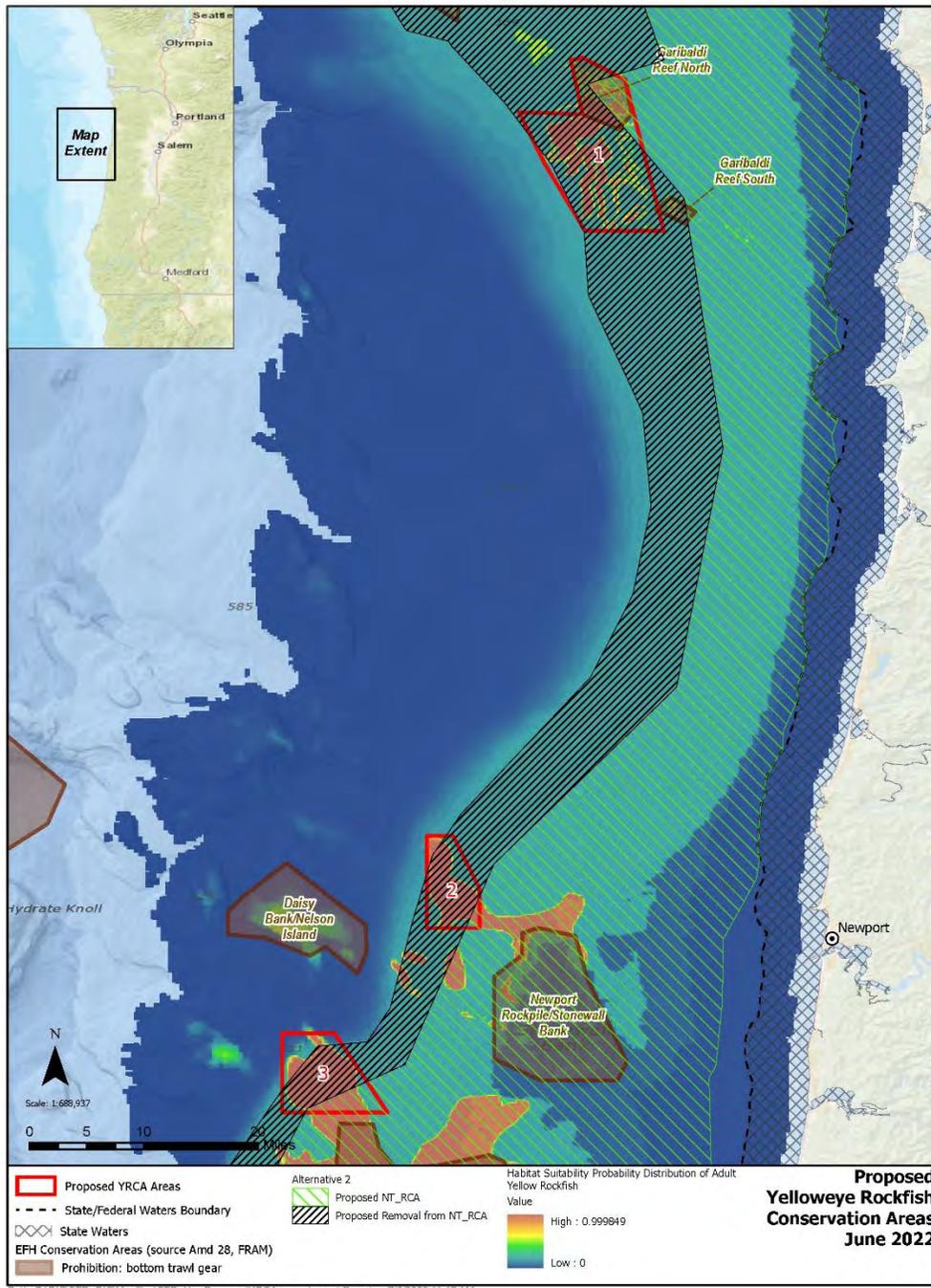


Figure 15. Staff-proposed YRCAs for development under Alternative 2, Suboption 3

Table 5. Coordinates for Staff-Proposed YRCAs under Alternative 2, Suboption 3

YRCA	Lat deg	Lat min	Lon deg	Lon min
1	45	41	-124	27
1	45	37	-124	25
1	45	32	-124	22
1	45	32	-124	16
1	45	43.49	-124	18.94
1	45	45.17	-124	22.19
1	45	44.94	124	23.07
1	45	40.84	-124	22.17
1	45	41	-124	27
2	44	46	-124	34
2	44	39	-124	34
2	44	39	-124	30
2	44	42	-124	30
2	44	46	-124	32
2	44	46	-124	34
3	44	25	-124	45
3	44	31	-124	45
3	44	31	-124	41
3	44	25	-124	37
3	44	25	-124	45

2.4 Alternative 3

Alternative 3: Repeal the Cowcod Conservation Areas (CCA) for Commercial and Recreational Fisheries.

- Include development of new NT_RCA lines around islands and banks for management within the current boundaries of the CCA
- Include analysis of new proposed area restrictions for a) Hidden Reef, b) West of Santa Barbara Island c) Potato Bank, d) 107/118 Bank, e) Cherry Bank, f) Seamount 109, g) Northeast Bank, and h) the 43-Fathom Spot.

Alternative 3 would remove both East and West CCAs from use for commercial and recreational fisheries off California (Figure 16). Fishing is currently allowed shoreward of the 40 fm lines around the islands and banks within the current boundaries of the CCA. With the removal of the CCA, the 40 fathom restriction would no longer be in place (i.e., vessels could operate anywhere in the area, subject to pre-existing area closures). However, the intent of developing new NT_RCA lines around the islands is to provide flexible fisheries management and restrict fishing seaward or shoreward of the new lines as needed to prevent interactions with certain nearshore species or control catch (see Figure 17 through Figure 20; coordinates

can be found in Tables 18 through 24 of [E.5.a., Supplemental CDFW Report 1](#)). As with any NT_RCA line, the lines could be implemented preseason or inseason and would be available for both commercial and recreational fisheries.

The new proposed area closures (hereafter known as “Proposed Groundfish Closures”) would restrict fishing around seamounts, banks, and shallow reefs. They include: Hidden Reef, West of Santa Barbara Island, Potato Bank, 107/118 Bank, Cherry Bank, Seamount 109, Northeast Bank, and the 43-Fathom Spot. Based on the California Department of Fish and Wildlife (CDFW) proposal, the intent of these new area closures is to prohibit all commercial and recreational groundfish fishing activity in these proposed areas to protect sensitive habitats upon removal of the CCA as described in [E.5.a., Supplemental CDFW Report 1](#) and identified in [F.6.a., CDFW Report 1](#)

The proposal by CDFW focuses on development of these proposed groundfish closures to protect corals, sponges, and other sensitive habitats. Since some recreational and commercial groundfish fishing gears do not contact the bottom and are not likely to affect sensitive habitats, the Council should consider the proposed restrictions by fishery and gear. In other words, the Council should consider the purpose of restriction along with the applicability of these closures to all groundfish fishing activity versus only prohibiting bottom contact groundfish fishing activity (as is being considered under Alternative 2- although through a different set of criteria). In addition, the ability to effectively enforce these areas with multiple users with and without VMS through Federal and state enforcement will need to be considered when applying fishery-specific restrictions. For further discussion, please see Habitat Section 3.7.2.2 and Regulatory Impact Review Section 4.5.4.

This alternative would require an FMP amendment to remove references to the CCA, establish language that identifies the new groundfish closures, and explains the purpose of them. The Council already has the authority to implement NT_RCA lines through a preseason or inseason action so long as designation and adoption of new potential RCA boundary lines are done through either a specifications-and-management-measures rulemaking (Section 6.2 C of the GF FMP) or a full rulemaking (Section 6.2 D of the GF FMP). In addition, Federal regulations for the CCA (including the 40-fathom depth contour restriction) would be removed, new regulations added to define the groundfish closures, and fishery prohibitions developed for each area. It must be noted that NT_RCA coordinates would be placed in Federal regulations; however, coordinates that are in state waters would need to be enforced by the state of California. In other words, any portion of a newly designated NT_RCA fathom line that straddles both state and Federal waters would only be enforceable by NMFS in Federal waters. California would need to take conforming action to enforce any NT_RCA boundaries in state waters. Due to the rapid change in depth off the islands, all potential fathom lines straddle both state and Federal waters (see Figure 16 through Figure 20). Additionally, any fishing restrictions associated with the Channel Islands National Marine Sanctuary (around Santa Barbara Island) would remain in place.

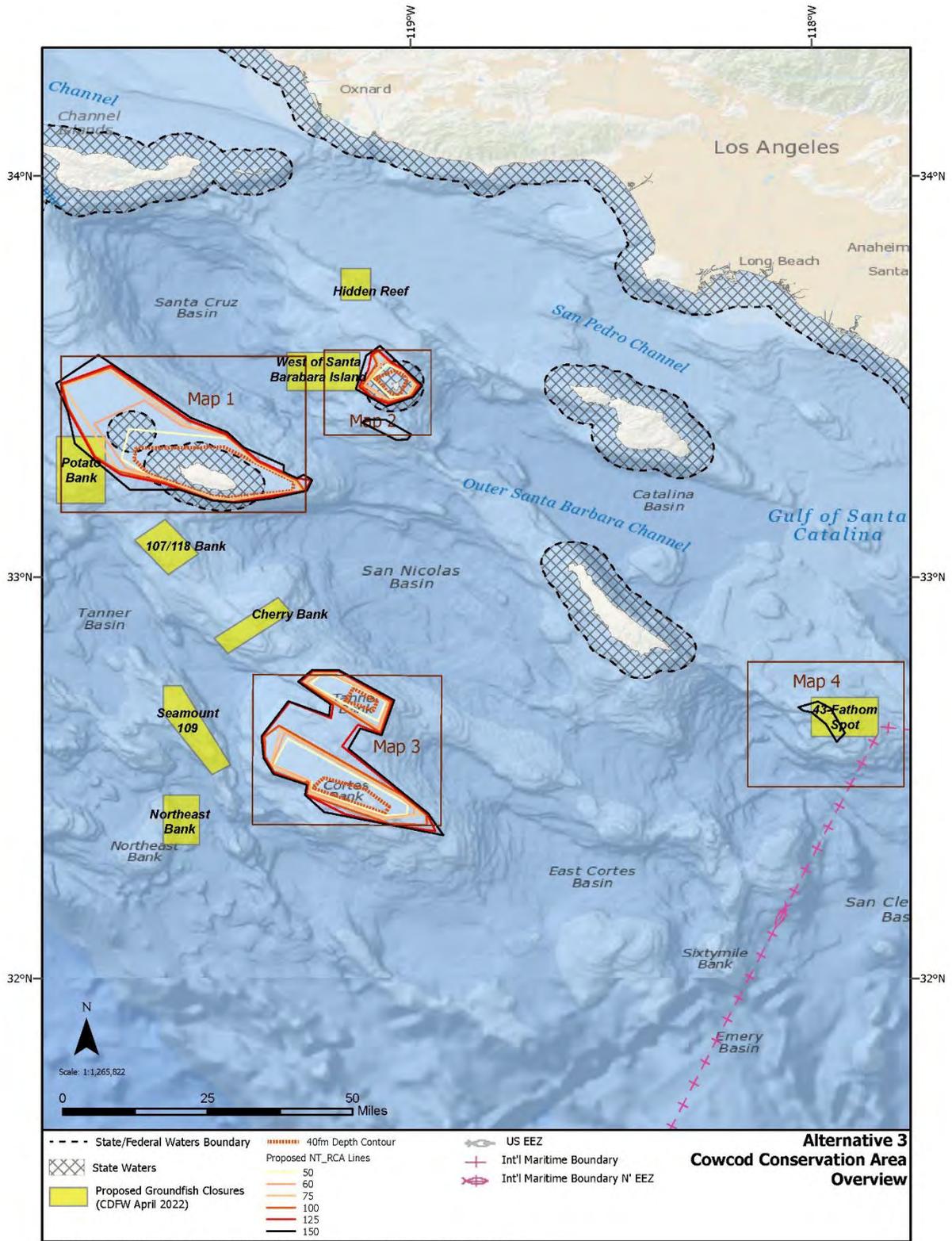


Figure 16. Alternative 3 Overview

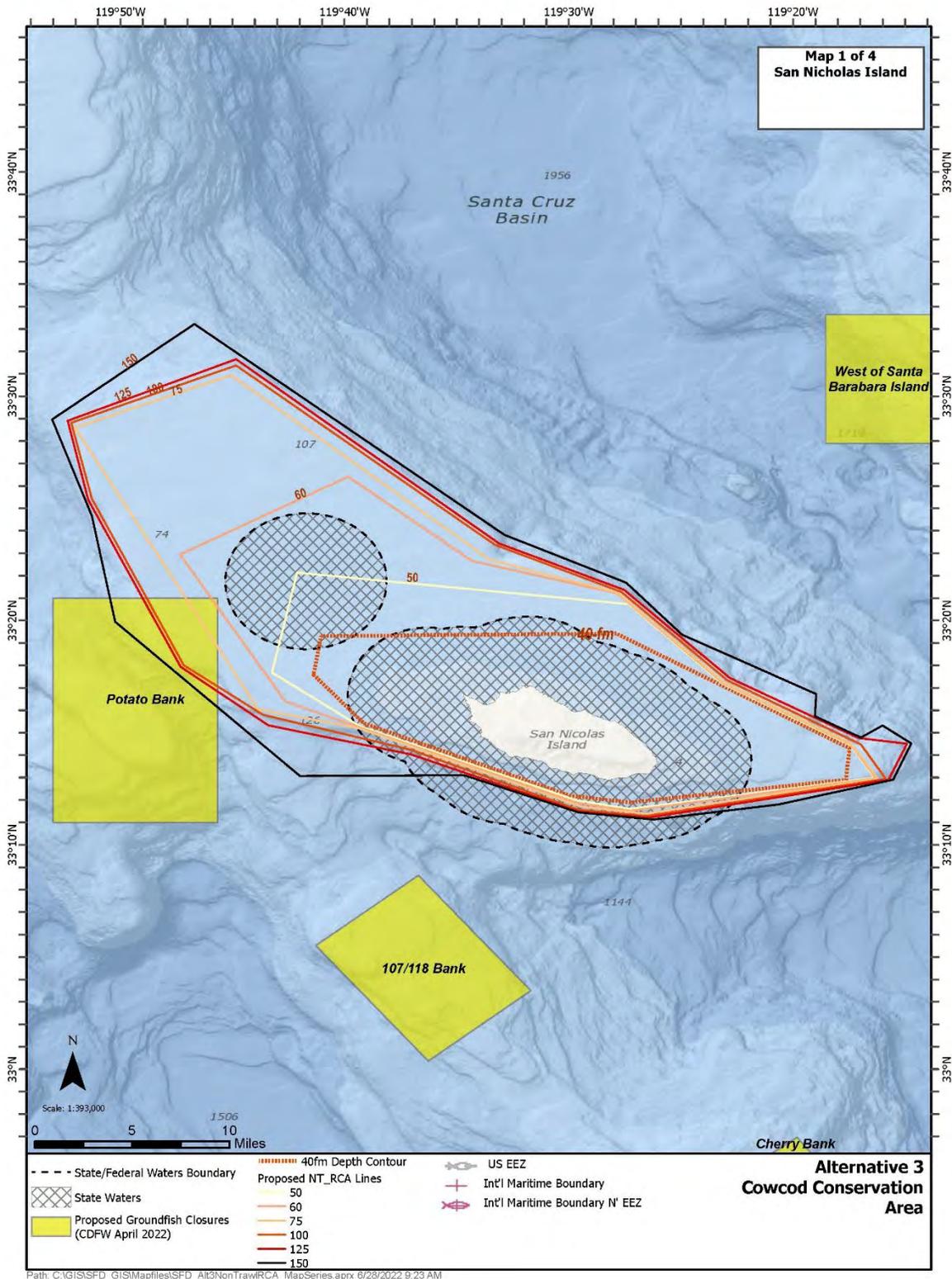


Figure 17. Alternative 3- Proposed NT_RCA lines around San Nicolas Island

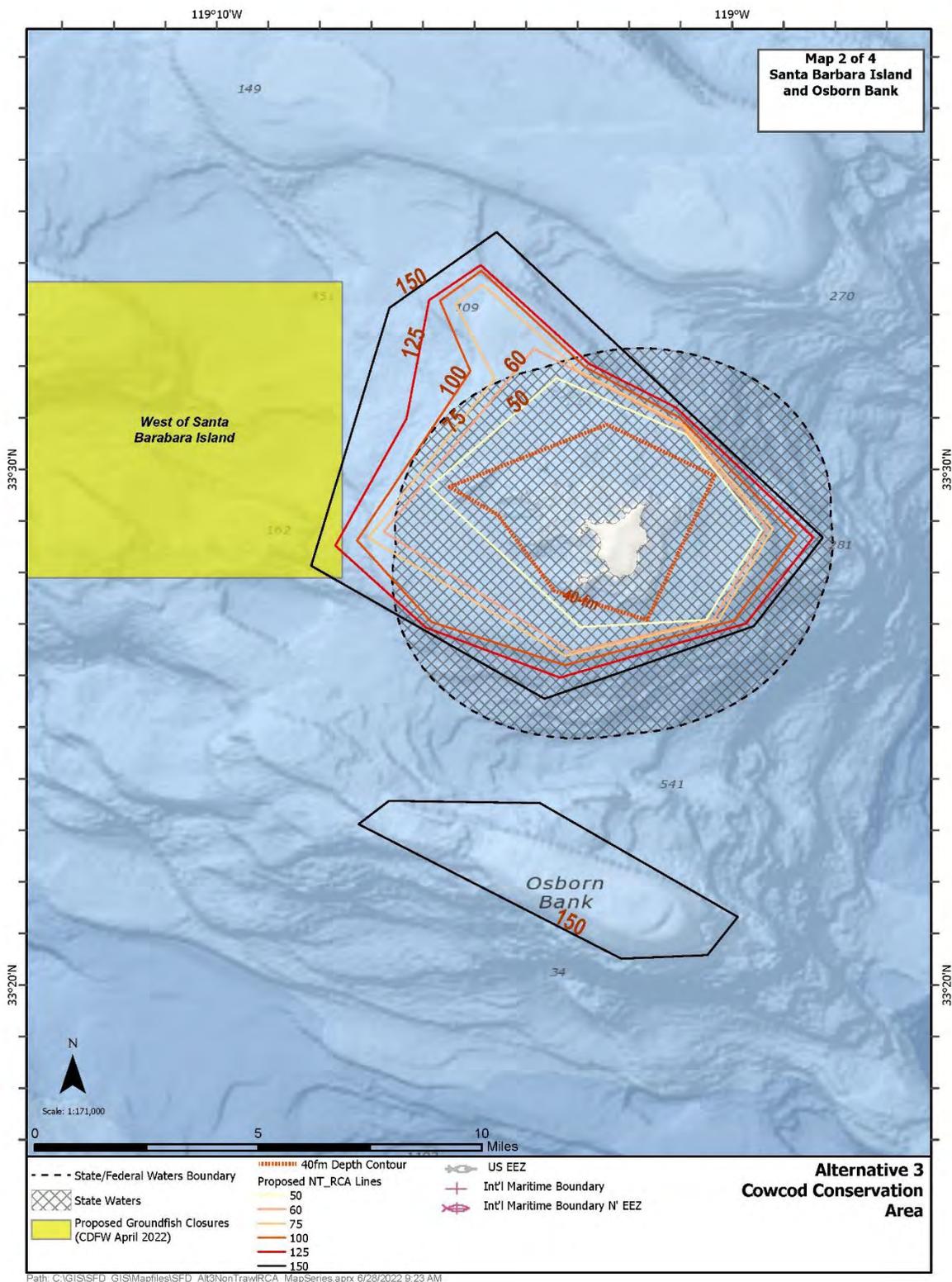


Figure 18. Alternative 3- Proposed NT_RCA lines around Santa Barbara Island and Osborn Bank

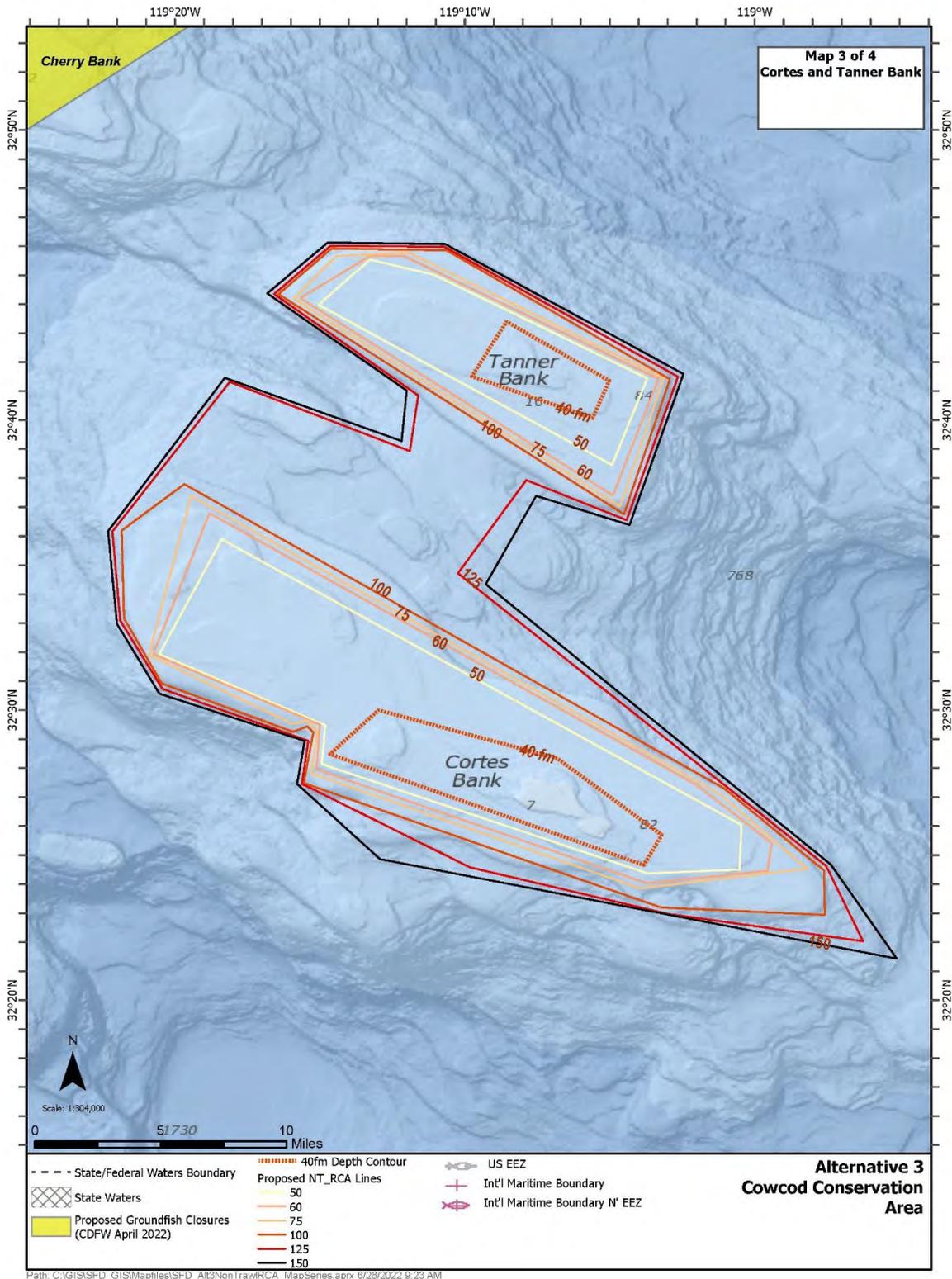


Figure 19. Alternative 3- Proposed NT_RCA lines around Cortes and Tanner Bank

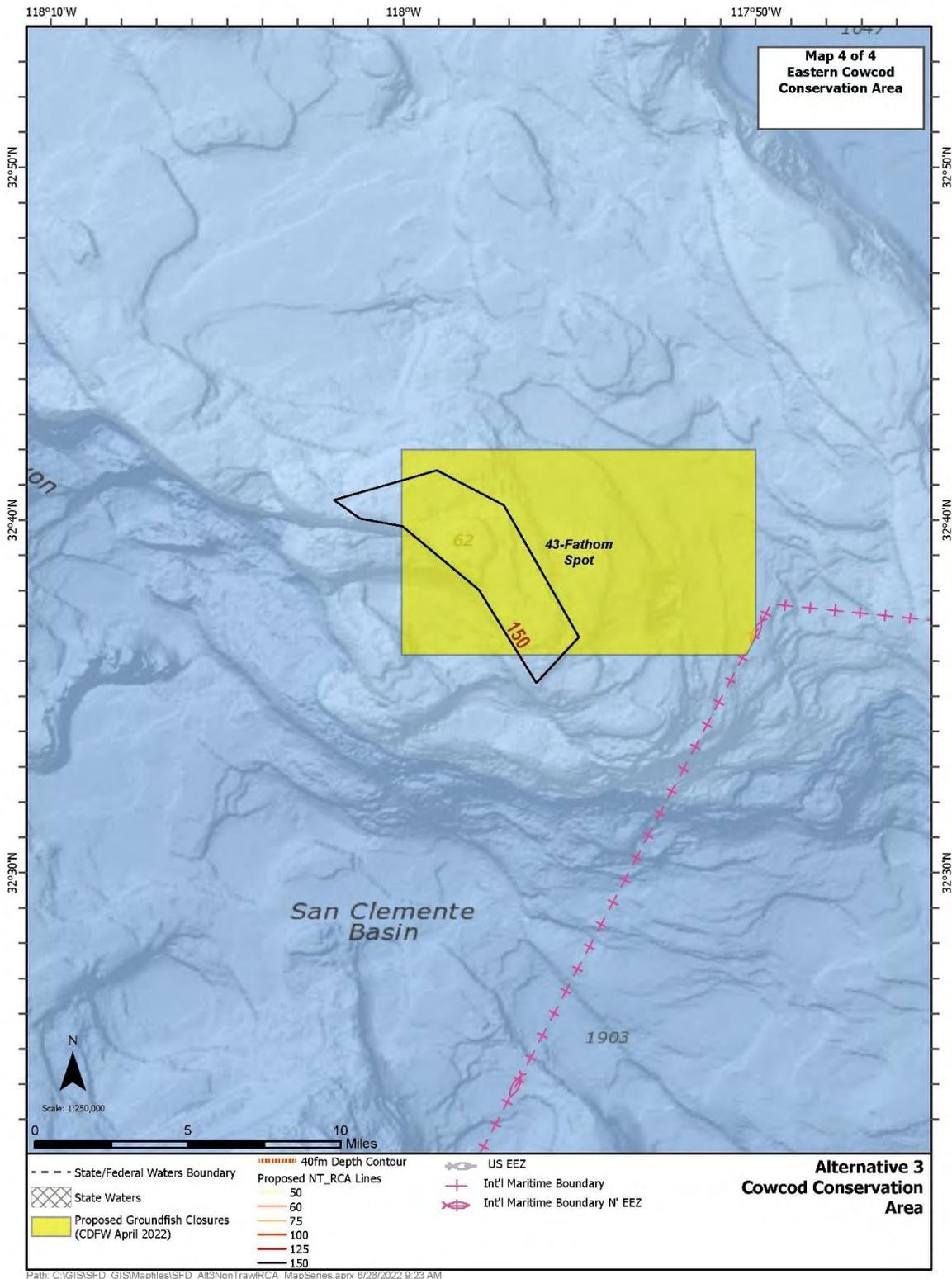


Figure 20. Alternative 3- Proposed NT_RCA line in the Eastern CCA area

2.5 Alternative 4

Alternative 4: NT_RCA adjustments off WA for pot gear

This alternative would open areas within the NT_RCA generally located seaward of the 75 fm line to pot gear off of Washington but may be defined by coordinates that do not necessarily follow a single depth contour. This alternative will be refined in the future to ensure the open areas would satisfy the objectives described in [Agenda Item E.6.a, Supplemental WDFW Report 1, November 2021](#). The Council also recommended analyzing pot gear impacts from groundfish fishing to any bottom trawl EFHCA that overlap with the area 75-100 fathoms off Washington.

During the June 2022 Council meeting, the Council requested that staff refrain from analyzing this alternative until the Washington Department of Fish and Wildlife can further define the alternative. Therefore, this document does not contain maps or an analysis of this alternative.

2.6 Alternative 5

Alternative 5: Develop Block Area Closure Management Tool

This alternative creates a mechanism for the Council to implement a BAC to mitigate bycatch of groundfish stocks, as well as protected or prohibited species in the directed OA, LEFG, or IFQ gear switching sectors. Note that it is staff's understanding that this measure would not apply to recreational fisheries. The alternative can be implemented as a stand-alone measure. The alternative could be used under any alternative that is selected by the Council (Alternatives 1 through 3) and can be used coastwide as needed in select areas either preseason or inseason.

BACs are a type of GCA, defined at § 660.111, bounded on the north and south by commonly used geographic coordinates and on the east and west by the EEZ, and boundary lines approximating depth contours. At present, BACs may be implemented in the EEZ off Oregon and California for vessels using limited entry bottom trawl for groundfish or prohibited species mitigation and for midwater trawl gear coastwide for salmon mitigation. As a part of the 2023-2024 harvest specifications, the Council also recommended expanding this authority for midwater trawl gears for use in mitigating groundfish impacts. This alternative would create a new type of BAC that could be implemented for commercial fishing vessels using non-trawl gears and could be implemented by sector (i.e., directed OA or LEFG) or by gear (e.g., bottom contact). BACs, if developed coastwide, could be used to restrict activity within the current bounds of the NT_RCA or CCA to curb mortality closer to that seen under the current state of the fisheries and no changes to the regulations (i.e., status quo).

This alternative would require an amendment of the groundfish FMP to incorporate the description and authority to use this management tool for non-trawl fisheries and the purpose of the tool. Additionally, a regulatory amendment would be required.

2.7 Comparison of Alternatives

Table 6. Summary of alternatives and major impacts.

Alternative	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 5
Description	No Action	Allow access to the NT_RCA with non-bottom contact gear	Adjust the seaward boundary of the NT_RCA to be 75 fm - suboptions include new closures for certain areas	Remove the CCA and implement new RCA lines and new groundfish closed areas.	Implement Block Area Closures
Scope	Coastwide	46° 16' N. lat. to U.S./Mex border	46° 16' to 34° 27' N. lat.	South of 34° 27' N. lat.	Coastwide
Differences in Alternatives					
Allows Access to NT_RCA	No	Yes, allows non-trawl groundfish fishery access to entire NT_RCA with certain approved gears	No. Allows non-trawl groundfish and directed halibut vessels access to newly opened areas via removal of a portion of the NT_RCA.	No	No
New Closed Areas	None	No	Yes, suboptions implement certain types of area specific closed areas along the coast such as groundfish EFHCAs, YRCAs, bottom contact closures or groundfish closures.	Yes, implements certain types of groundfish closed areas off California for recreational and commercial non-trawl vessels.	Yes, develops a tool that can close areas to groundfish fishing preseason or through inseason action
Environmental Impacts (within impacts previously described in the 2023-2024 Harvest Specifications EA)					
Target species	None	Possible increases in mortality for midwater rockfish	Likely increases in mortality for midwater rockfish, sablefish, shelf rockfish	Increases in mortality for shelf rockfish south, slope rockfish south, shortspine thornyheads, and sablefish south	None
Non-Target Species	None	Minimal, not significant	Additional impacts to yelloweye (Suboptions would mitigate YE impact)	Minimal, not significant, increase in bronzespotted and Cowcod rockfish ¹⁴	None
Prohibited Species	None	Not significant	Not significant	Not significant	None
Marine mammals	None	None expected	Potential increased exposure to gear	None expected	None
Seabirds	None	Potential increase through exposure to bait on troll gear	None expected	None expected	None
Habitat	None	None expected	Potential increased impact via bottom contact gear	Potential increased impact via bottom contact gear	None
Ecosystem	None	No significant impacts on the CCE	No significant impacts on the CCE	No significant impacts on the CCE	None
Economic Impacts					
Fishing effort	None	Minor increase expected	Shift in effort expected	Nominal increase expected	None
Gross Revenue at Risk	None	Increased revenue expected	Increased revenue expected	Increased revenue expected	None

¹⁴ Retention of bronzespotted and cowcod is prohibited.

2.8 Alternatives Considered but not Analyzed Further

The Council considered an alternative that fully removed the NT_RCA from 46° 16' to 34°27' N. lat.; however, based on Council discussion of the uncertainty for potential impacts to habitat and non-target species, the Council removed this alternative from further analysis (See [F.6.a, Attachment 1](#) for description of Alternative 4). During the April 2022 Council meeting the Council revised its range of alternatives to remove this alternative based on rationale provided by the Groundfish Management Team (GMT) in [Agenda Item F.6.a, Supplemental GMT Report 1](#). The GMT noted there is a lack of data to make an informed decision on whether removal of the NT_RCA is appropriate at this time.

Environmental Assessment

The National Oceanic and Atmospheric Administration (NOAA) NEPA Companion Manual to NOAA Administrative Order 216-6 lists four required components for an environmental assessment. The purpose and need for the proposal is described in Chapter 1.1 and the alternatives in “Description of Alternatives”. This chapter addresses the probable environmental impacts of the proposed action and alternatives, along with an analysis of the economic impacts in the Regulatory Impact Review (RIR). A list of agencies and persons consulted is included in “Preparers and Persons Consulted”.

For each resource component, the analysis identifies information necessary to understand the affected environment, the potential impacts of each alternative, and criteria to evaluate the significance of these impacts.

3.1 Methods

3.1.1 Resource Components Addressed in the Analysis

Table 5 shows the components of the human environment and whether the proposed action and its alternatives have the potential to impact that resource component and thus require further analysis.

The effects of the alternatives on the resource components would be caused by increased harvest of underutilized groundfish species, changes in allowable fishing gear, increased area of fishing grounds, and mitigation of impacts through the development of specified closed areas. The alternatives have the potential to affect target and non-target groundfish species, habitat, marine mammals, seabirds, and social and economic components.

No effects are expected on protected species, ecosystem component species, cultural and public health, and safety. No effect is presumed for protected and ecosystem component species because current effort and harvest of these species is not expected to change as these species are already harvested in relatively low amounts. In addition, these measures would not change allowable harvest for important prey species. Moreover, the measures would not change trip limits for targeted species. No effects are presumed for cultural and public health and safety because the alternatives would not change where fish are landed or encourage fishers to fish in unsafe waters or create a race to fish.

Table 7. Resources potentially affected by the proposed action and alternatives.

Resource	Yes	No	Resource	Yes	No
Target Fish	X		Ecosystem Component Species		X
Non-Target Fish	X		Habitat	X	
Prohibited Species		X	Social	X	
Marine Mammals	X		Economic	X	
Seabirds	X		Cultural		X
Turtles		X	Public Health / Safety		X

N = no impact anticipated by each alternative on the component.

Y = an impact is possible if each alternative is implemented.

3.1.2 Cumulative Effects Analysis

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

The geographic scope for habitat, fish resources, and protected resources is the West Coast EEZ. For socioeconomic resources, the geographic scope is those United States fishing communities directly involved in the harvest or processing of Council-managed resources, particularly those of the states of Washington, Oregon, and California.

The temporal scope of selecting past and present actions for the affected resources encompasses actions that occurred since the Groundfish FMP, the LEFG Sablefish Primary Fishery, and the Trawl Catch Share program were implemented. The temporal scope of selecting reasonably foreseeable future actions is based on the following two criteria.

1. Actions in the West Coast EEZ that affect the same resources impacted by the proposed action. Administrative fishery management actions that have no discernible effect are not included.
2. Actions that are not speculative, in that the action is defined to an extent that it can be analyzed and that some concrete step has been taken toward implementation. This includes actions for which the Council has at least decided on a preliminary proposed alternative 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.

The Council is monitoring the development and sighting of offshore wind energy farms and ocean aquaculture programs. Although offshore wind energy development is in the beginning stages and is not a Council-driven process, the Federal government and the Bureau of Ocean Energy Management seeks to establish energy production by the year 2030. The timeframe for ocean aquaculture is not known at this time but interest is building and some presentations to the Council has occurred, including areas of interested along the West Coast. Therefore, the timeframe for these distant, non-speculative actions are set to be 2030; however, it’s likely that this timeframe is aggressive, and the timeframe may be extended. Both actions will impact fisheries that the Council currently manages and will be incorporated into future, Council-driven actions.

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 2023-2024 groundfish specifications and Gear Switching Actions for the Trawl Catch Share

Program will be analyzed in future NEPA documents. Therefore, we do not quantify a temporal scope for the effects of the reasonably foreseeable future actions.

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

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

1. Implementation of the Trawl Catch Share Program, applies to area of the U.S. EEZ, Past Action, and effective date January 2011.
2. 2021-2022 Groundfish Specifications, applies to area of the U.S. EEZ, Past Action, and effective date is January 1, 2021.

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

3. 2023-2024 Groundfish Specifications and Management Measures, applies to area of the U.S. EEZ, Sets harvest levels and includes fishery-specific management actions such as bag limits, size limits, and changes to fishery management lines, and effective date is January 1, 2023.¹⁵
4. Gear Switching Action for Trawl Catch Share Program, applies to area of the U.S. EEZ, may change allocations/harvest limits for individual vessels/permits operating under the Catch Share program, effective date is not known at this time.

3.2 Target Species

3.2.1 Status/Affected Environment

Non-trawl fisheries, both commercial and recreational, can target a suite of different groundfish species depending on the area fished and gear allowances. All alternatives (apart from Alternative 5) would be expected to increase attainment of groundfish species, including midwater rockfish, shelf rockfish, and sablefish. Recent attainment and stock status information can be found in the [2022 Stock Assessment and Fisheries Evaluation document](#). Impacts to Pacific halibut, particularly under Alternative 2, are considered and analyzed under this action; however, any regulations that implement the Council's recommendations would be promulgated under the Pacific Halibut Act.

3.2.2 Effects of the Alternatives

Impacts to target stocks for all alternatives, including No Action, would be within those described in the 2023-2024 Groundfish Specifications EA as that analysis assumes that full ACLs are harvested for each stock within the fishery. Management measures would be implemented to keep catch within specified

¹⁵ Some NT_RCA coordinates will be corrected as part of the 2021-2022 Harvest Specifications. These corrected coordinates were not incorporated into this proposed action and analysis at this time.

allocations and ACLs. This section therefore attempts to provide the Council and its advisory bodies a relative sense of which species may see increased attainment under each alternative.

Under Alternative 1, there would likely be increases in mortality for midwater rockfish, particularly canary rockfish, compared to No Action as described in [Agenda Item F.6.a, Supplemental GMT Report 3, June 2022](#). Vessels would be permitted to use live bait and potentially other gear configurations outside of those approved under the 2023-2024 management measures package.

For Alternative 2, vessels would be permitted to use all non-trawl gear types in areas open to fishing between 75 and 100 fathoms from 46° 16' N. lat. to 34° 27' N. lat. In addition to midwater rockfish, it is likely that groundfish targeting vessels could access sablefish or other shelf rockfish. Vessels participating in the directed commercial Pacific halibut fishery would also be permitted to fish in this area. Attainment for the directed fishery is typically already high, and therefore, no significant changes are expected compared to No Action.

Under Alternative 3, there would likely be increases in mortality for shelf rockfish south, slope rockfish south, shortspine thornyheads, and sablefish south of 36° N. lat. On the commercial fisheries, sablefish, shortspine thornyheads, blackgill rockfish, and bank rockfish are thought to be the likely primary targets (pers. Comm., Gerry Richter). While shelf rockfish are underutilized in the south, it is thought that the current trip limits may not be sufficient to encourage targeting in the CCA area compared to closer to port. If there were to be any targeting of shelf or midwater stocks, it would likely be for chilipepper rockfish or bocaccio which co-occur. For recreational fisheries, vessels are likely to target shelf rockfish (vermillion, olive, yellowtail, sunset, Mexican), widow rockfish, and bocaccio (pers. Comm., Louis Zimm and Merit McCrea).

To provide some information around the potential species to be encountered in the reopened CCA, staff examined catch data from the Southern California Hook and Line Survey which uses rod and reel gear to sample both inside and outside of the CCA (since 2014) to help inform stock assessments. For details on the survey, please visit <https://www.fisheries.noaa.gov/west-coast/science-data/southern-california-shelf-rockfish-hook-and-line-survey>.

Using data from 2019 and 2021 (no survey in 2020), there were 79 sites sampled within the CCA in each year and 122 (2019) and 119 (2021) outside the CCA. Of the hooks sampled in the CCA, approximately 53 percent were positive for catch. Table 6 below describes the number of species caught inside and outside the CCA in 2019 and 2021 and the management complex to which they belong (if applicable). Groundfish species that saw a higher number of encounters inside the CCA on average compared to outside the CCA included bank rockfish, chilipepper, cowcod, greenstriped rockfish, rosy rockfish, and speckled rockfish.

Table 8. Hook-and-line survey catch from 2019 and 2021 from inside and outside the CCA.

Species Common Name	Complex	Outside CCA		Inside CCA	
		2019	2021	2019	2021
Bank Rockfish	Slope rockfish south	86	70	336	240
Blue Rockfish	Nearshore rockfish south	39	7	11	6
Bocaccio		769	602	617	369
Bronzespotted Rockfish	Shelf rockfish south	0	1	1	3
Calico Rockfish	Nearshore rockfish south	4	3	0	0
California Scorpionfish		0	3	0	1
California Sheephead		1	1	5	0
Canary Rockfish		41	12	0	0
Chilipepper		124	46	156	88

Copper Rockfish	Nearshore rockfish south	48	25	19	9
Cowcod		38	26	55	72
Flag Rockfish	Shelf rockfish south	9	6	0	2
Freckled Rockfish	Shelf rockfish south	0	1	0	0
Greenblotched Rockfish	Shelf rockfish south	18	13	1	7
Greenspotted Rockfish	Shelf rockfish south	253	225	97	183
Greenstriped Rockfish	Shelf rockfish south	52	48	47	88
Halfbanded Rockfish	Shelf rockfish south	83	104	10	4
Honeycomb Rockfish	Shelf rockfish south	3	7	4	8
Lingcod		20	11	24	12
Lizardfish		0	1	0	0
Mexican Rockfish	Shelf rockfish south	3	48	2	8
Ocean Whitefish		33	40	110	179
Olive Rockfish	Nearshore rockfish south	40	28	32	19
Pacific Jack Mackerel		1	0	0	0
Pacific Mackerel		14	26	8	0
Pacific Sardine		1	0	0	0
Petrals Sole		0	0	1	0
Pink Rockfish	Shelf rockfish south	0	1	11	17
Pinkrose Rockfish	Shelf rockfish south	0	0	2	2
Rosethorn Rockfish	Shelf rockfish south	2	0	0	1
Rosy Rockfish	Shelf rockfish south	29	31	74	100
Sharpchin Rockfish	Slope rockfish south	0	0	4	2
Silvergray Rockfish	Shelf rockfish south	0	0	1	0
Speckled Rockfish	Shelf rockfish south	159	145	190	156
Spiny Dogfish		0	1	0	0
Squarespot Rockfish	Shelf rockfish south	80	169	112	150
Starry Rockfish	Shelf rockfish south	147	150	182	270
Star-studded Grouper		0	1	0	0
Swordspine Rockfish	Shelf rockfish south	109	143	153	120
Treefish	Nearshore rockfish south	1	0	1	0
Vermilion Rockfish	Shelf rockfish south	1531	1388	745	937
Whitespeckled Rockfish		0	0	1	0
Widow Rockfish		12	42	11	6
Yelloweye Rockfish		5	5	12	19
Yellowtail Rockfish	Shelf rockfish south	69	95	2	0

Alternative 5 would develop BACs to be used inseason or preseason to close off an area to fishing by non-trawl vessels. No impacts would result from the development of this measure and assessment of the impacts to target species would occur at the time of implementation, therefore are not discussed here.

Overall, there is no significant impact on the stocks under any of the considered alternatives, as all stocks would continue to be managed within their respective catch limits.

Cumulative Effects on Target Species

Preliminary preferred RFFAs have and are likely to continue to have an impact on the multiple target species within the action area and timeframe. All adverse effects in the Limited Entry Trawl fishery will continue to be constrained by the introduction of the trawl catch share program (Past Action #1) that ensures individual accountability of target fish catch. The current and future biannual harvest specifications (past action #2, future action #4) management measures maintain stocks well below the overfishing limit. The Gear Switching Action item (Future Action #5) is not yet final but if measures are implemented, the available quotas and catch associated with them would not exceed the available harvest levels under the trawl catch share program.

Considering the direct and indirect impacts of the proposed action when added to the impacts of past and present actions on target species and the anticipated impacts of the reasonably foreseeable future actions listed above, the cumulative impacts of the proposed action are determined to be not significant because all catch would continue to be managed to stay within the respective allocations and ACLs. The anticipated impacts of the proposed action are expected to contribute to the cumulative impact on target and actively managed species of rockfish because we expect additional harvest. However, we don't anticipate the additional harvest to negatively impact already healthy and well-managed fish stocks that the action proposes to access or exceed the ACLs.

3.3 Non-target fish species

3.3.1 Status/Affected Environment

Impacts to non-target groundfish stocks for all alternatives are expected to be within those described in the 2023-2024 EA, as the analysis assumes that full ACLs are harvested for each stock within the fishery. Management measures would be implemented to keep catch within specified allocations and ACLs. As with the target species above, this section therefore attempts to provide a relative sense of which species may see impacts under each alternative. Recent attainment and stock status information can be found in the 2022 Stock Assessment and Fisheries Evaluation document.

3.3.2 Effects of the Alternatives

Under No Action, impacts to non-target groundfish species would be within those described in the 2023-24 EA.

For Alternative 1, OA vessels would be permitted to use non-bottom contact hook-and-line gear within the NT_RCA. There are likely minimal impacts to non-target groundfish (i.e. yelloweye rockfish, copper rockfish) as was previously described in [Agenda Item F.6, Attachment 1, April 2022](#). While there is some uncertainty given potential additional gear configurations that could be permitted under Alternative 1 compared to No Action (e.g., more hooks allowed on the stationary hook-and-line gear permitted under No Action), based on the available EFP data and life history of these stocks, it is unlikely that there will be significant impacts outside of those previously disclosed.

Under Alternative 2, there could be additional impacts to yelloweye rockfish, but are still expected to remain within what was disclosed in the 2023-2024 Harvest Specifications EA. Yelloweye rockfish are managed with Annual Catch Targets (ACTs) and harvest guidelines for the non-trawl sectors and with QPs for the IFQ sector. Yelloweye rockfish are prohibited from retention in the non-trawl sectors, and catch has stayed within the trawl and non-trawl allocations, and non-trawl ACTs/harvest guidelines in recent years ([Table 8-8 through Table 8-10 of Agenda Item F.6, Attachment 2, June 2022](#)).

As described above in Section 1.4.1, the NT_RCA was implemented to protect overfished species, including yelloweye rockfish. Yelloweye rockfish are known to inhabit the depths of the current NT_RCA, and models do indicate that yelloweye are likely to inhabit specific areas to be opened. Suboptions 1a-1c may mitigate potential impacts to yelloweye as it would keep areas known as yelloweye rockfish habitat closed to any type of bottom contact gear. Yelloweye rockfish impacts could also be mitigated with the use of YRCAs, both currently in regulation outside the NT_RCA (e.g., Point Delgada North and South, Point St. George & South Reef) or if the Council were to develop new YRCAs under Alternative 2, suboption 2 (Heceta Bank, Figure 14) or suboption 3.

Of the area to be opened under Alternative 2, there are currently no YRCAs available in regulation that the Council could consider implementing pre-season or inseason to control catch in any or all of the non-trawl sectors. However, per the Council motion, staff has identified three additional YRCAs for the Council and its advisory bodies to consider (Figure 15 and Table 3). Note that there are areas of high yelloweye suitability that were not proposed as YRCAs as they are currently being considered for EFHCA designation for bottom contact gear (e.g., Nehalem Bank/Shale Pile). If the Council chooses not to keep those areas closed, staff could develop additional YRCAs as directed.

For halibut fisheries, yelloweye rockfish are accounted for via an off-the-top deduction within the broader “incidental open access” sector, which includes fisheries such as salmon troll or sea cucumber that are targeting other species but may incidentally retain groundfish. Directed halibut fisheries have been observed by the WCGOP since 2017 and the table below shows the yelloweye rockfish mortality for that sector since that time. Yelloweye rockfish mortality has varied considerably in the last four years.

Table 9. Yelloweye rockfish mortality (mt) in the directed halibut fishery, 2017-2020 (source: WCGOP GEMM).

Year	2017	2018	2019	2020
Total Mortality (mt)	0.67	0.01	7.37	2.62

As directed halibut fisheries are subject to the NT_RCA as well, research data from the IPHC annual Pacific halibut stock assessment survey could provide some insight on the potential for yelloweye rockfish encounters within the 75-100 fathom bin. The IPHC survey samples 118 stations off the West Coast ranging in depths from 20 to 275 fathoms, including within the NT_RCA. For a detailed description of the survey protocols and station locations, please see the [IPHC sampling manual](#).

In the proposed action area off Oregon and California, the number of stations and survey information available varies. Between 46 and 60 stations are sampled off Oregon annually, depending on the sample design in the year, with 2019 and 2021 only having 46 samples. Sampling off Northern California has occurred only in 2013 (27 stations) and 2017 (42 stations with an extension south to the San Francisco Bay area). While this data set provides a limited sample set compared to utilizing coastwide sampling data (i.e., including Washington), given the known northerly distribution of yelloweye rockfish and the proposed action area, this data set was believed to be the most representative of the potential fishery interactions.

From 2011-2021 (no survey in 2020) in the stations sampled off Oregon and California, yelloweye rockfish are typically caught between two and seven stations annually with an average of 3.22 yelloweye rockfish (or approximately 22 pounds) being caught per skate on those positive stations.

Table 10. IPHC stations with yelloweye bycatch, percent of 2A stations with yelloweye rockfish bycatch, and average number per unit effort (NPUE) for positive stations, 2011-2021.

Year	Number of Stations with Yelloweye Rockfish Bycatch	Average NPUE for positive stations (number of yelloweye per skate a/)
2011	5	2.03
2012	4	4.06
2013	5	3.83
2014	7	3.81
2015	5	3.10
2016	2	1.25
2017	6	2.68
2018	4	1.26
2019	4	2.97
2020	No survey conducted off West Coast	
2021	4	4.10

a/ Skate=100 hooks

Of that bycatch observed, an average of 47.6 percent of the catch (extrapolated) occurred within the 75-100 fathom depth bin (Table 9). However, as shown in the far-right hand column, the proportion of catch varied by year, with 2016 seeing no positive skates in the 75-100 fathom depth bin and the previous year seeing almost 84 percent of the total yelloweye catch in the depth bin. This does suggest that there could be additional impacts to yelloweye rockfish with the expansion of the directed halibut fishery into shallower depths; however, given the interannual variability in the bycatch of the survey and the directed halibut fishery in the current depths, it is uncertain the degree to which yelloweye rockfish bycatch may change. Halibut quotas, season length, and the continued rebuilding of yelloweye rockfish may all play a factor in the overall bycatch in the fishery.

Table 11. Percentage of extrapolated catch of yelloweye rockfish on IPHC survey, 2011-2021.

Year	Number of yelloweye (extrapolated)		Percentage of Extrapolated Catch in 75-100 fathoms
	Outside of 75-100 fathoms	Within 75-100 fathoms	
2011	27.6	30.0	52.1%
2012	51.3	10.0	16.3%
2013	65.0	50.0	43.5%
2014	111.1	75.8	40.6%
2015	13.3	69.0	83.8%
2016	15.0	0.0	0.0%
2017	40.0	52.8	56.9%
2018	9.9	30.1	75.2%
2019	55.0	40.0	42.1%
2020	No survey conducted off West Coast		
2021	40.0	75.0	65.2%

YRCAs are currently not available for use in the directed Pacific halibut fishery and would need to be developed. However, as a part of this action, the Council could choose to develop YRCAs for use in mitigating yelloweye bycatch in the halibut fishery. Any YRCAs developed by the Council could be

implemented as a part of this action; however, the ability to implement any YRCA through an inseason action would require a separate process outside of this action in order to develop the mechanism in the Federal halibut regulations similar to that for recreational fisheries at [50 CFR 300.63\(I\)](#).

While there could be additional impacts to yelloweye rockfish or other non-target stocks under this alternative, there is likely not significant impacts to the stocks, especially with additional mitigation measures (i.e., YRCAs) available.

Under Alternative 3, there could be impacts to species such as bronzespotted and cowcod rockfishes. Bronzespotted and cowcod are expected to remain species that are prohibited from retention; however, opening the CCA to additional fishing would likely increase the encounters with these species, leading to increased mortality (as depths where they would be encountered would result in 100 percent mortality even if descended). Mortality could be mitigated by implementing one of the new proposed NT_RCA lines described under the alternative.

Using the same Southern California Hook and Line Survey data described above in Section 3.2.2 and Table 6, this analysis also looked at potential impacts to non-target species. For cowcod, there was a higher average catch per unit effort inside the CCA (1.1 fish per every 100 hooks) compared to outside the CCA (0.36 per every 100 hooks)- which aligns with the idea that the CCA was designed to protect cowcod and its habitat. For bronzespotted, there was also a higher average catch per unit effort (0.03 per 100 hooks compared to 0.006 per 100 hooks outside the CCA)- but overall, there were only five caught in total in both survey years. Again, these species will remain prohibited, but may have higher mortality with the opening of the CCA at the depths in which they are released. One species that has seen increasing levels of bycatch over time in the CCA has been yelloweye rockfish. Yelloweye rockfish is managed within the shelf rockfish south complex south of 40° 10' N. lat. and has seen an increasing number of encounters, particularly within the bounds of the eastern CCA in recent years. Bycatch of non-target species is uncertain, but could be mitigated with the use of the proposed NT_RCA lines, and therefore it is expected that impacts should be within those analyzed in the 2023-2024 Harvest Specifications EA.

While the hook-and-line survey information provides some information on which species may be more likely to be caught within the CCA, it does not take into account seasonality of fishing, management restrictions, etc. Overall, Alternative 3 is not expected to have significant impacts on any non-target stocks if the Council can mitigate catch inseason with new NT_RCA lines, trip or bag limit adjustments, BACs (if adopted) and the additional proposed groundfish closures.

Alternative 5 would develop BACs to be used inseason or preseason to close off an area to fishing by non-trawl vessels and could ensure impacts to non-target fish species remain within the environmental impacts assessed in the 2023-2024 Harvest Specifications EA. No impacts would result from the development of this measure and assessment of the impacts to non-target species would occur at the time of implementation and therefore are not discussed here.

Cumulative Effects on Non-Target Species

Considering the direct and indirect impacts of the proposed action when added to the impacts of past and present actions on non-target species and the anticipated impacts of the reasonably foreseeable future actions as described under Cumulative Effects on Target Species, the cumulative impacts of the proposed action are determined to be not significant because all catch would continue to be managed to stay within the respective allocations and ACLs to prevent exceedance of overfishing limits.

The anticipated impacts of the proposed action are expected to add a minor contribution to the cumulative impact on non-target species because we expect some additional harvest as part of fishers targeting certain species and fishing in areas that have previously been protected for yelloweye. However, we don't

anticipate the additional harvest to negatively impact the status of fish stocks beyond the level anticipated and analyzed in the 2021-2022 and 2022-2023 harvest specifications. Again, these stocks are actively monitored and managed through existing tools (i.e., NT_RCA lines) and new tools being developed under alternative 5.

3.4 Prohibited Species

3.4.1 Status/Affected Environment

Non-trawl gear types have historically had little or no mortality of any of these species, and even with the expansion of opportunities for non-trawl fisheries through this action, mortality is expected to still be negligible. Recent estimates of bycatch of Endangered Species Act (ESA) listed species can be found in the [June 2021 Groundfish Endangered Species Workgroup Reports](#) or salmon bycatch scorecard. For other prohibited species (halibut, Dungeness crab), estimates can be found in [Agenda Item C.1.b, NMFS Report 1, June 2021](#) and [Agenda Item C.1.b, NMFS Report 3, June 2021](#).

3.4.2 Effects of the Alternatives

Under the proposed alternatives, there are likely no significant impacts associated with prohibited or protected species including salmon, Dungeness crab, eulachon, and green sturgeon given the limited encounters and mortality associated with non-trawl fisheries.

Cumulative Effects on Prohibited Species

Overall impacts from the Proposed Action and alternatives, when combined with the effects of past, present, and reasonably foreseeable future actions, the incremental effect of the action will not result in significant cumulative impacts on prohibited species.

3.5 Marine Mammals / Turtles

3.5.1 Status/Affected Environment

NMFS manages marine mammals and turtles that are primarily affected by fisheries through interactions with fishing gear, disturbance by fishing activity or vessel movement, or prey competition.

Marine mammal stocks, including those currently listed as endangered or threatened under the ESA or depleted or strategic under the Marine Mammal Protection Act (MMPA) that may be affected by the proposed action or alternatives are shown in Table 10 and in NMFS annual [List of Fisheries \(LOF\)](#). The LOF classifies each commercial fishery into one of three categories under the MMPA based upon the level of mortality and serious injury of marine mammals that occurs incidental to each fishery. The classification of a fishery on the LOF determines whether participants in that fishery are subject to certain provisions of the MMPA, such as registration, observer coverage, and take reduction plan requirements. Category III species are those with a “remote likelihood of/no known incidental death or serious injury of marine mammals”; these species are not discussed further as no changes are expected under any alternative.

Table 12. 2022 List of Fisheries under this action that may impact marine mammals.

Species	Fishery	Status
Humpback Whale	WA/OR/CA sablefish pot fishery	Category II
Bottlenose dolphin	WA/OR/CA Groundfish, bottom longline/setline	Category III
California Sea Lion	WA/OR/CA Groundfish, Pacific Halibut longline ¹⁶	
Northern elephant seal, California breeding	WA/OR/CA groundfish/finfish hook-and-line	
Sperm whale	AK/WA/OR/CA commercial passenger fishing vessel	
Stellar Sea Lion		
Killer Whale		

The primary marine mammal of focus for with this action is humpback whales. The [2020 BiOp](#) concluded that the take of humpback whales would likely occur through entanglement of fishing gear, and specifically, the sablefish pot gear fishery. The incidental take limit for the groundfish fishery is no more than 5 humpback whales in one year are observed or estimated to have been incidentally captured, or if the 5-year running average of humpback whale bycatch exceeds 2.34 per year. Historically, there have been two documented takes of humpback whales in the groundfish fishery- one in the LEFG sablefish pot fishery in 2014 and the OA pot fishery in 2016. Based on the most recent report, the estimated fleet-wide entanglements/takes in the combined pot sectors were not above the five-year running average threshold ([Agenda Item G.4.a, NMFS Report 4, June 2021](#)).

Leatherback sea turtles are managed under the [2012 BiOp for the Pacific Coast Groundfish Fishery](#). The Incidental Take Statement (ITS) states that the take limit of leatherback turtles to be 0.38 turtles/year over a 5-year average not exceeding 1 turtle/yr. There have been no observed takes of turtles from 2015-2019. ([Agenda Item G.4.a, NMFS Report 5, June 2021](#)) The only observed take in the groundfish fishery was in the OA pot fishery in 2008.

3.5.2 Effects on Marine Mammals/Turtles

Alternative 1 is expected to have little to no additional impact to marine mammals or turtles outside of No Action (see discussion on [page 32 of 2023-2024 Biennial Harvest Specifications and Management EA](#)) as it would only expand the potential non-bottom contact hook-and-line gear configurations permitted in the NT_RCA. Hook-and-line gear has no documented impacts to humpback whales or sea turtles. Pot gear would still be prohibited in the NT_RCAs under Alternative 1.

Under Alternative 2, there would be more area opened to pot gear compared to No Action- all of which resides in the critical habitat for humpback whales and/or leatherback sea turtles (see Figure 21). However, it is not necessarily the amount of area that affects potential entanglement risk but rather the amount of gear in the water. This action does not change the overall amount of sablefish (i.e., the primary species targeted by pot gear) that can be caught by the fishery, which is analyzed as part of the 2023-20224 Biennial Harvest

¹⁶ None documented to be incidentally killed or injured.

Specifications and Management Measures EA. As such, we do not anticipate an increase in fishery participants or gear in the water, as this alternative only opens up new fishing grounds. The density of fishing gear (including pot gear) both shoreward and seaward of the NT_RCA will likely lessen, as some vessels will likely shift some of their effort to the newly opened depth bin. This will increase the spatial distribution of pot gear, but not change the overall amount of effort. Opening shallower areas could increase the overlap in humpback feeding grounds, but there is no evidence to suggest that 75-100 or 75-125 fathoms would be more impactful to the species compared to 100-125 or greater which is already opened to fishing. There are expected to be no impacts to the prey of humpbacks given that their typical prey of krill or smaller fish are not selected by the gear types being considered under this action. For leatherbacks, there is no impact to prey expected given that the jellyfish bycatch typically occurs in the trawl fisheries. Therefore, this alternative is not expected to change interactions with humpbacks or turtles from what is disclosed in the 23-24 EA.

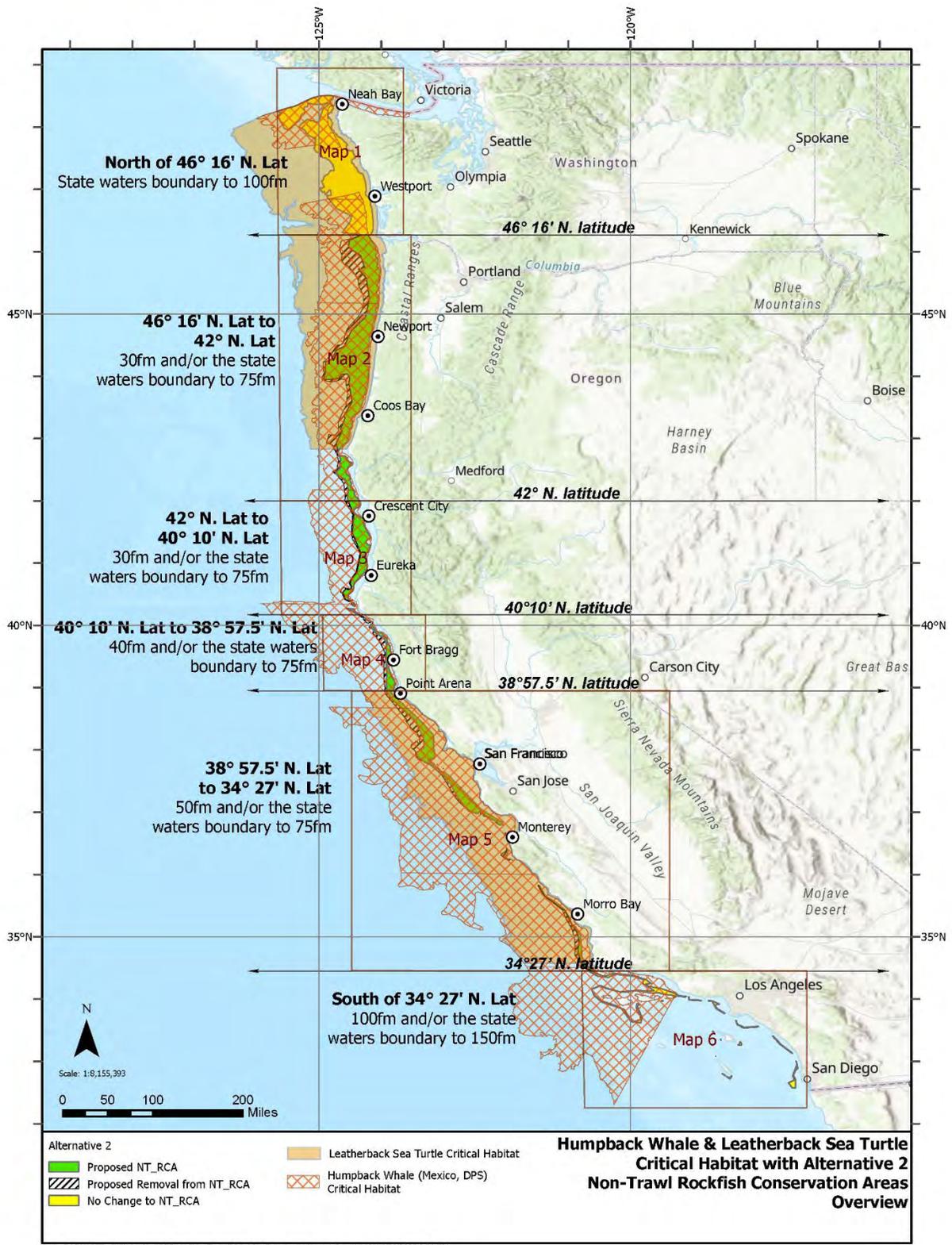


Figure 21. Humpback whale and leatherback critical habitat overview with Alternative 2

Alternative 3 is also not expected to change interactions with humpbacks or turtles from what is disclosed in the 23-24 EA, nor create additional adverse impacts based on the critical habitat designations (Figure 22). In the assessment of the critical habitat for humpback whales, the Critical Habitat Review Team determined that the southern California area (noted as Unit 19 in the draft biological report) did not contain “Biologically Important Areas”, which consists of reproductive areas, feeding areas, migratory corridors, and small and resident populations, for humpback whales ([NMFS 2019](#)). However, the Critical Habitat Review Team did note that the area “is predicted to support high densities of whales in the winter/spring months...[which] may stem from the fact that some of the whales sighted in this area may be transiting through the area, rather than occupying the area as a feeding destination.” Therefore, there could be some increased opportunity for interactions within the spring and winter months, but would be dependent on the location (i.e., where the whales are transiting versus fishing occurring) and amount of gear in the water. For leatherbacks, the critical habitat does not extend down to the action area for Alternative 3, as the most dense concentrations of foraging leatherbacks are known to occur off central California from Point Arena to Point Pinos in nearshore waters ([CA Entanglement Risk Assessment and Mitigation Program and Draft Conservation Plan](#)).

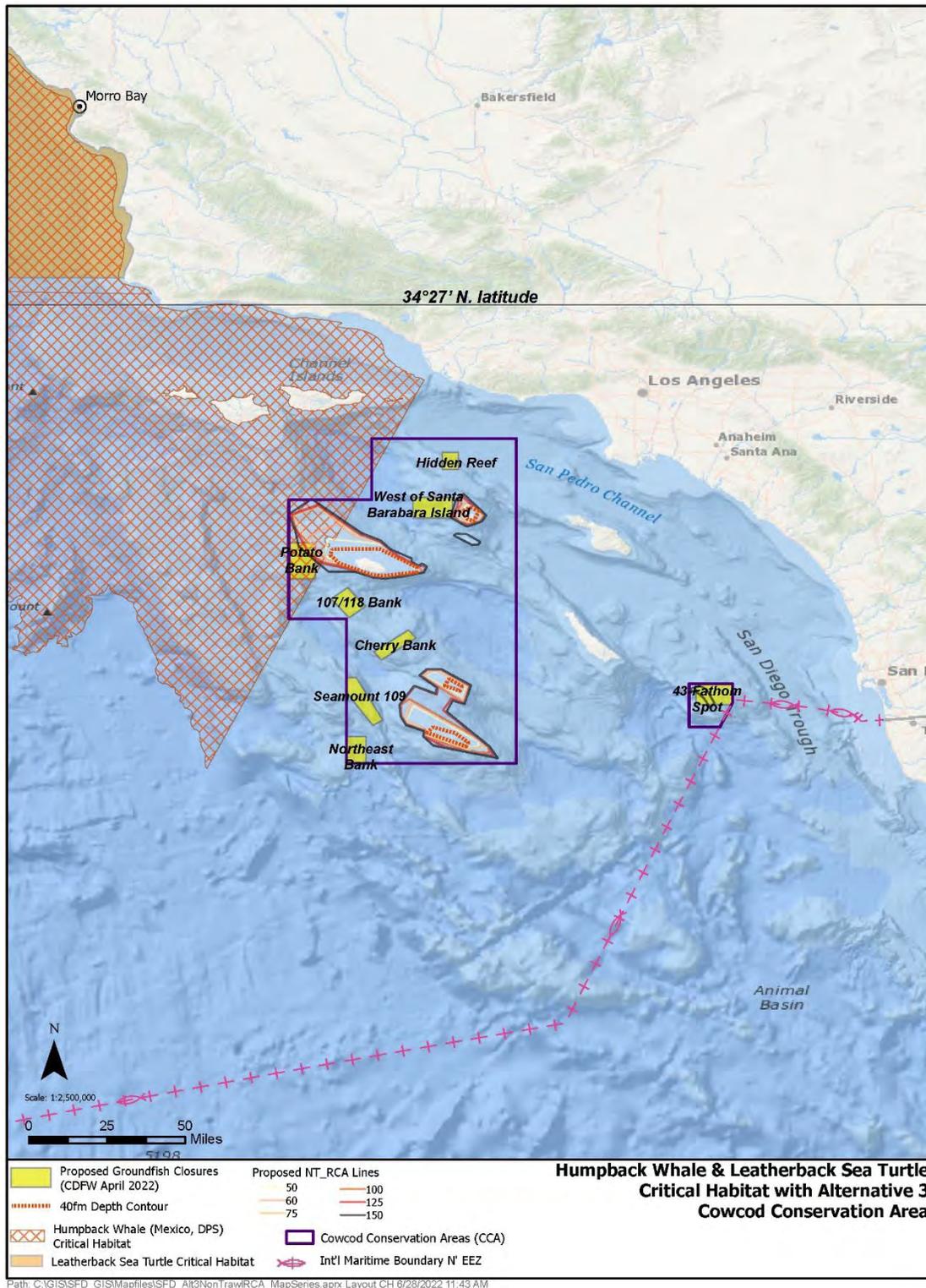


Figure 22. Humpback whale and leatherback critical habitat overview with Alternative 3

Alternative 5 is not expected to have any significant impacts on marine mammals or turtles as it would not be increasing the total amount of gear in the water, but only potentially moving effort to different areas. Overall impacts would be assessed when implementing a BAC preseason or inseason.

Cumulative Effects on Marine Mammals/Turtles

Under the 2023-2024 harvest specifications and management measures package, the LEFG primary tier fishery season end date was extended from October 31 to December 31. As noted in the 2023-2024 Harvest Specifications EA, “extending the season would be unlikely to have an additive effect on how much gear is in the water but would more likely keep the gear amount at a status quo level.” Given that the primary tier fishery is a highly attained fishery with a limit on pot gear permits, we would continue to not expect an increased risk of entanglement with Alternative 2 and the season extension. The fishery is expected to operate in a similar manner as the current season structure, just potentially in slightly shallower depths (i.e., into 75 fathoms) and no new gear would be used that would negatively impact whales or sea turtles. The fishery will continue to be constrained by the amount or extent of take and the non-discretionary terms and conditions documented in the ITS for humpback whales and sea turtles.

3.6 Seabirds

Seabirds are protected under the Migratory Bird Treaty Act. Additionally, some species are listed under the ESA. Seabirds are generally affected by fishing through interactions with fishing gear, disturbance by fishing activity or vessel activity, and prey competition.

3.6.1 Status/Affected Environment

Table 11 describes the identified seabird species with estimated mortality in West Coast non-trawl groundfish and directed halibut fisheries from 2012-2018.¹⁷ For a full description of all seabirds found on the West Coast, please see Janet, et.al. 2021. With regards to this action, the primary species of concern likely to interact with the non-trawl and directed halibut fisheries is short-tailed albatross. Short-tailed albatross are managed in the groundfish fishery with a take threshold of five estimated or one observed albatross over a two-year period, neither of which have been exceeded based on the last status report ([Agenda Item G.4.a, NMFS Report 6, June 2021](#)). The only observed take of short tailed albatross was in 2011 in the longline LEFG sablefish fishery.

¹⁷ Unidentified species not listed in table, see WCGOP report for estimated mortalities by type of seabird.

Table 13. Seabird species with estimated mortality in West Coast Non-Trawl Groundfish and Directed Halibut Fisheries

Type	Common name	Status ¹⁸
Albatrosses	Black-footed	Near threatened
	Short-tailed	Endangered
	Laysan	Near threatened
Fulmars	Northern fulmar	Least concern
Shearwaters	Sooty	Near threatened
	Pink-footed	Vulnerable
Pelican	Brown pelican	Least concern
Cormorant	Brandts	Least concern
	Double-crested	Least concern
Loon	Common	Least concern
Phalarope	Red-necked	Least concern
Gulls	Glaucous-winged	Least concern
	Mew	Least concern
	Western	Least concern
	Arctic herring	Least concern
	California	Least concern
	Ring-billed	Least concern
Murres	Common	Least concern

(Source: WCGOP Seabird Bycatch Report 2002-2018)

3.6.2 Effects on Seabirds

Impacts to seabirds under No Action can be found in Section 3 of the 2021-2022 Harvest Specifications EA and Section 8.4 of 2023-2024 Harvest Specifications EA. The 2023-2024 EA describes that there have been no seabird interactions observed through the hook-and-line gear configurations used under the EFPs (which by January 1, 2023 are expected to be defined and implemented for use), supporting the assumption of lower risk of seabird bycatch than other gear types. During the review and approval process for the EFPs, NMFS concluded the risk of seabird interactions with these hook-and-line gear configurations are expected to be lower than with bottom longline and determined, in part, the gear used under the EFPs are not expected to cause short-tailed albatross to exceed take limits. As noted earlier, LEFG vessels are required to implement mitigation measures to prevent seabird interactions and under No Action these measures would continue.

Under Alternative 1, impacts to seabirds are uncertain given the allowance of natural bait. While other gear types (e.g., longline) are permitted to use natural bait, they are also subject to mitigation measures such as streamer lines or night setting. Gear types that were approved under the 2023-2024 harvest specifications (management measure “12e”) were only approved to be used with artificial bait based on previous EFP testing (See Section 8.4 of 2023-2024 Harvest Specifications). Applicants of these EFPs did request and the Council recommended that the gears be used to test natural bait impacts, particularly on seabirds, in the 2023-2024 biennium. For the vertical hook-and-line gear configurations (i.e., stationary vertical jig gear used in the Emley-Platt EFP project), which is like rod and reel type gear, there is thought to be a lower concern with the use of natural bait given the fishing method of the gear. As described in the Seabird BiOp, rod and reel type gear is unlikely to affect short-tailed albatross in part because of how the nature of a rod and tackle limits the exposure of the gear to seabirds. The activity is conducted close to the vessel usually in the proximity of humans, causing the line and bait to be less attractive to seabirds than other hook-and-line gear that tends to sink slowly for a comparatively long distance aft of the vessel.

¹⁸ Endangered under ESA; all other categories are International Union for the Conservation of Nature

With the troll configuration, there is some uncertainty related to the sink rate of the gear. Depending on the configuration of the gear, it is possible, absent further research not available at this time, that troll gear has a similar sink profile as bottom longline gear and that allowing baited hooks could create a similar seabird risk as is well documented in bottom longline gear. At the time of drafting of this document, it is uncertain of what configurations may be able to test natural bait and if there will be sufficient data by the time final action is scheduled to occur for this package. Additionally, it is unknown whether the seabird bycatch mitigation measures currently used successfully in the bottom longline fishery would work on groundfish troll vessels.

Under Alternative 2, while there would be additional area opened for longline gear to be used, mitigation measures would still apply. Specifically, all vessels 26 feet or greater in length must use streamer lines or night set when operating within the EEZ north of 36° N. lat. ([§ 660.21](#)). There have been no known takes of short-tailed albatross since the mitigation measure requirements were implemented. However, the most recent NMFS report on seabird bycatch notes that “the continuing use of longlines with floats remains a potential risk to short-tailed albatross, especially for those fishers unwilling or unable to fish at night.” ([Agenda Item G.4.a, NMFS Report 6, June 2021](#))

There are no impacts to short-tailed albatross under Alternative 3 given that the CCA is south of the known current range of the species. Vessels fishing south of 36° N. lat. are not subject to the mitigation measure requirements. The Groundfish Endangered Species Workgroup (GESW) noted in their most recent statement at the June 2021 Council meeting that there have been no sightings of short-tailed albatross in the area from 2011-2020 and no new telemetry or sightings data in the area; however, it is important to note that observer coverage is lower on these vessels. ([Agenda Item G.4.a, GESW Report 1, June 2021](#)) Additionally at that meeting, it was noted that there was a juvenile observed by a commercial fishing vessel south of 36° N. lat. in June 2021 (i.e. after the time series considered in the GESW report; [Public Comment, June 2021](#)) The Council will revisit any new information on the issue in 2023 under the routine GESW agenda item ([June 2021 Decision Document](#)).

Alternative 5 is not expected to have any significant impacts on seabirds as it would not be increasing the total amount of gear in the water, but only potentially moving effort to different areas. Overall impacts would be assessed when implementing a BAC preseason or inseason.

Cumulative Effects on Seabirds

Considering the direct and indirect impacts of the proposed action when added to the impacts of past and present actions on non-target species and the anticipated impacts of the reasonably foreseeable future actions as described under Cumulative Effects on Target Species, the cumulative impacts of the proposed action are determined to be not significant because seabird-specific mitigation measures would still be in place and the GESW would continue to monitor potential impacts to seabirds on a biannual basis.

Apart from the allowance of natural bait with the troll gear configuration, the anticipated impacts of the proposed action are expected to add a minor contribution to the cumulative impact on seabirds because of the allowance of natural bait on non-bottom contact gear types and the shifting of fishing effort onto the shelf in the proposed openings of the NT_RCA. However, we don't anticipate the impact to significantly impact seabirds outside of the proposed terms of the current BiOp given the mitigation measures in place and the routine monitoring and assessment of the fishery against the ITS. At this time though, it is uncertain about the impacts to seabirds with the use of natural bait on troll gears and if bycatch mitigation measures would work as effectively on groundfish troll vessels.

3.7 Habitat

3.7.1 Status/Affected Environment

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 have updated available habitat information, and their understanding of the impacts of fishing on habitat, in periodic 5-year reviews of the EFH components in the Council fishery management plans (Appendix B and C). Maps and descriptions of EFH for groundfish species are available in the applicable fishery management plan.

As described in the FMP Appendix C, habitat sensitivity and recovery time vary between habitat type. Table 12 provides an overview of the impacts from non-trawl gear and Figure 23 shows the substrate types present along the West Coast compared to the NT_RCA and CCA configurations under the alternatives. 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 for all types of non-trawl gear fall under the “minor impacts” category (see [Table 3a and Table 3b of Appendix C](#)). Within the non-trawl gear types (and those with research available), habitat is more sensitive and incurs a longer recovery time from 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 fixed gear compared to the other two bottom types. Hook-and-line style gears 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.

Table 14. Summary of non-trawl gears used in the groundfish fishery and their effects on groundfish habitat, from Appendix C-1 of the Groundfish FMP.

Gear types subject to the NT_RCA	Method of fishing	Gear components that impact substrate	Substrates generally fished	Potential effects to 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
Hook-and-line gears				
Dinglebar gear	Bounces on bottom	Dinglebar, hooks, line	Hard bottom, rocky reef	Overturn, undercut, crush, break habitat and organisms, displace/disturb biogenic habitat
Troll Gear	Trolling in upper water column	Weights	Primarily fished in water column	Crush/break biogenic habitat (from weights), entanglement
Vertical Longline (single or multi hook gangion, and weight)	Drift fishing “jigging” or trolled	Weights, hooks, line	All bottom types and water column	Damage to and displacement of biogenic habitat damage; entanglement

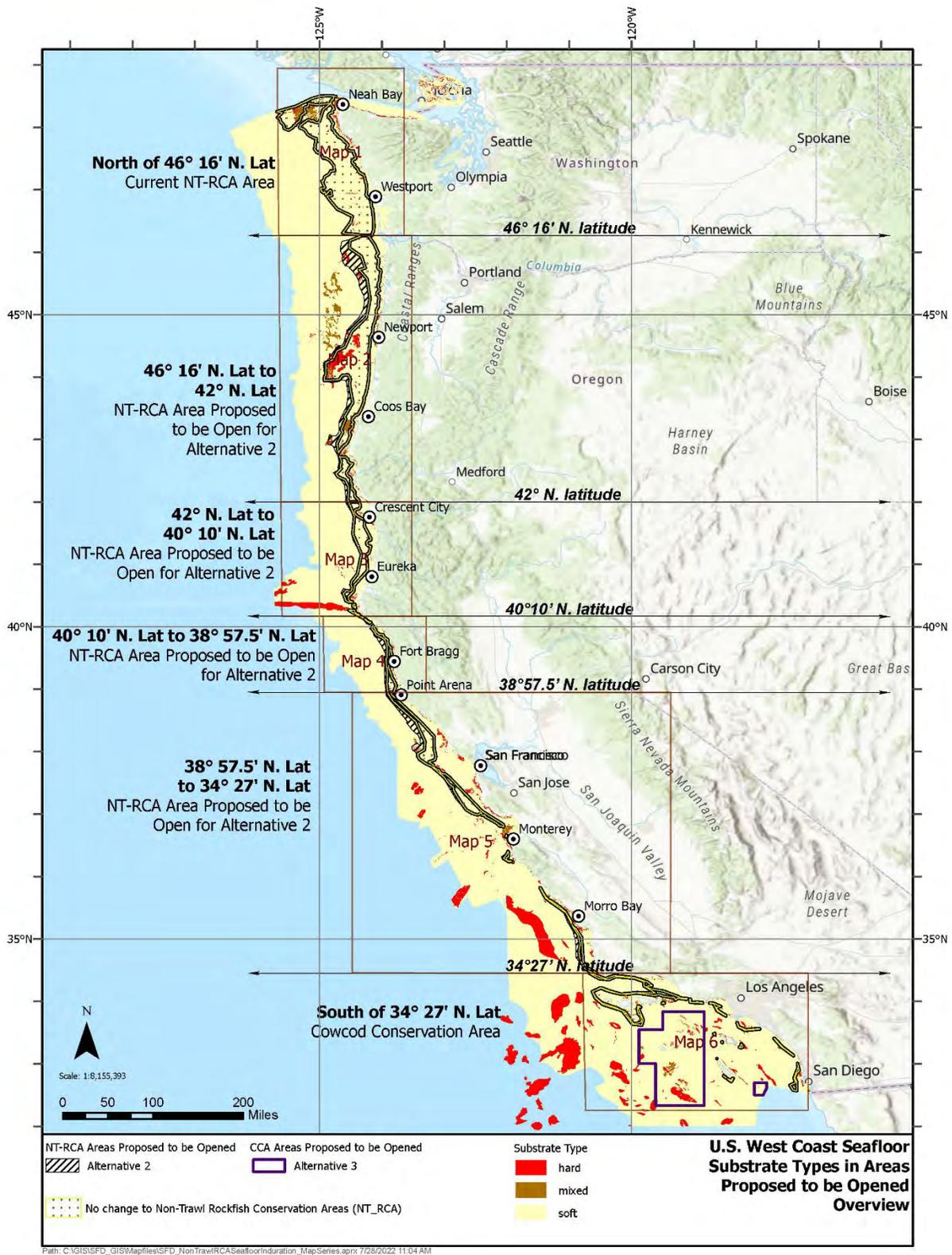


Figure 23. Substrate Type Compared to Action Alternatives

3.7.2 Effects of the Alternatives

Under No Action, habitat impacts would be the same as those described in Section 3 of the 2021-2022 Harvest Specifications EA and Section 8 of the 2023-24 Harvest Specifications EA.

For Alternative 1, impacts are likely similar to that as described in the 2023-24 Harvest Specifications EA. At the time of drafting of this document, the gear configurations that would be permitted beyond those included in the 2023-2024 new management measures are unknown. However, as was described in [Agenda Item F.4, Attachment 2, April 2022](#), the style of gear types proposed under this action (“non-bottom contact hook-and-line”) are likely not to impact habitat in a significant manner.

Alternative 5 has no associated habitat impacts under this action; however, it could have indirect positive benefits if implemented in the future on the area where fishing pressure is restricted or indirect negative impacts if it resulted in effort moving to an area with more sensitive habitat than the closed area. This would need to be considered at the time of implementation.

Alternatives 2 and 3 are likely to have negative impacts on habitat compared to No Action as each alternative is proposed to open areas to additional fishing effort with non-trawl gear. However, each alternative considers potential mitigation measures in protecting habitat. In the following sections, an analysis is presented on the potential impacts to seafloor habitat, including groundfish habitat areas of particular concern (HAPCs) and deep-sea corals and sponges. Seafloor substrate data was developed by Oregon State University, Active Tectonics and Seafloor Mapping Lab, NOAA Fisheries, and the Bureau of Ocean Energy Management. Groundfish HAPCs are defined in [Section 7.3 of the groundfish FMP](#) and include estuaries, canopy kelp, seagrass, and rocky reefs. There are additional HAPC areas of interest due to unique geological and ecological features, including seamounts. Deep sea corals and sponge observation data was obtained from the [NOAA Deep Sea Coral and Sponge Portal](#) (description of the database and sources can be found in the [NOAA Technical Memorandum NOS NCCOS 191](#)). To facilitate ease of understanding, all observations were grouped into three main categories as was done under Amendment 28: corals, sponges, and sea pens. Note that [habitat suitability models are available on the Deep Sea Coral and Sponge Portal](#) for a variety of coral and sponge species and were used in development of the proposed groundfish closures under Alternative 3 by CDFW and stakeholders. The analysis presented below does not include those layers at this time.

3.7.2.1 Alternative 2

Opening the area seaward of 75 fm to non-trawl groundfish and directed halibut fishing between 46° 16' N. lat. and 34° 27' N. lat. would result in 2,351 sq. mi. opened to fishing, including approximately 201 sq. mi. of area currently closed to all bottom trawl gear in EFHCAs. In the area to be exposed to fishing, there are a variety of habitat types (see Figure 24, Figure 32, Figure 36, and Figure 39); however, the majority of the hard substrate (i.e. the most sensitive to fixed gear types) that could be exposed under Alternative 2 is currently within bottom trawl EFHCAs and may therefore be protected through one of the suboptions discussed below.

There are a total of 23 bottom trawl EFHCAs that would be partially or entirely exposed under Alternative 2. Under suboption 1, the Council could consider prohibiting groundfish bottom contact gear from fishing within current bottom trawl EFHCAs in the area exposed (1a) or the entirety of the bottom trawl EFHCA with small portions outside the existing NT_ RCA boundary (1b). After further review of the suboptions, staff also propose a third suboption (1c)- where the entire bottom trawl EFHCA would be prohibited from groundfish bottom contact gear- both within and outside the proposed NT_ RCA boundary. Table 13 provides staff's assessment of each suboption's applicability to each EFHCA area exposed under Alternative 2. Each EFHCA exposed by Alternative 2 is listed (first column) and the amount of habitat that could be opened to fishing in the EFHCA in the second column. The final three columns describe whether

a suboption was not applicable (No Action) or if there was sufficient information available to consider a closure (Applicable). Note that some assessments include a *, which denotes complexities with enforcement (discussed in following paragraph). A close-up of each of the EFHCAs exposed by Alternative 2 and the HAPCs and deep-sea coral and sponge occurrences in the area are provided below with a discussion on the suboptions and cross-referenced in Table 13.

For the majority of bottom trawl EFHCAs with portions exposed under Alternative 2, closing those exposed portions (1a) would be difficult to enforce due to their small size. Based on discussion with NOAA's Office of Law Enforcement (pers. Comm. Greg Busch), area closures typically need to be at least 1 mile wide in either direction to be enforced effectively with VMS reporting every 15 minutes, depending on the shape of the area and the specific fishery. Areas that do not meet this standard for most of the proposed area to be opened are identified by an asterisk (*) in the table below. Based on these criteria, staff assumed that EFHCAs with less than one sq. mi. of proposed opened area in total would not be applicable for suboption 1a. Based on the absolute size of the proposed closure, Heceta Bank, Blunts Reef, Delgada Canyon, and Point Arena North appear to not be suitable for suboption 1a. Eleven additional bottom trawl EFHCAs were also assessed to have minimal sensitive habitats present in the areas proposed to be open and potential enforcement complexities based on the 1-mile criteria, and therefore suboption 1a was determined not to be applicable.

For suboption 1b, staff identified the following EFHCAs that would have portions exposed, but already have small portions outside of the current NT_RCA boundary: Nehalem Bank/Shale Pile (Figure 25), Bandon High Spot (Figure 30), The Football (Figure 27), and La Cruz Canyon (Figure 38). If the Council chose to implement suboption 1b for these four EFHCAs, it would result in an additional 24.35 sq. mi. being closed to groundfish bottom contact gear that could currently be used by industry.

Suboption 1c would create a groundfish bottom contact EFHCA over the entire bottom trawl EFHCA—both in the area to be exposed and in the current NT_RCA (i.e., not exposed) with the idea that this would lead to less enforcement and administrative burden as the closure boundary would remain as currently described in regulation. In addition, if the Council chose to move NT_RCA boundaries again in a future action (therefore exposing additional area to non-trawl fishing, then these areas would already be protected via suboption 1c. In some situations, the result of suboption 1c would be the same as suboption 1b (i.e., adding a groundfish bottom contact closure over the entire EFHCA area) and is noted as such in the table below. While there could be some efficiencies gained with suboption 1c, the Council should also consider whether these additional habitat protections should be dealt with in the broader EFH review process. Some of the EFHCAs exposed under Alternative 2 extend into state waters, and therefore while the Council could opt for suboption 1c for an area, the states would have to take conforming action to enforce that restriction in state waters.

Overall, the selection of any of these suboptions for the EFHCAs exposed would protect habitat that would otherwise be exposed to non-trawl bottom contact gear. While non bottom contact gear (i.e., troll or jig gear) could be fished in these areas, those gear types are known to have less impact on substrate types or corals/sponges due to the lower likelihood of the gear hitting the seafloor or biogenic structure. It should be noted that the Council can select No Action for any EFHCA that is partially or wholly exposed by the seaward NT_RCA boundary adjustment if there are not any significant habitat concerns with new areas being exposed to non-trawl gear.

Table 15. Assessment of Applicability of Alternative 2 Suboptions for EFHCAs exposed under Alternative 2

EFHCA name	Map Reference	Approximate Amount of EFHCA to be exposed under Alternative 2 (sq. mi)	Suboption 1a: Prohibit all groundfish bottom contact gear in EFHCA that would otherwise be reopened under this action. (* denotes areas that may have enforcement complexity)	Suboption 1b: Prohibit all groundfish bottom contact gear in the entire EFHCA for bottom trawl EFHCAs with small portions outside the existing NT_RCA seaward boundary	Suboption 1c: Create a groundfish bottom contact EFHCA over the entire bottom trawl EFHCA- both in the area to be exposed and in the current NT_RCA
Nehalem Bank/Shale Pile	Figure 25	60.44	Applicable	Applicable	Applicable (Same as 1b)
Garibaldi Reef North	Figure 26	8.48	Applicable	Not Applicable	Applicable
Garibaldi Reef South	Figure 27	2.32	Applicable	Not Applicable	Applicable
Heceta Bank	Figure 28	Negligible	Not Applicable	Not Applicable	Not Applicable
Arago Reef	Figure 29	2.54	Not Applicable*	Not Applicable	Applicable
Bandon High Spot	Figure 30	39.72	Applicable	Applicable	Applicable (Same as 1b)
Rogue River Reef	Figure 31	5.69	Not Applicable*	Not Applicable	Applicable
Eel River Canyon	Figure 33	1.83	Not Applicable *	Not Applicable	Not Applicable
Blunts Reef	Figure 34	0.5	Not Applicable	Not Applicable	Applicable
Mendocino Ridge	Figure 35	11.56	Not Applicable *	Not Applicable	Not Applicable
Delgada Canyon	Figure 37	Negligible	Not Applicable	Not Applicable	Not Applicable
Point Arena North	Figure 38	0.76	Not Applicable	Not Applicable	Applicable
Point Arena South Biogenic Area	Figure 40	11.77	Not Applicable *	Not Applicable	Not Applicable
The Football	Figure 41	8.91	Applicable	Applicable	Applicable (Same as 1b)
Gobblers Knob	Figure 42	1.64	Applicable	Not Applicable	Not Applicable
Cordell Bank/Biogenic Area	Figure 43	12.52 a/	Not Applicable	Not Applicable	Not Applicable
Cordell Bank (50-fathom isobath)	Figure 44	0.41	Bottom Contact EFHCA (Suboptions Not Applicable)		
Farallon Islands/Fanny Shoal/Cochrane Bank	Figure 45	1.2	Not Applicable*	Not Applicable	Applicable
Farallon Escarpment	Figure 46	1.47	Not Applicable*	Not Applicable	Not Applicable

Ascension Canyonhead	Figure 47	1.22	Not Applicable*	Not Applicable	Not Applicable
Monterey Bay/Canyon	Figure 48	3.08	Not Applicable*	Not Applicable	Not Applicable
Big Sur Coast/Port San Luis	Figure 49	1.95	Not Applicable*	Not Applicable	Not Applicable
La Cruz Canyon	Figure 50	5.89	Applicable	Applicable	Applicable (Same as 1b)
Point Conception	Figure 51	17.92	Not Applicable*	Not Applicable	Not Applicable

a/ Cordell Bank/Biogenic Area bottom trawl EFHCA overlaps with the Cordell Bank (50-fathom isobath) bottom contact EFHCA and therefore, only 12.11sq. mi. of area would be opened to groundfish non-trawl bottom contact gears.

Discussion of Alternative 2 for EFHCAs off Oregon (42° N. lat. to 46° 16' N. lat.)

Off the coast of Oregon, there are six bottom trawl EFHCAs that would be all or partially exposed under Alternative 2 that cover a variety of substrate types (Figure 24) as well as HAPCs and coral and sponges.

For the Nehalem Bank/Shale Pile EFHCA, there would be approximately 60.4 sq. mi. of area opened to non-trawl fishing consisting of hard substrate/rocky reefs and some sponge observations (Figure 25). Approximately 4.5 sq. mi. of the EFHCA is already exposed to non-trawl bottom contact gear outside of the current NT_RCA configuration. The Council could consider any of the suboptions for this EFHCA, noting that suboption 1b and 1c would result in the same prohibition (i.e., the entire EFHCA would have an added groundfish bottom contact EFHCA).

For Garibaldi Reef North EFHCA, approximately 8.6 sq. mi. of area would be opened to non-trawl fishing (Figure 26). While there are no coral or sponge observations in this area, it does consist of rocky reef habitat. This EFHCA is completely within the current boundaries of the NT_RCA and therefore the Council could consider suboption 1a or 1c if there was a desire to mitigate potential habitat impacts in the area, which would extend the groundfish bottom contact EFHCA by approximately 6.4 sq. mi.

Similar to Garibaldi Reef North, Garibaldi Reef South EFHCA (Figure 27) is fully within the bounds of the current NT_RCA and less than 0.4 sq. mi. would remain closed to non-trawl fishing in the NT_RCA boundary under Alternative 2. Suboptions 1a and 1c are available for the Council to select if desired. However, there is only limited presence of rocky reef HAPC in the area and no known coral/sponge occurrence, therefore the Council should consider if any additional habitat protection is needed in this area.

A negligible amount of area would be exposed at Heceta Bank EFHCA; therefore, no suboptions are likely to be applicable (Figure 28). However, the area to the west of this EFHCA (which would include any residual area opened in the EFHCA and the new seaward boundary) would be included within the proposed YRCA under suboption 2.

For Arago Reef EFHCA, 2.54 sq. mi. of area would be exposed to non-trawl fishing gear under Alternative 2 with only minimal rocky reef habitat present (Figure 29). Additionally, given the small size of the exposure, it would be likely hard to enforce the closure under suboption 1a making that option not applicable. The Council could consider suboption 1c, which would extend into the NT_RCA and state waters; however, states would need to take conforming action to prohibit groundfish non-trawl bottom contact gear from fishing in those areas. Overall, the Council may want to consider this area's designation during the next EFH review process.

Under Alternative 2, the entire Bandon High Spot EFHCA would now be exposed to non-trawl fishing gear (Figure 30). Currently, less than 27 percent (~14.5 sq. mi.) is subject to fishing outside of the NT_RCA boundaries. Both the exposed and proposed to be exposed areas contain rocky reef habitat and coral/sponge observations. Suboption 1a would afford additional habitat protection, with suboption 1b offering the greatest habitat protection (Suboption 1c would have the same impacts as 1b).

Rogue River Reef EFHCA would open approximately 5.7 sq. mi. of area to non-trawl fishing gear, with the majority of the EFHCA remaining in the NT_RCA (or state waters; Figure 31). Due to the size of the opening, suboption 1a may be difficult to enforce and would offer minimal habitat protection to HAPCs suggesting that this suboption is not applicable to the area. The Council could consider suboption 1c; however, due to the extent of the area within the NT_RCA and state waters, the Council may want to consider forgoing any additional habitat protects here in favor of waiting for the more holistic EFH review for the area.

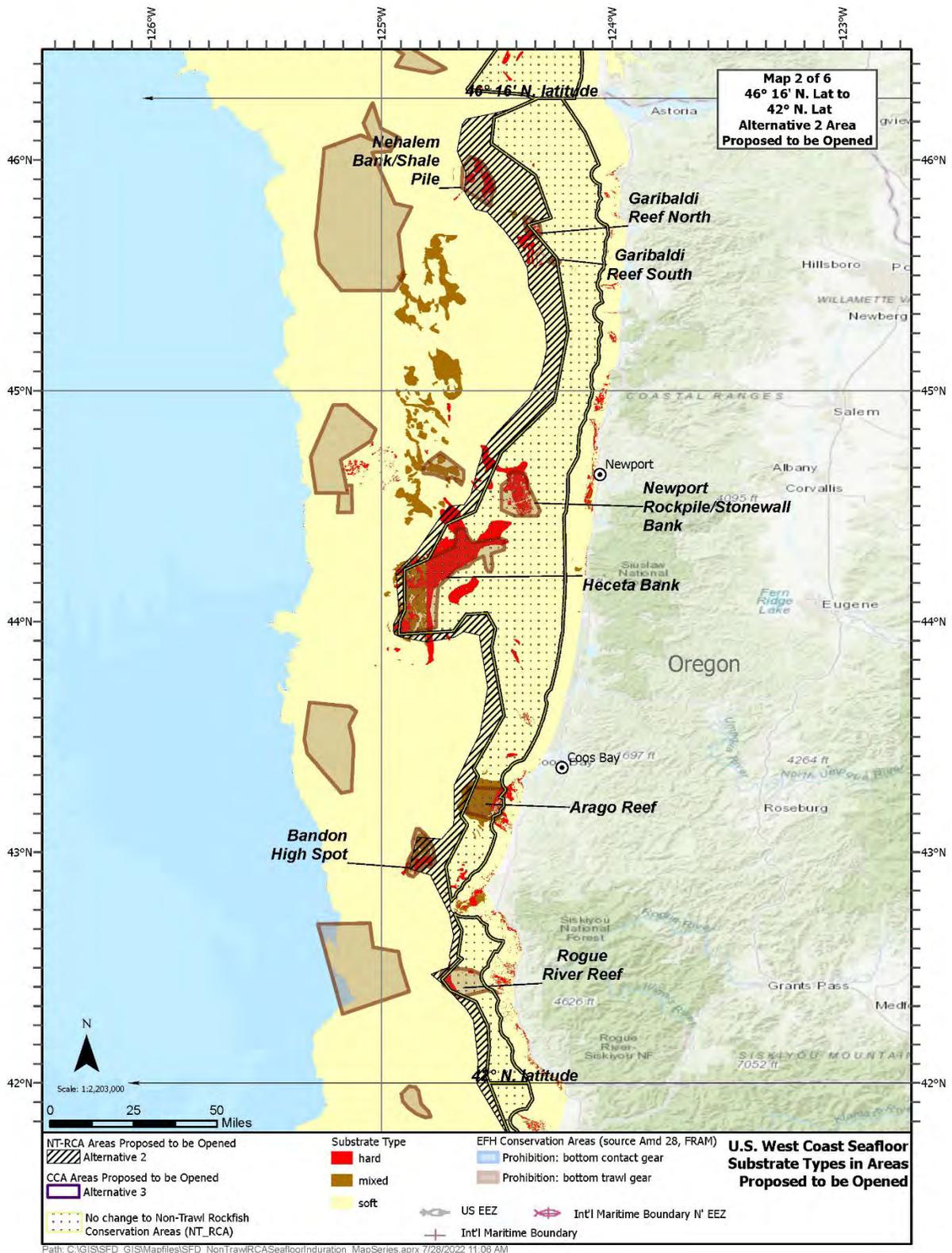


Figure 24. Substrate type in area to be opened under Alternative 2 from 46° 16' N. lat. to 42° N. lat.

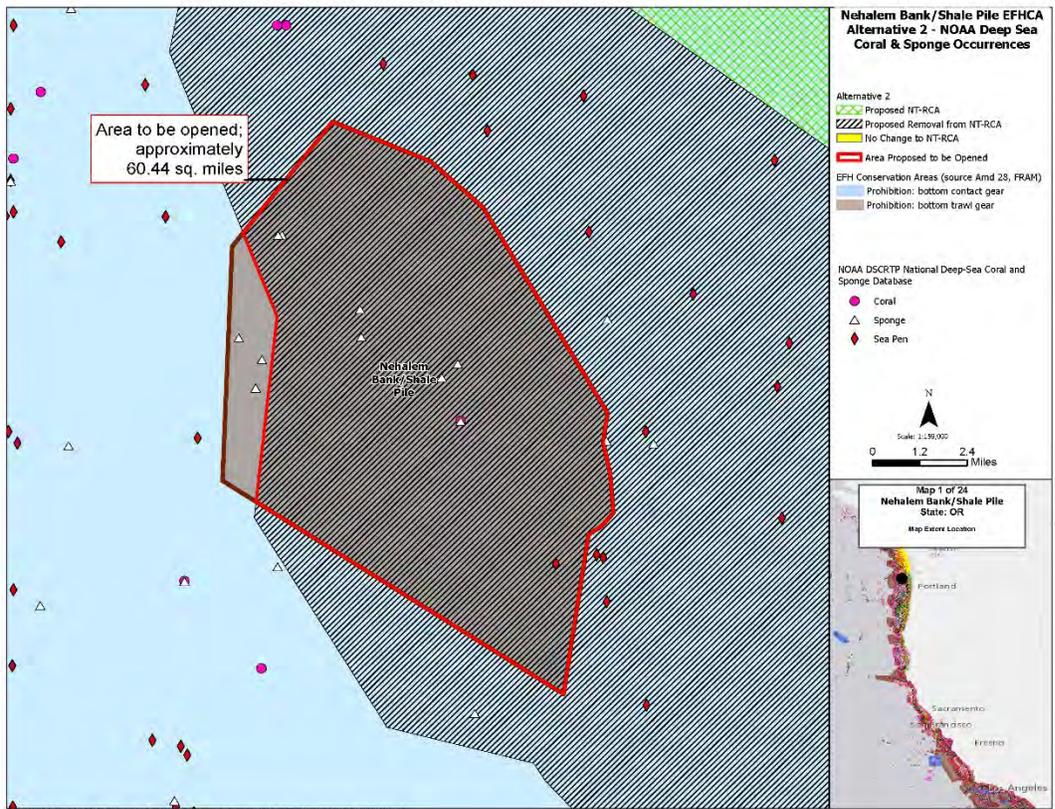
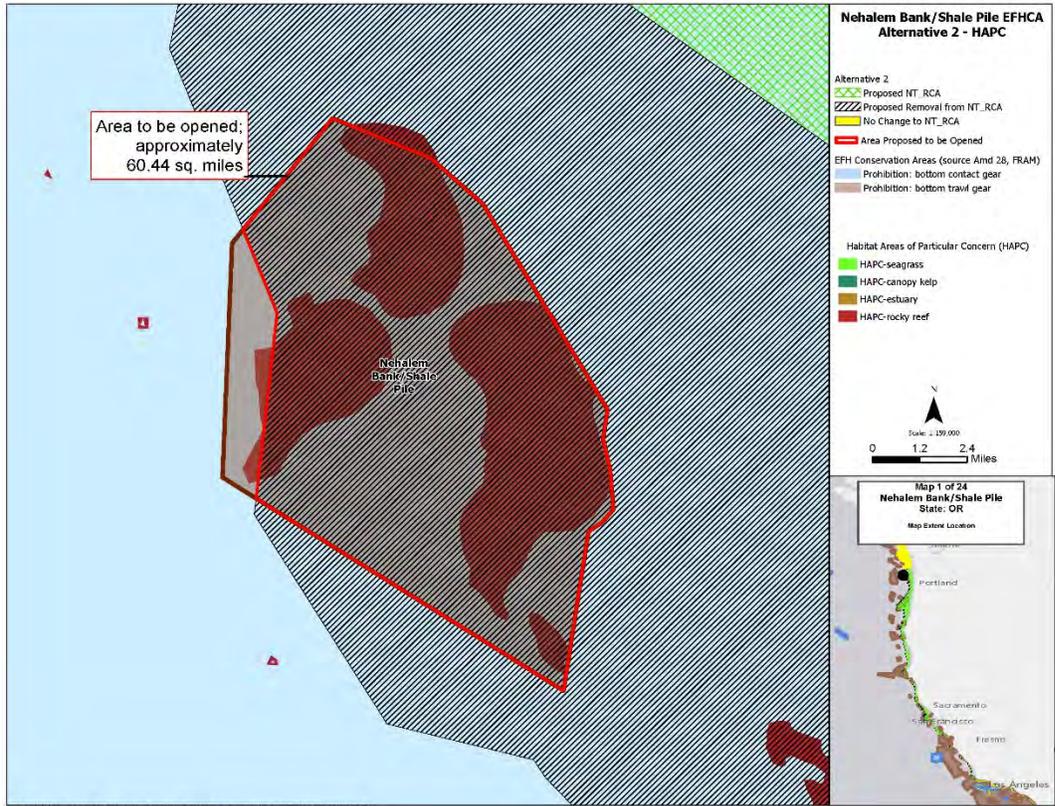


Figure 25. Nehalem Bank/Shale Pile EFHCA

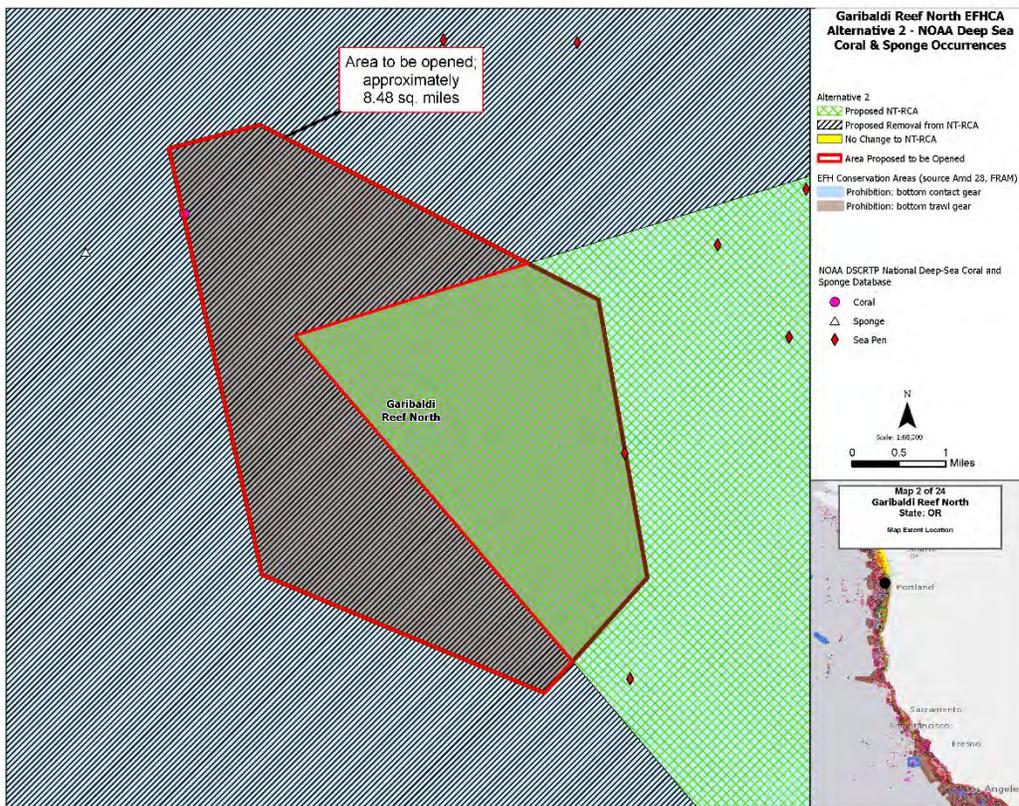
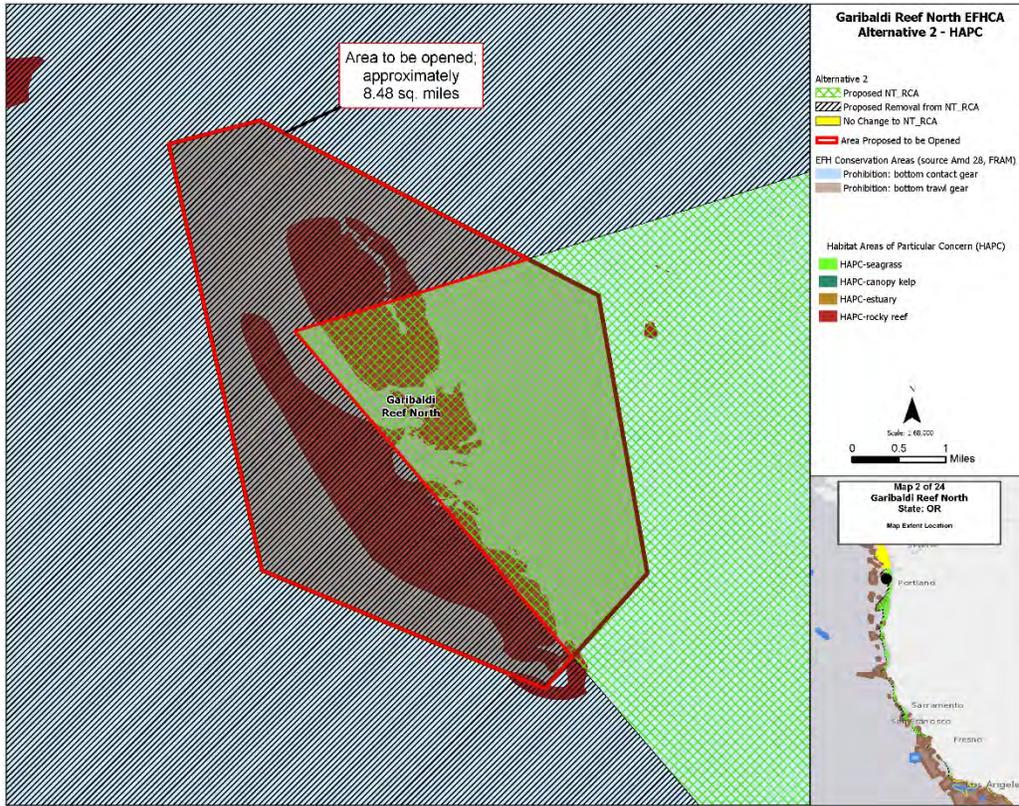


Figure 26. Garibaldi Reef North

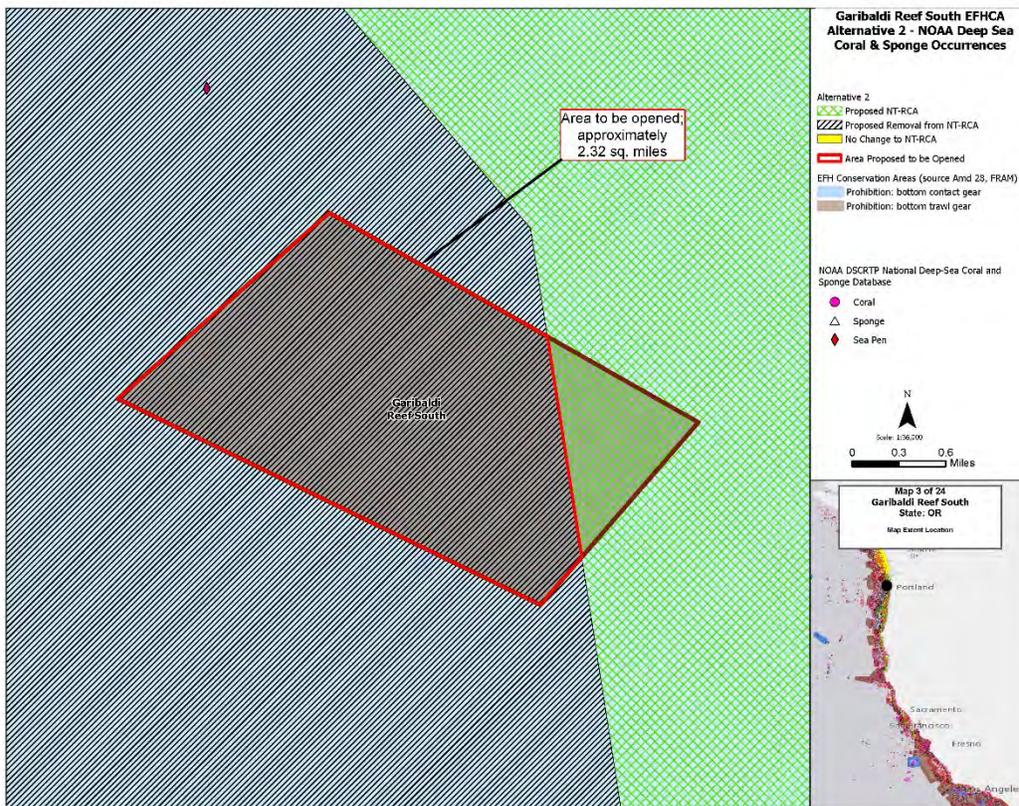
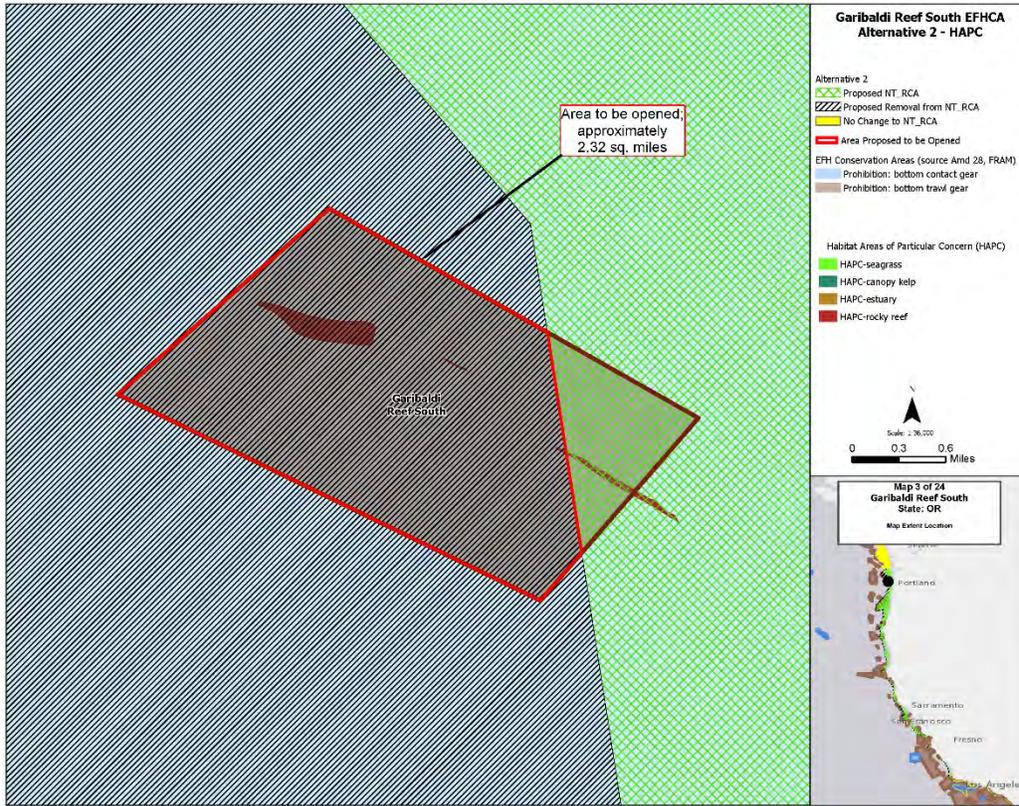


Figure 27. Garibaldi Reef South

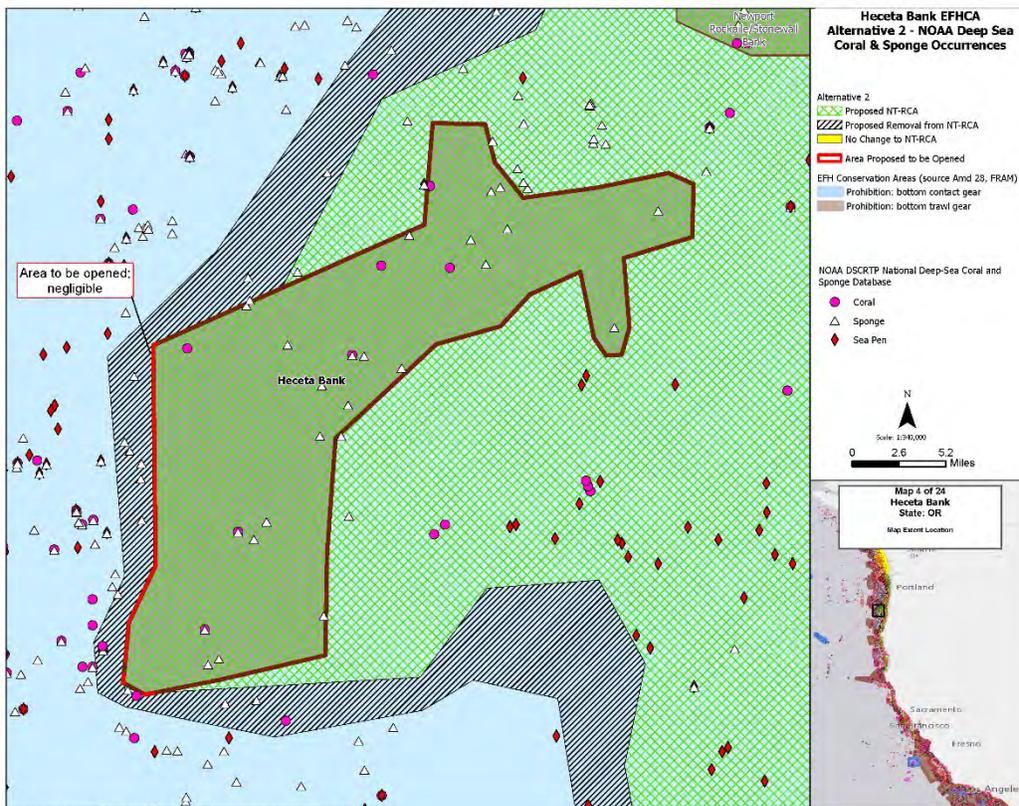
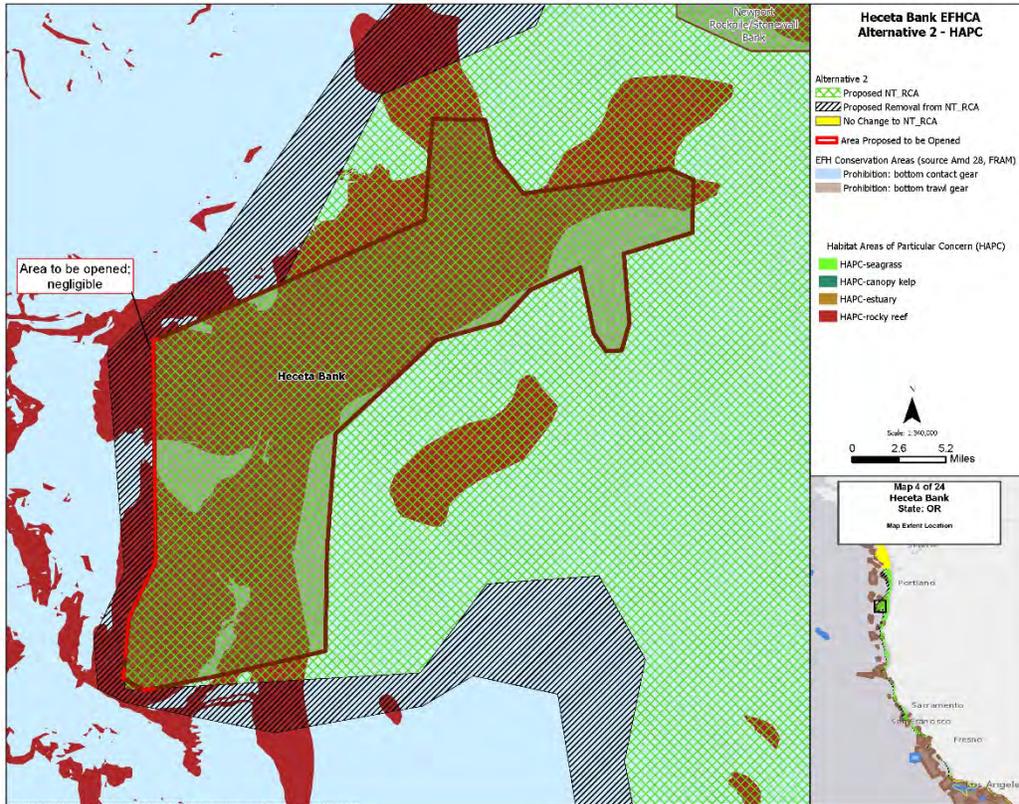


Figure 28. Heceta Bank EFHCA

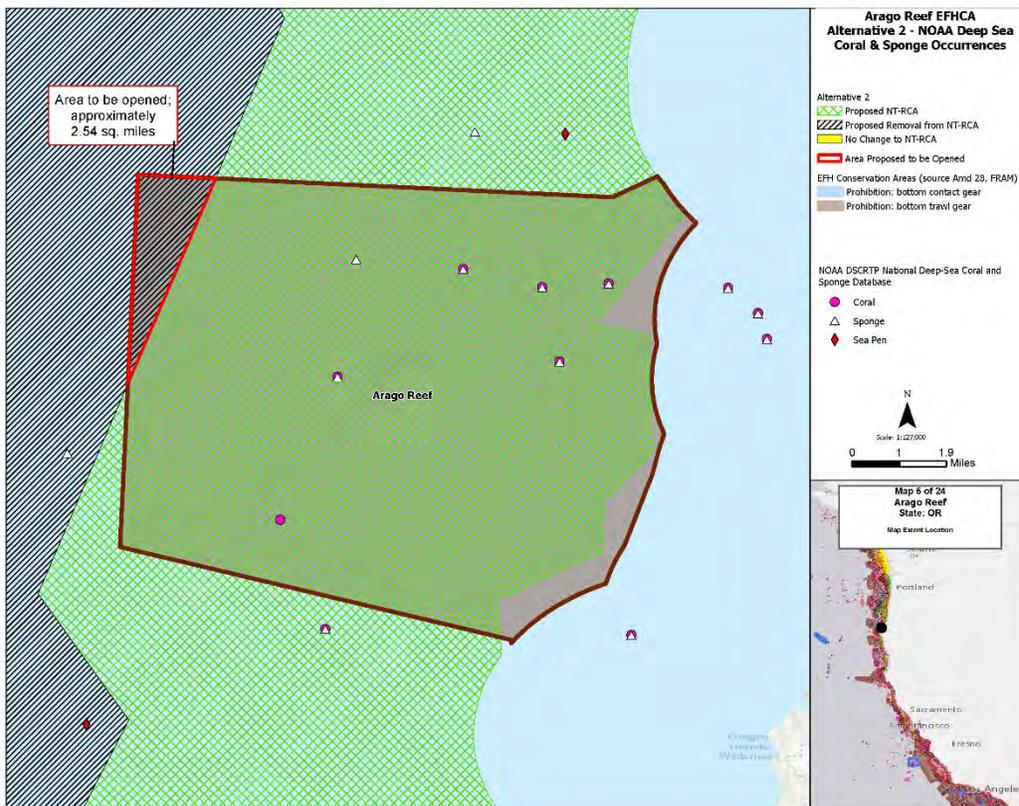
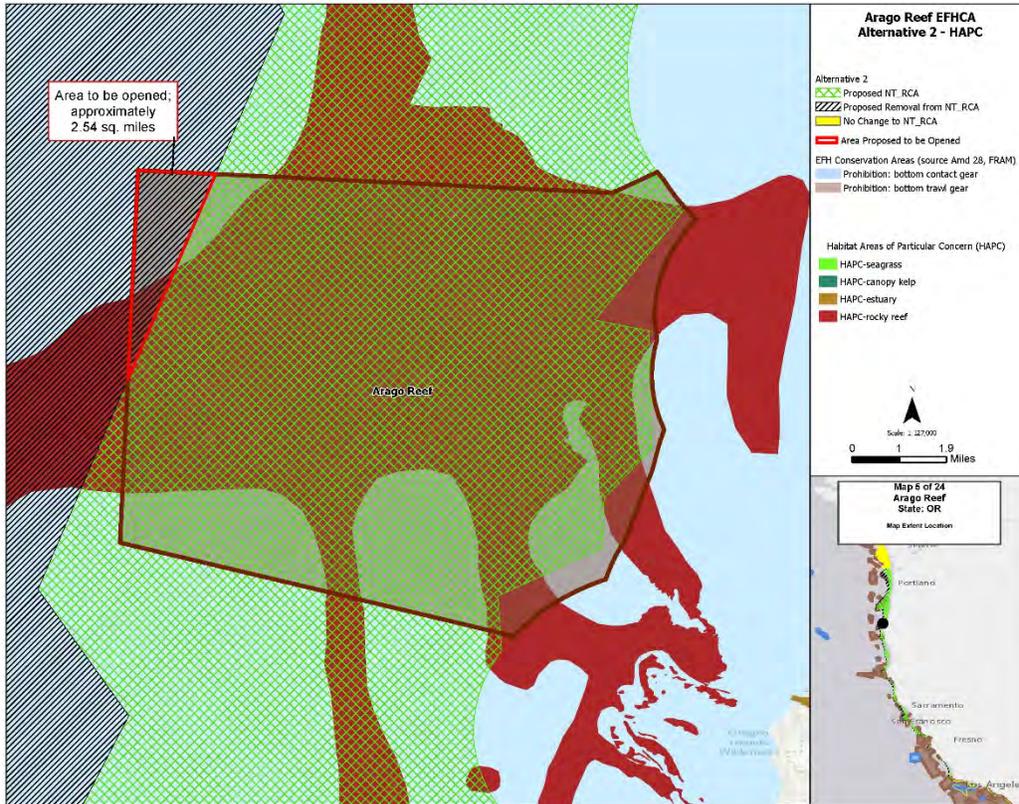


Figure 29. Arago Reef EFHCA

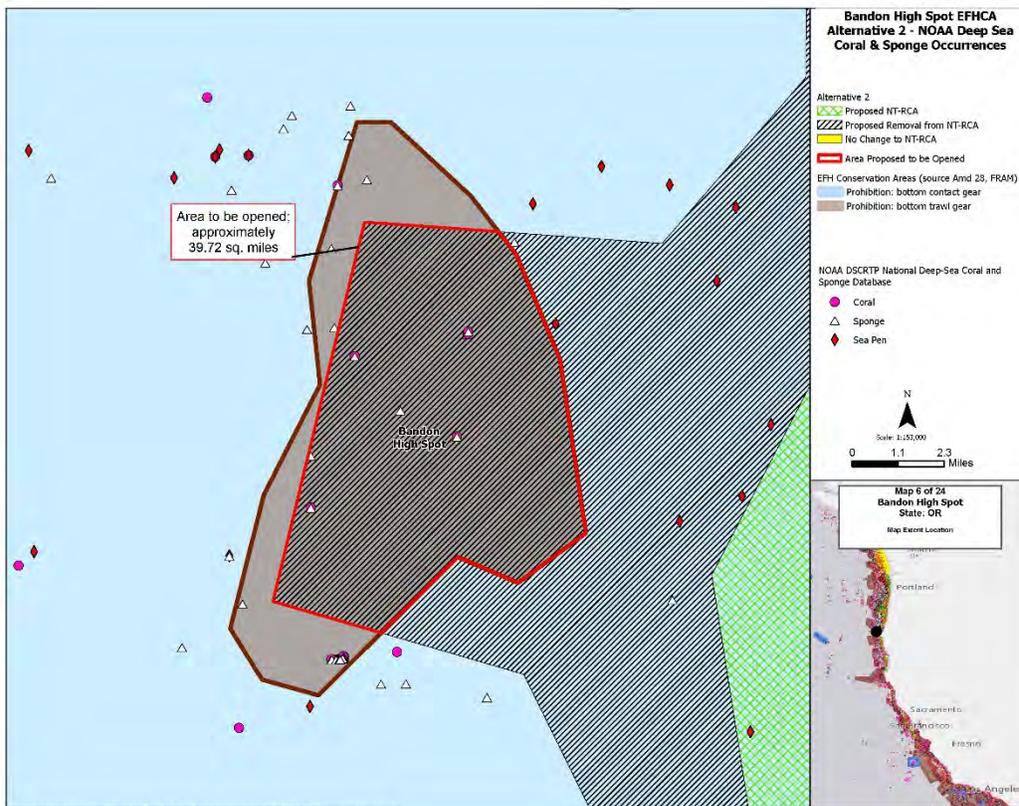
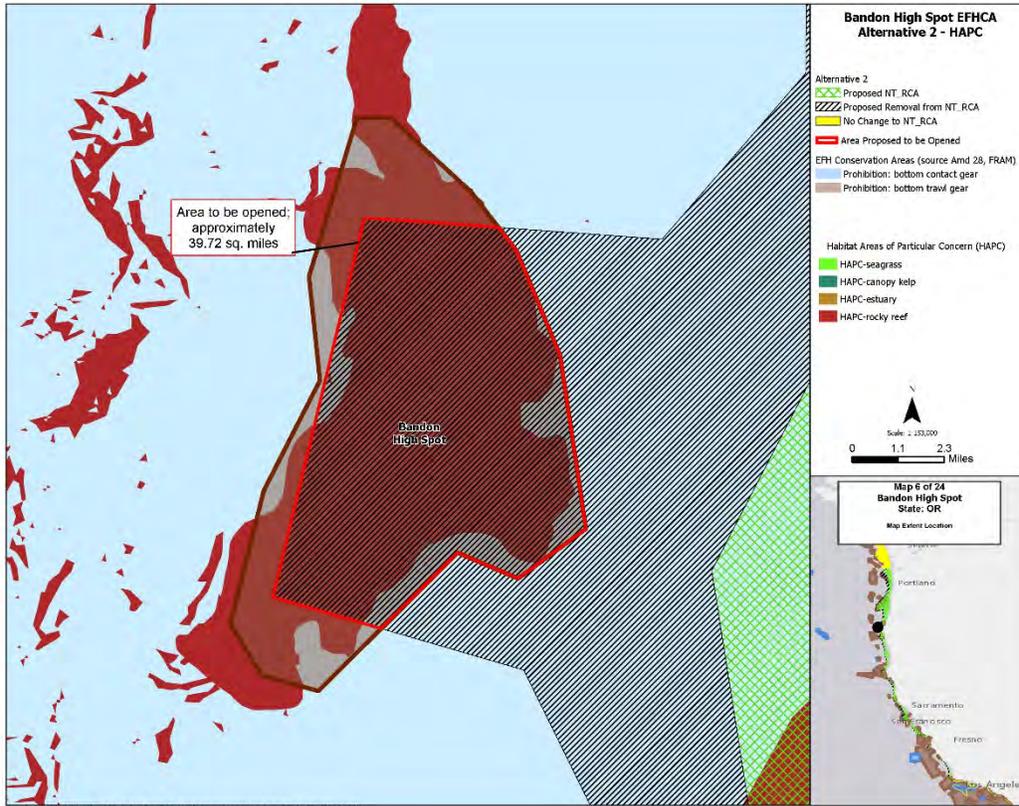


Figure 30. Bandon High Spot EFHCA

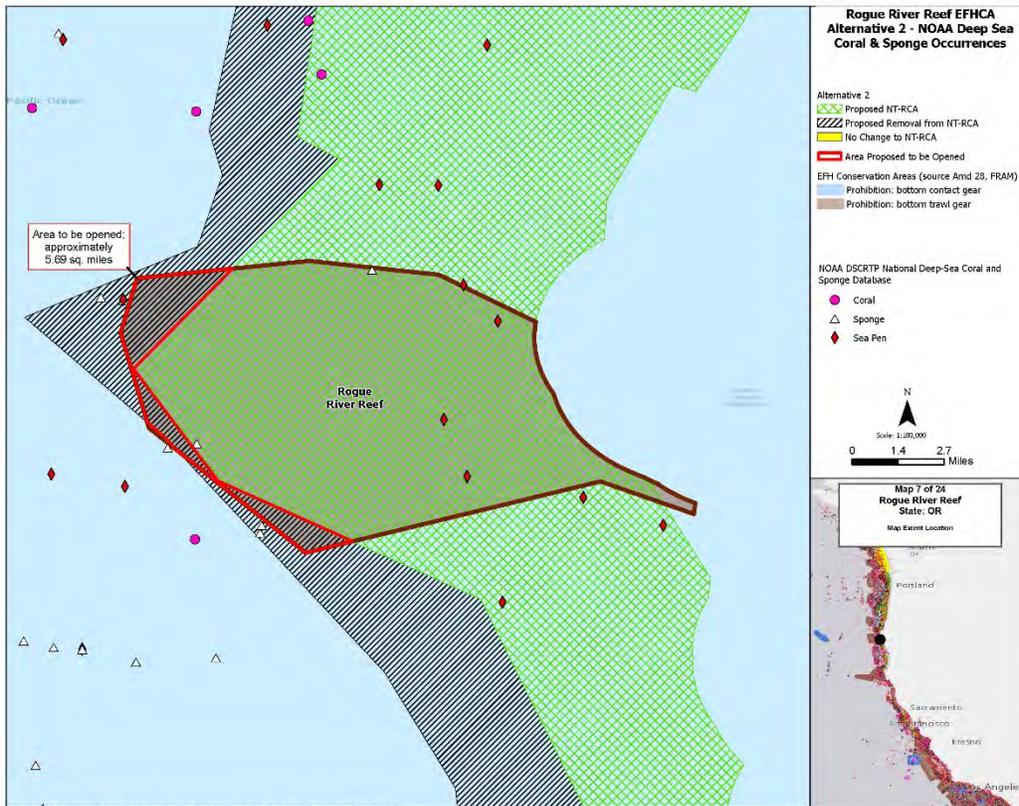
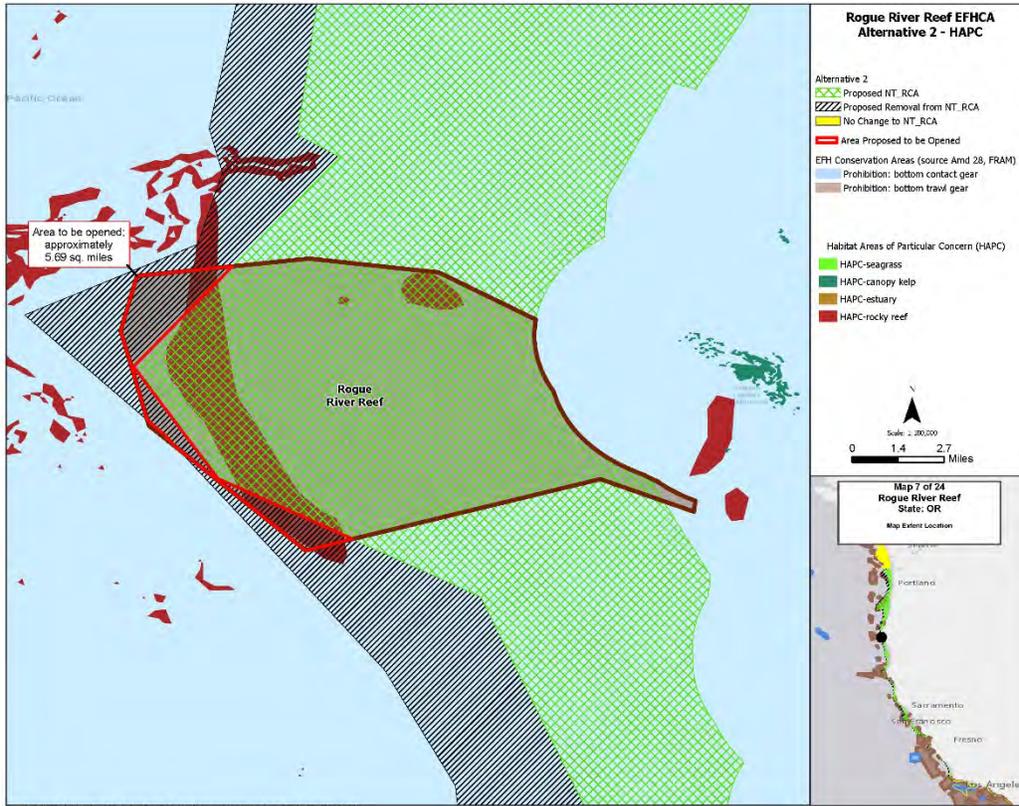


Figure 31. Rogue River Reef EFHCA

Discussion of Alternative 2 for EFHCAs off California from 42° to 40° 10' N. lat.

Off the coast of Northern California, there are three bottom trawl EFHCAs that would be exposed under Alternative 2 to non-trawl fishing gear (Figure 32).

Eel River Canyon EFHCA would open less than 2 sq. mi. to non-trawl gear activity, with the majority of the EFHCA already outside of the NT_RCA (Figure 33). There appear to be no known HAPCs or coral/sponge occurrence in the area, suggesting that Alternative 2 would not have any significant habitat impact in the area. Suboption 1a would likely be difficult to enforce due to the small size and suboptions 1b and 1c would not be applicable. Therefore, the Council may want to consider No Action in this area.

Approximately 0.5 sq. mi. of Blunts Reef EFHCA would be exposed to non-trawl gear under Alternative 2 (Figure 34). The majority of the EFHCA will remain inside the NT_RCA or within state waters. Currently, there is around 1 sq. mi. opened to groundfish and halibut non-trawl gear. Neither that currently opened area or the area proposed to be opened contain any observed HAPC or coral/sponge observation. Suboption 1a would likely be difficult to enforce, and given the lack of sensitive habitat presence, appears not to be applicable. However, suboption 1b or 1c (which would have the same result in this situation) would close the entire EFHCA to groundfish bottom contact gear. As described above, if the Council chose suboption 1b or 1c, California would need to take conforming action to close the areas in state waters to groundfish bottom contact gear. At the time of this analysis, it is unknown if any fisheries operate in those areas. The Council therefore may want to consider No Action and review any EFHCA designations at the next review.

The Mendocino Ridge EFHCA would have approximately 11.6 sq. mi. exposed to non-trawl gear under Alternative 2 (Figure 35). While there are minimal rocky reef habitat and no coral/sponge observations in the proposed opened area, the Mendocino Ridge is a designated HAPC of special interest and occurs in much of the exposed area (not shown on map). Opening of the area could result in some negative habitat impacts, however, suboption 1a would likely be hard to enforce due to the segmented nature of the opened areas and the small width of the openings. Suboptions 1b and 1c would not apply given the majority of the EFHCA is already outside of the NT_RCA.

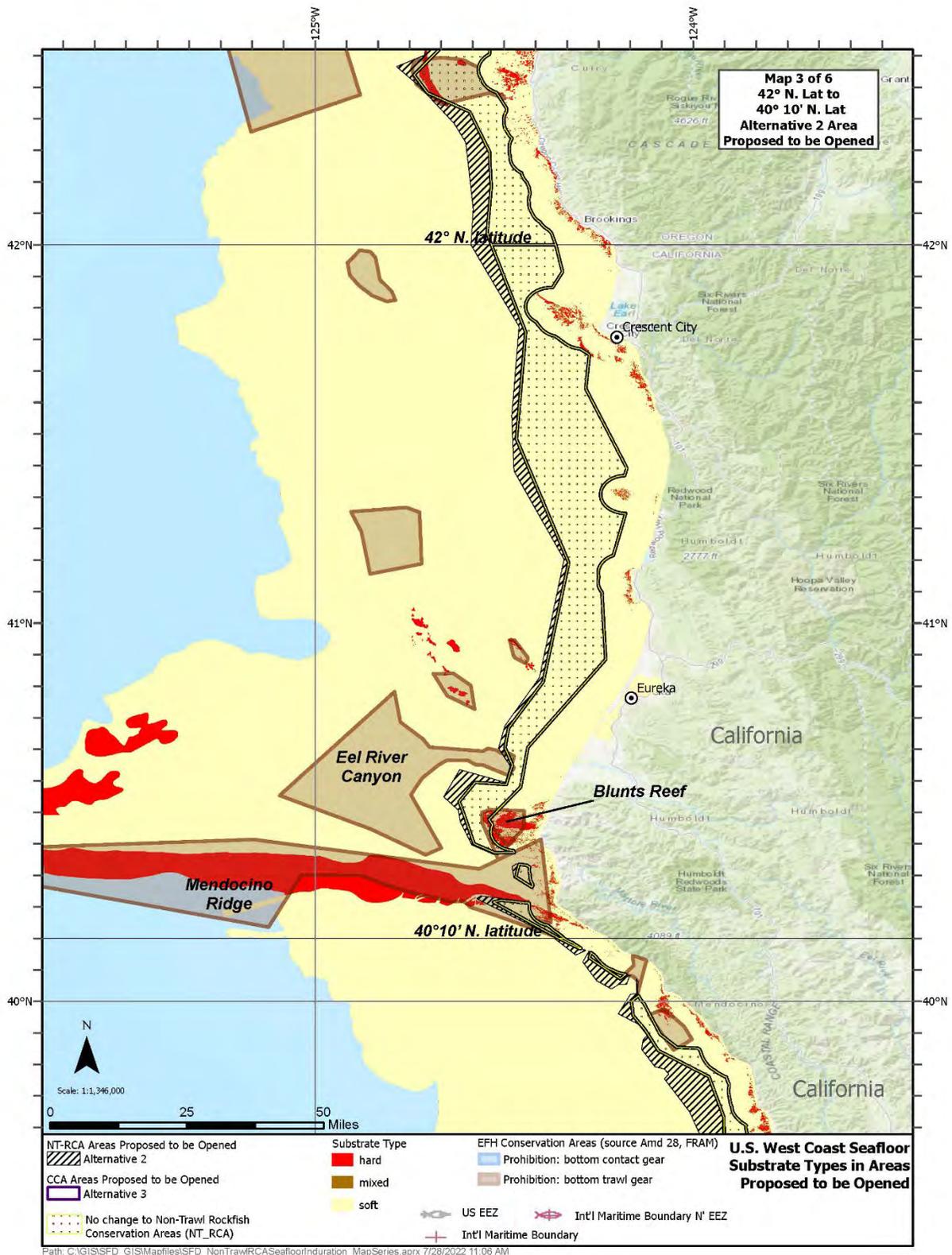


Figure 32. Substrate type in area to be opened under Alternative 2 from 42° N. lat. to 40° 10' N. lat.

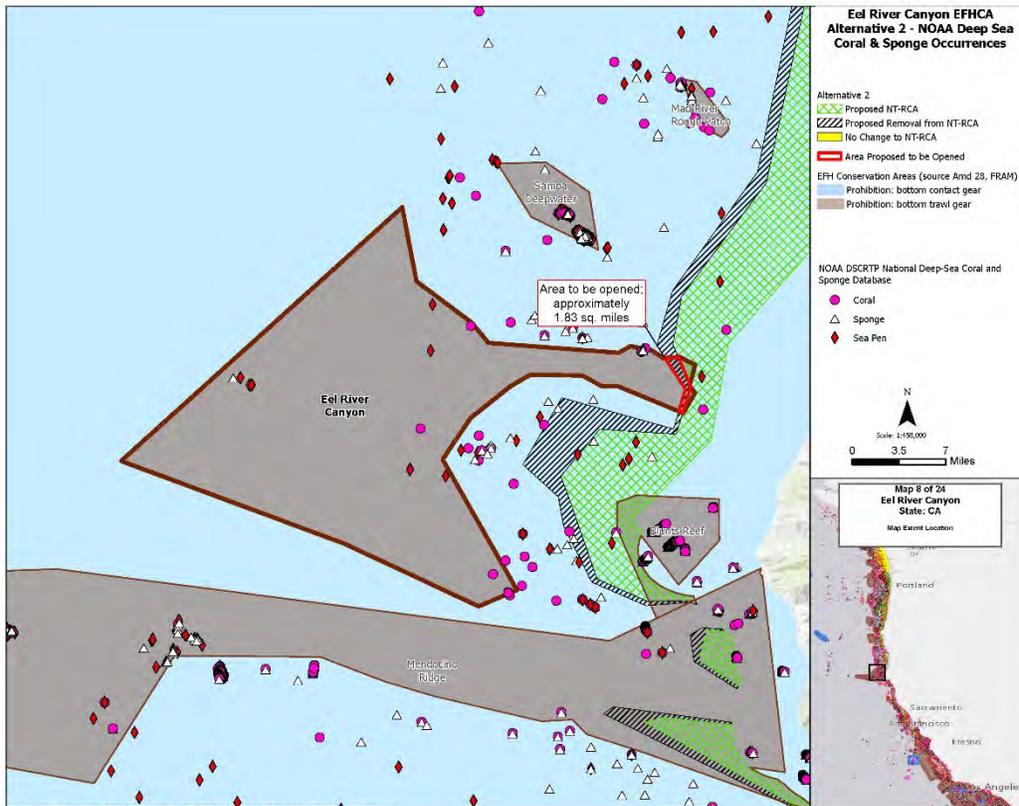
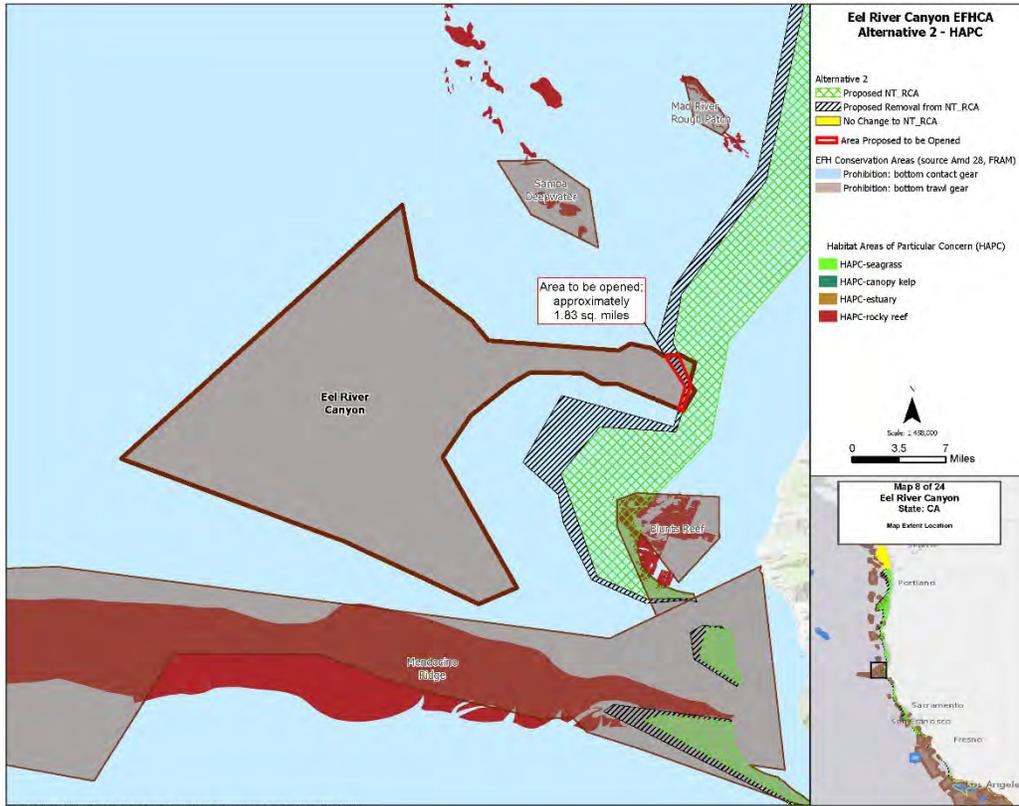


Figure 33. Eel River Canyon EFHCA

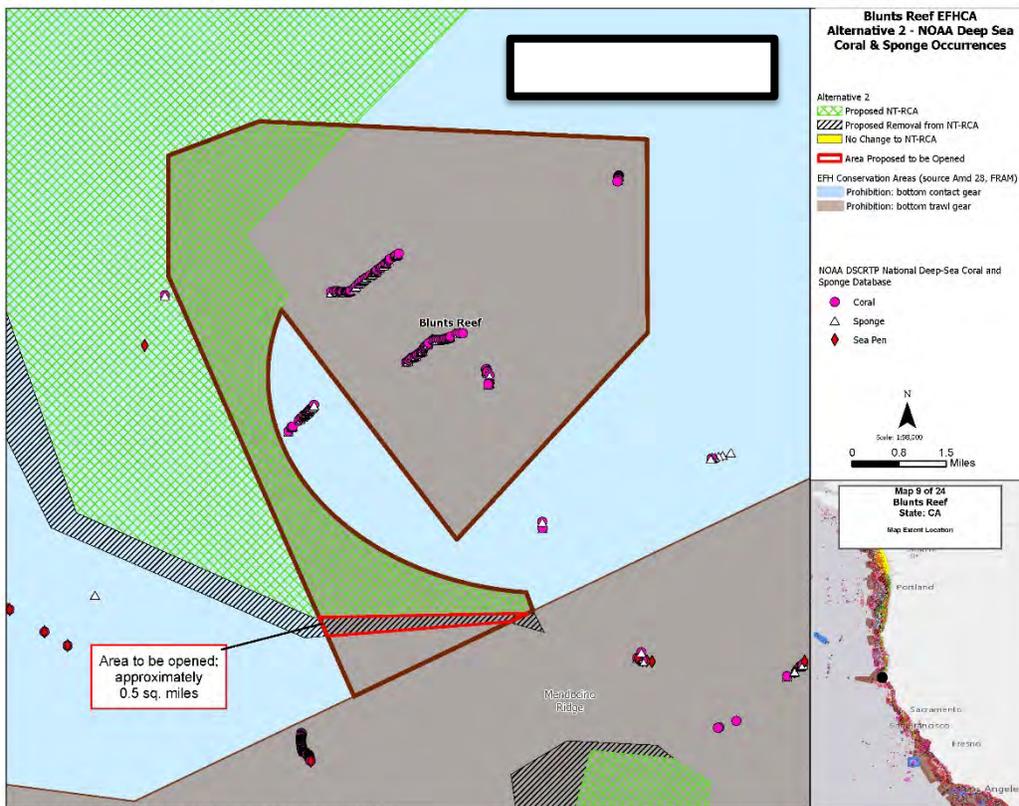
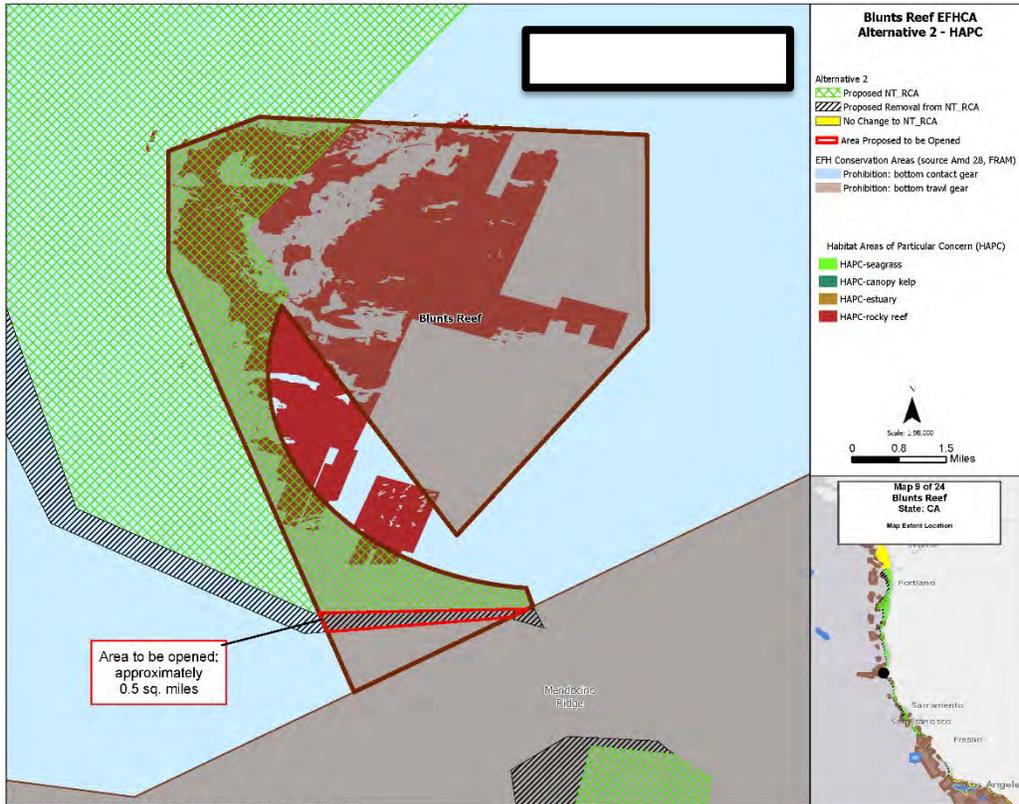


Figure 34. Blunts Reef EFHCA

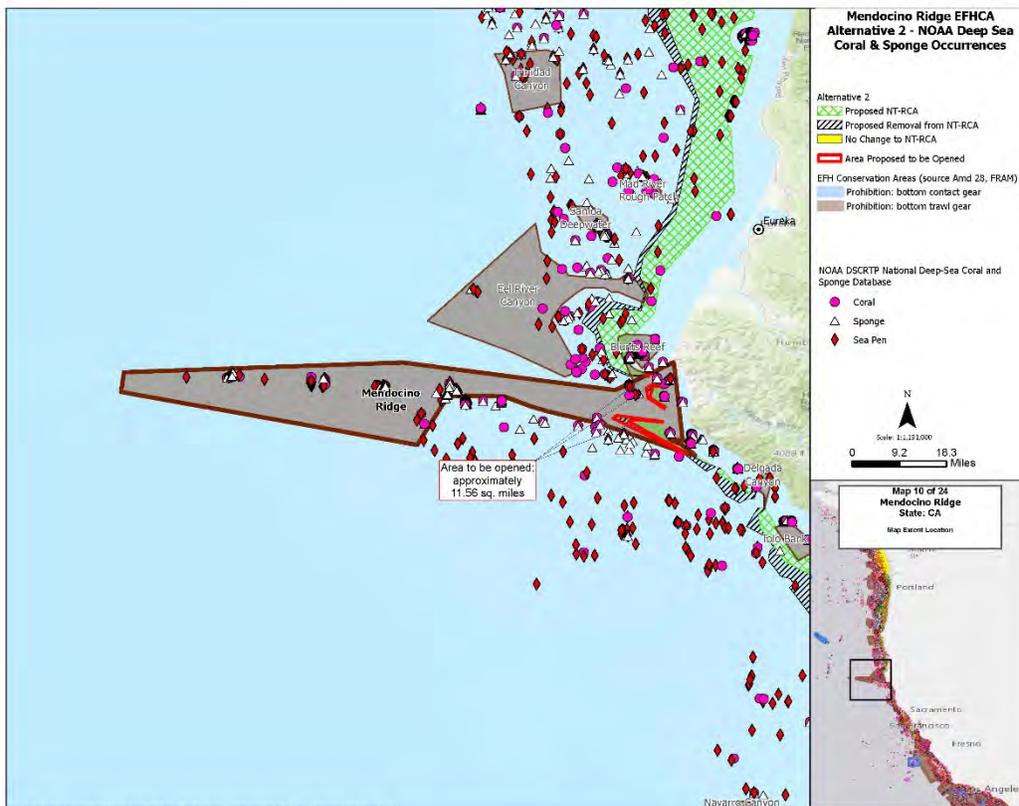
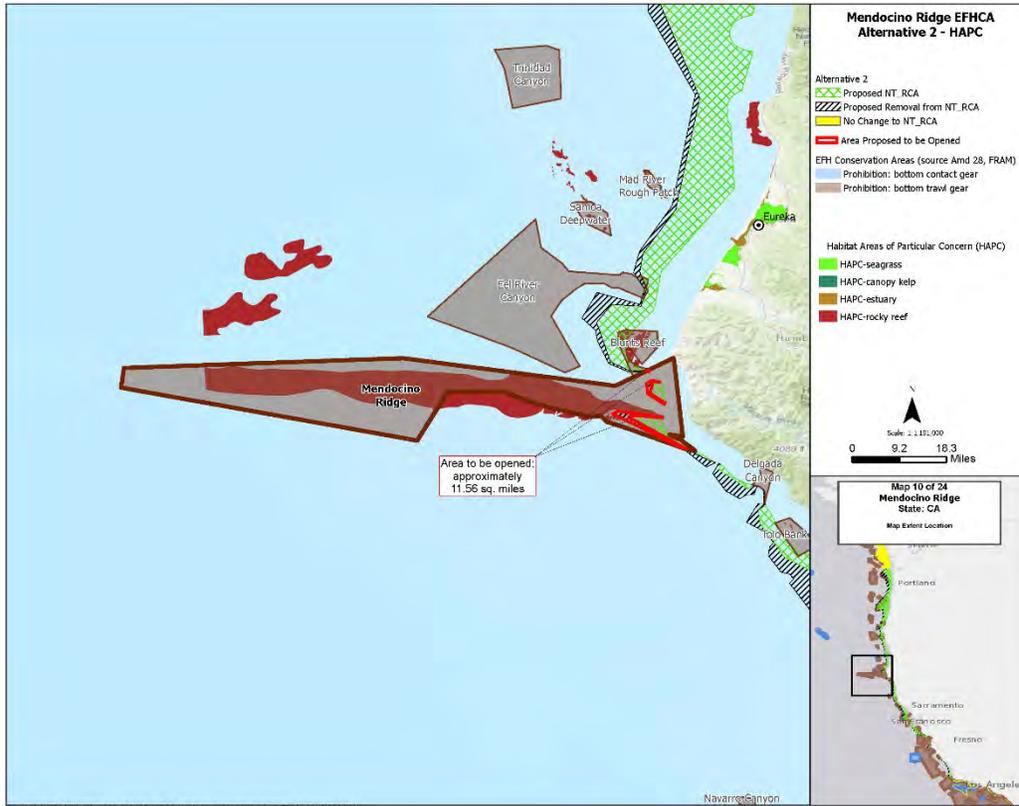


Figure 35. Mendocino Ridge EFHCA

Discussion of Alternative 2 EFHCAs off California between 40° 10' and 38° 57.5' N. lat.

There are only two bottom trawl EFHCAs that may be exposed under Alternative 2- Delgada Canyon and Point Arena North (Figure 36).

With the movement of the seaward boundary to 75 fathoms, Delgada Canyon would see a negligible amount of area exposed to non-trawl fishing (Figure 37). The overwhelming majority of the EFHCA sits within California state waters. Therefore, the only option that appears to be applicable would be suboption 1c; however, the impacts of this suboption would be like No Action unless California took conforming state action to limit groundfish bottom contact fishing in the area. At the time of this analysis, it is unknown whether groundfish fisheries operate in this area. Therefore, the Council should consider if No Action may be most appropriate.

Point Arena North would see less than 1 sq. mi. opened to groundfish and directed halibut non-trawl fishing effort, with the majority of the EFHCA remaining within the NT_RCA boundaries (Figure 38). No significant habitat impacts are expected by opening this area to fishing (no HAPC or sponge/coral occurrences). Suboption 1a would likely not be applicable given the size of the opening and lack of sensitive habitat. However, the Council could consider suboption 1c, which would extend into the NT_RCA and state waters. As discussed above, any prohibitions to groundfish bottom contact gear in state waters would need to be done through state rule. Given the small area and lack of HAPCs and deep-sea corals and sponges, No Action may be the most appropriate action.



Figure 36. Substrate type in area to be opened under Alternative 2 from 40° 10' N. lat. to 38° 57.5' N. lat.

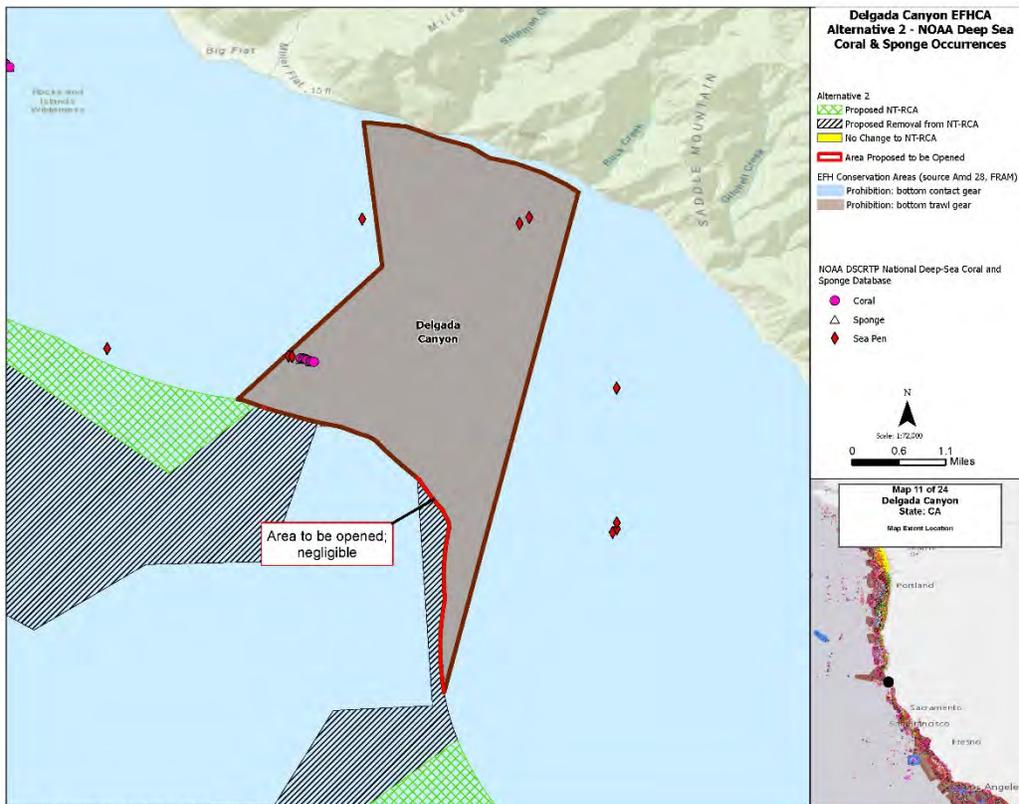
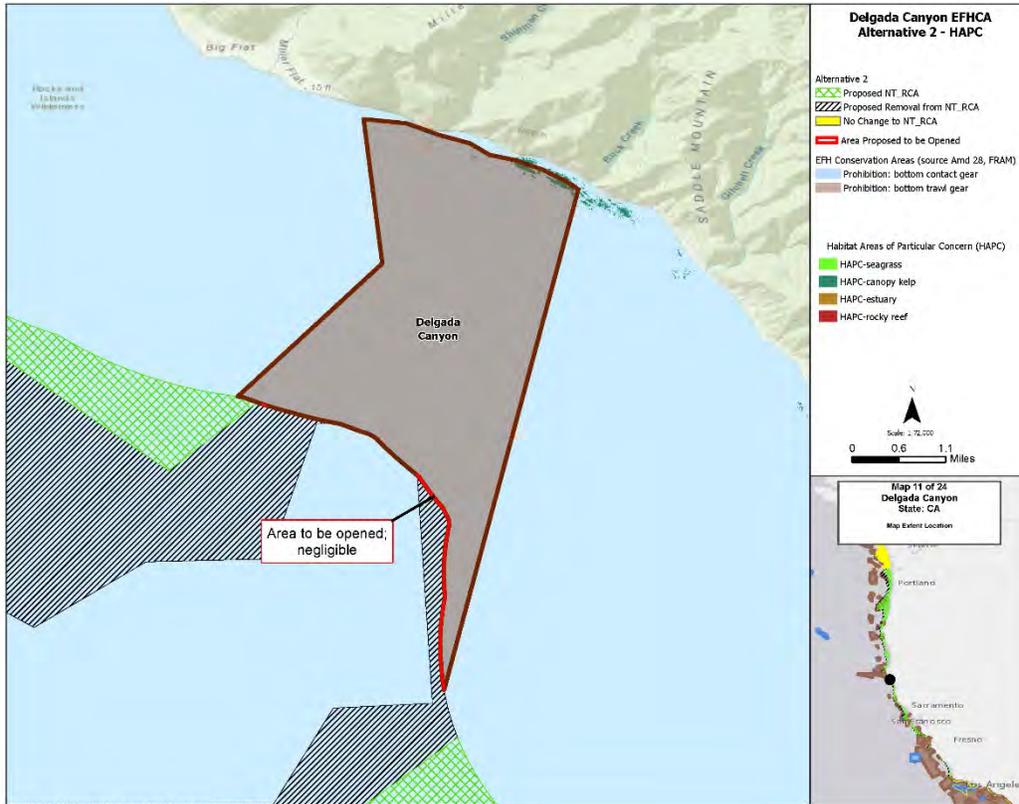


Figure 37. Delgada Canyon

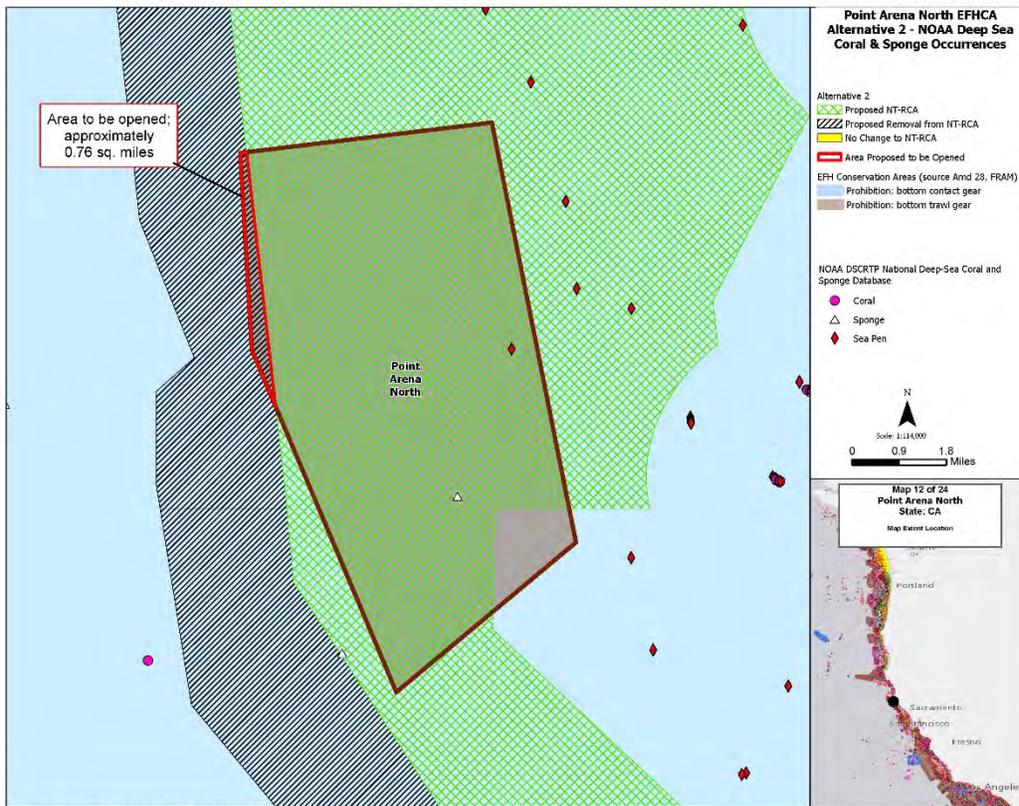
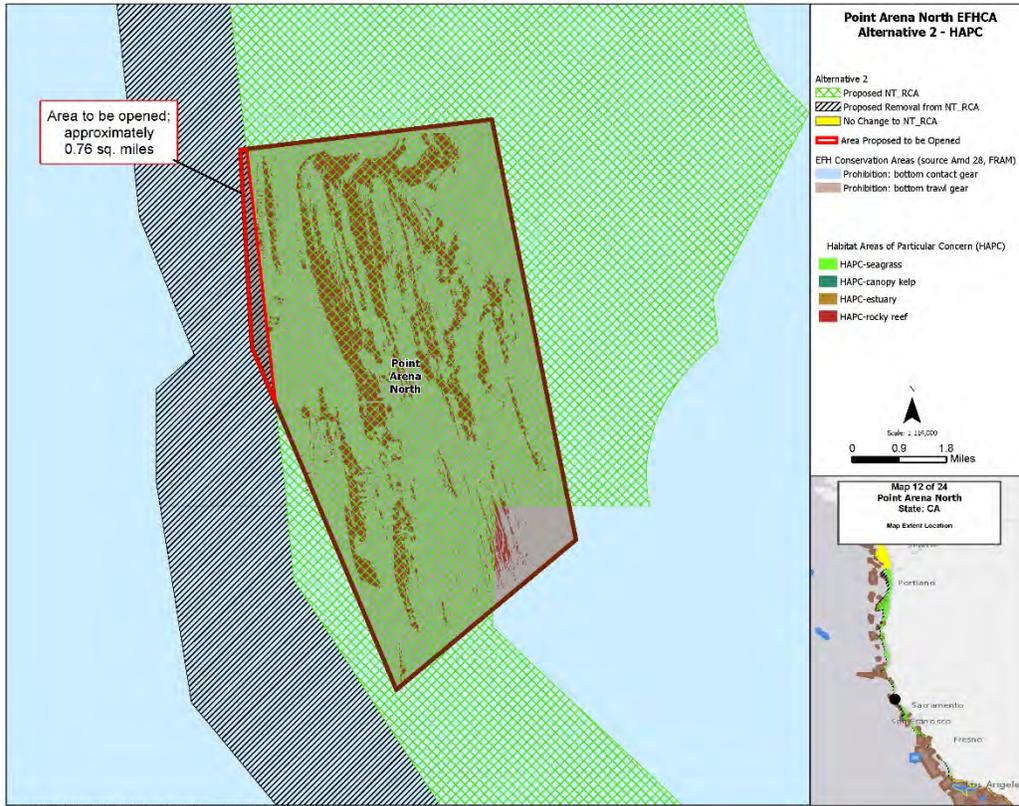


Figure 38. Point Arena North

Alternative 2 EFHCAs off California between 38° 57.5' and 34° 27' N. lat.

Under Alternative 2, there would be eleven bottom trawl EFHCAs and one bottom contact EFHCA that would be exposed to potential fishing effort.

Point Arena South EFHCA would have approximately 11.77 sq. mi. exposed to non-trawl groundfish and halibut gear, including some areas of known rocky reef habitat and coral and sponge occurrences. The majority of Point Arena South (around two-thirds) exists outside of the NT_RCA and could be fished by commercial non-trawl operations. The Council could consider suboption 1a; however, it may be difficult to enforce due to the size and shape of the polygon. Suboptions 1b and 1c are not applicable.

Under Alternative 2, the Football EFHCA would have just under nine sq. mi. exposed to fishing, including areas of known coral/sponge occurrences (Figure 41). Approximately four sq. mi. of the EFHCA already is open to fishing seaward of the current NT_RCA boundary. All three suboptions would be applicable (with suboptions 1b and 1c resulting in the same impact) and would provide some positive habitat impact.

Gobbler's Knob EFHCA would see approximately 1.6 sq. mi. of area opened under Alternative 2. The remainder of the EFHCA is currently exposed to non-trawl fishing activity outside of the NT_RCA boundaries. There are no known HAPCs or coral/sponge occurrences within the proposed area to be opened, and therefore the suboptions appear to not be applicable.

The area around Cordell Banks contains several fishing area restrictions within the bounds of the area to be exposed within Alternative 2: Cordell Bank/Biogenic Area bottom trawl EFHCA, Cordell Bank (50-fm isobath) bottom contact EFHCA, and the Cordell Bank GCA. Under Alternative 2 as currently written, even if the seaward boundary of the NT_RCA were to be moved to 75 fathoms, the area within the Cordell Bank GCA would remain closed to all groundfish fishing (shown in the green dashed outline). Therefore, there would only be approximately 12.1 sq. mi. of area exposed under Alternative 2 for the Cordell Bank/Biogenic Area bottom trawl EFHCA (Figure 43) that is outside of both the Cordell Bank GCA and the Cordell Bank (50-fm isobath) bottom contact EFHCA (Figure 44). There are no known HAPCs in the area proposed to be opened to fishing in the bottom trawl EFHCA, but there are some known sea pen and coral occurrences. The majority of the rocky reef habitat and coral/sponges would remain protected from fixed gear impacts due to the bottom contact EFHCA and in an indirect manner through the Cordell Bank GCA. However, it is also important to consider that a majority of the Cordell Bank/Biogenic Area bottom trawl EFHCA also covers the Cordell Bank- which is designated as an HAPC area of interest (not pictured). Given the shape and extent of the proposed openings, suboption 1a may not be applicable. Approximately 60 sq. mi. of the EFHCA exists seaward of the current NT_RCA boundary and therefore is likely not "small" enough to be considered for suboption 1b (or 1c). For the Cordell Bank (50-fm isobath) bottom contact EFHCA, there would be approximately 0.4 sq. mi. of the EFHCA open to non-bottom contact gear types.

Farallon Islands/Fanny Shores/Cochrane Bank bottom trawl EFHCA would have 1.2 sq. mi. of area with some coral/sponge presence exposed to potential non-trawl groundfish and directed halibut gear under Alternative 2 (Figure 45). The majority of the EFHCA would remain within the NT_RCA or is in state waters. Given the size of the proposed opening, suboption 1a would likely not be enforceable and is therefore not applicable. Suboption 1c would provide the same habitat benefit as 1a under Alternative 2, however the majority of the EFHCA lies within California state waters. It is unknown the fishing effort that occurs in this area. The Council may want to consider if No Action is appropriate at this time with a more holistic look at the area under the next EFH review.

Farallon Escarpment EFHCA currently exists primarily outside of the NT_RCA, with only 1.5 sq. mi. existing within the NT_RCA and proposed to be opened under Alternative 2 (Figure 46). There appears to be no known HAPCs or coral/sponge occurrences within the proposed area to be opened. Therefore, none of the suboptions would be likely to provide significant habitat benefit or be applicable.

Approximately 1.2 sq. mi. of the Ascension Canyonhead EFHCA would be exposed under Alternative 2, which includes some known sponge occurrence (Figure 47). The majority of EFHCA is outside of the current NT_RCA boundaries. Suboption 1a would provide increased habitat protections; however, the enforceability may be challenging given the small area and therefore is not applicable. Suboptions 1b and 1c would not apply.

Monterey Bay/Canyon EFHCA would have just over 3 sq. mi. exposed to potential directed halibut and non-trawl groundfish operations in two discrete sections that occur within the 75-125 fathom depth contours of the NT_RCA (Figure 48). There are rocky reefs, corals, and sponges present in the area to be opened and the entire area is considered a HAPC of special interest (Monterey Canyon), therefore suboption 1a would provide positive habitat benefits. However, it is likely difficult to enforce given the size of the openings and therefore may not be applicable. Suboptions 1b and 1c are not applicable.

Less than 2 sq. mi. would be opened under Alternative 2 for Big Sur Coast/Port San Luis EFHCA, with the overwhelming majority of the EFHCA currently seaward of the NT_RCA and opened to directed halibut and non-trawl groundfish fishing (Figure 49). Rocky reefs and coral/sponge are known to exist in the area to be opened, suggesting that suboption 1a would provide habitat protection and benefits. However, the small size is likely difficult to enforce. Suboptions 1b and 1c are not applicable.

La Cruz Canyon EFHCA would have nearly 6 sq. mi. of area exposed to non-trawl groundfish and directed halibut fishing under Alternative 2 (Figure 50). Approximately 2.7 sq. mi. of the EFHCA exists outside of the NT_RCA currently, with a small part proposed to remain within the NT_RCA and state waters. The majority of the EFCHA covers rocky reef habitat and therefore any of the suboptions would provide positive habitat impacts, with suboption 1a providing the least amount of the three and suboptions 1b and 1c being the same in terms of protection.

Approximately 18 sq. mi. of the Point Conception EFHCA would be exposed to non-trawl groundfish and directed halibut under Alternative 2 (Figure 51). The majority of the EFHCA is seaward of the current NT_RCA boundary and already exposed to non-trawl impacts. There are known coral/sponge/sea pen observations in the area proposed to be opened, suggesting that suboption 1a would provide positive habitat impacts; however, given the shape of the proposed area, it may be difficult to enforce. Suboptions 1b and 1c are not applicable to this area.



Figure 39. Substrate type in area to be opened under Alternative 2 from 38° 57.5' N. lat. to 34° 27' N. lat.

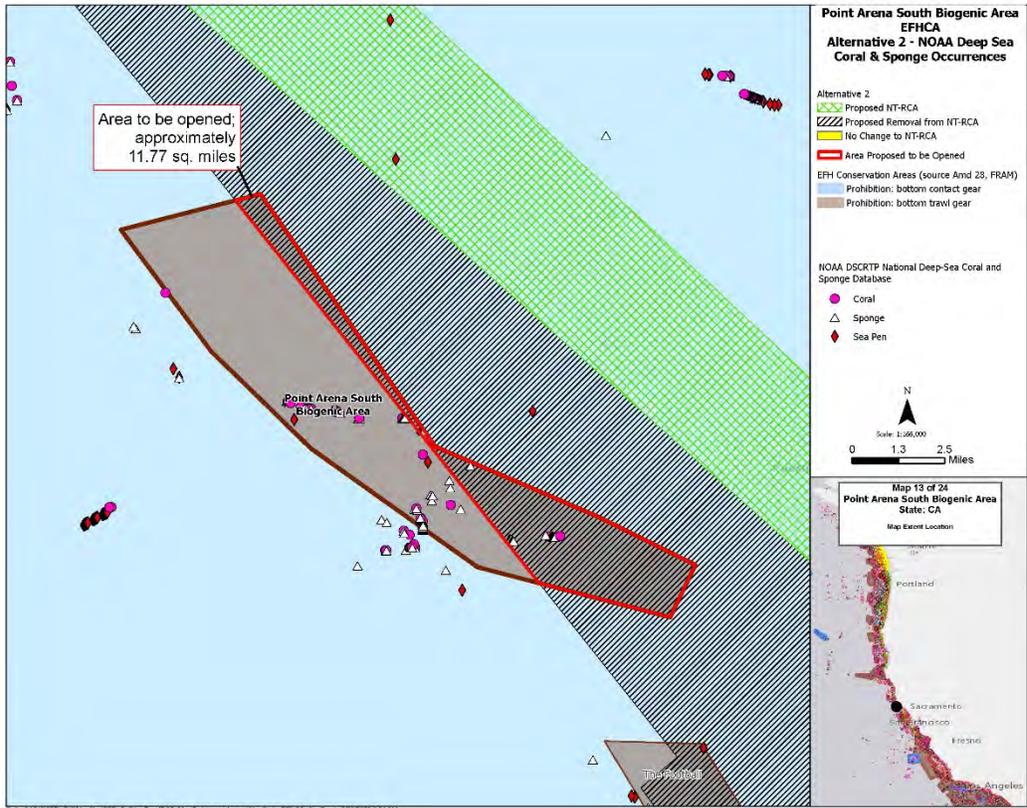
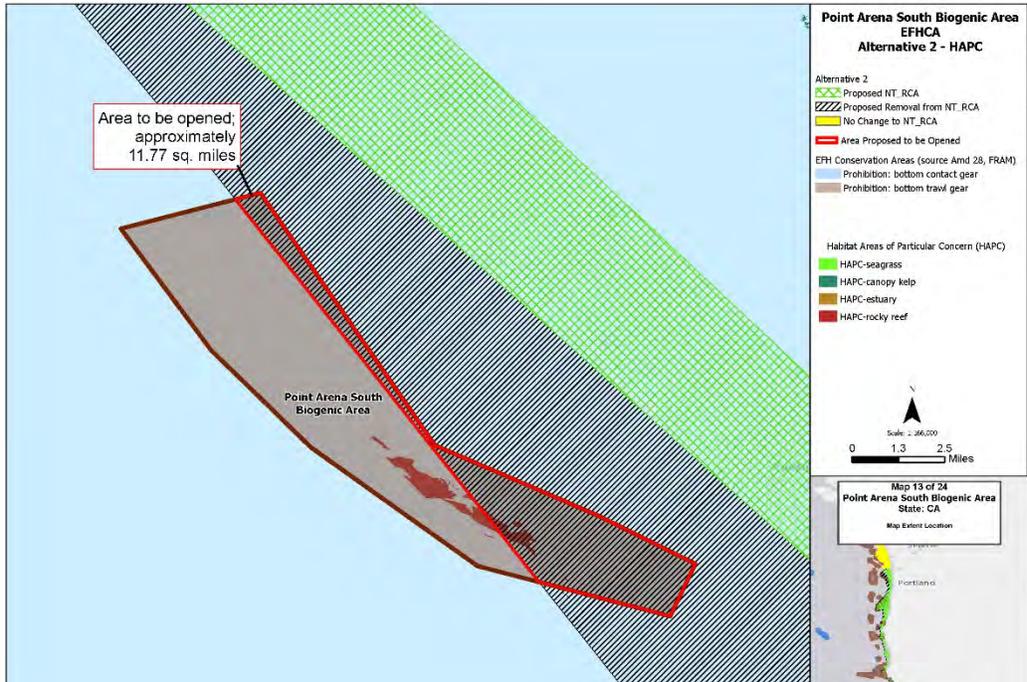


Figure 40. Point Arena South Biogenic Area

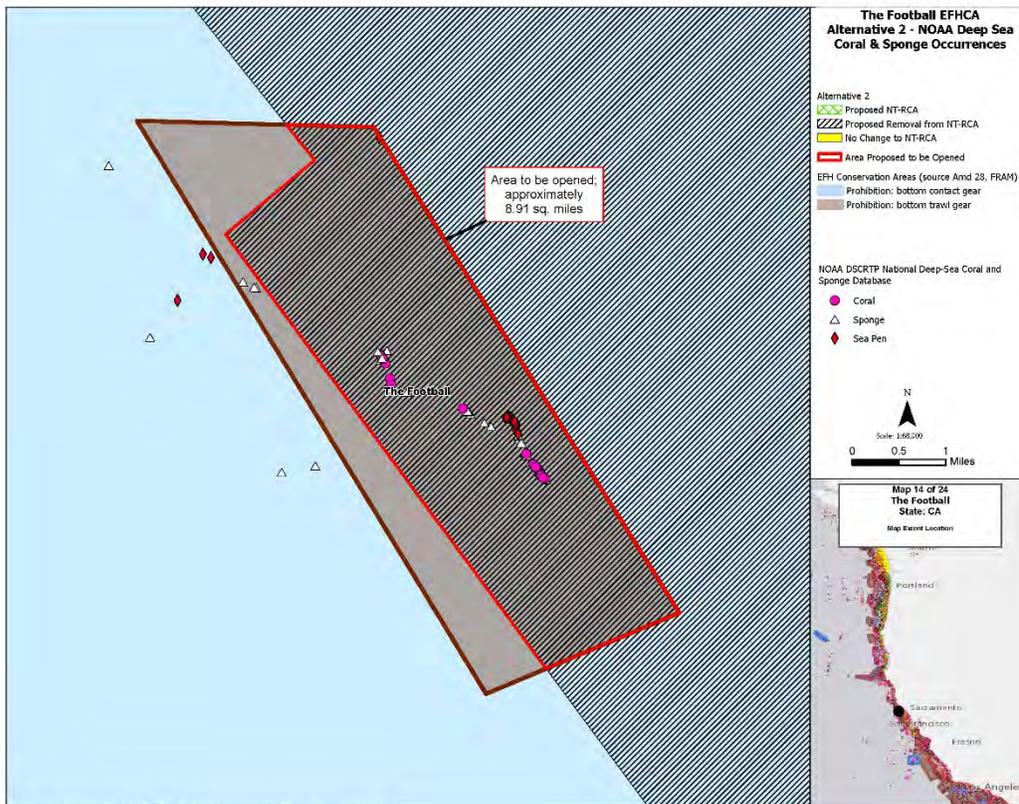
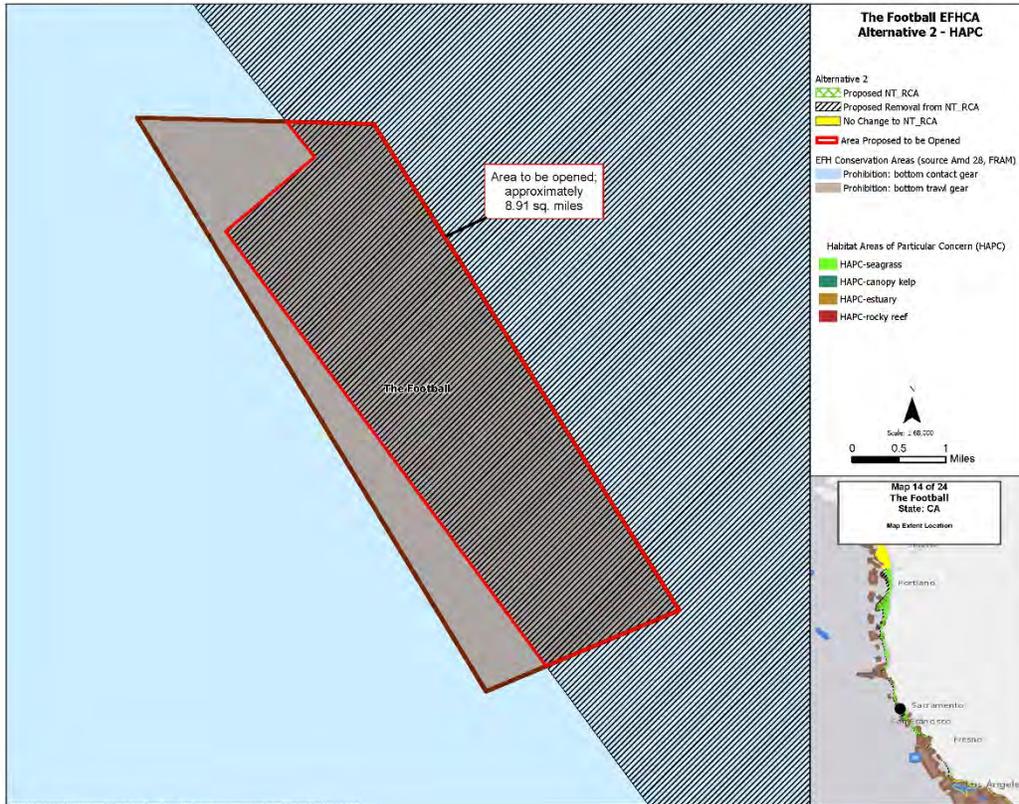


Figure 41. The Football EFHCA

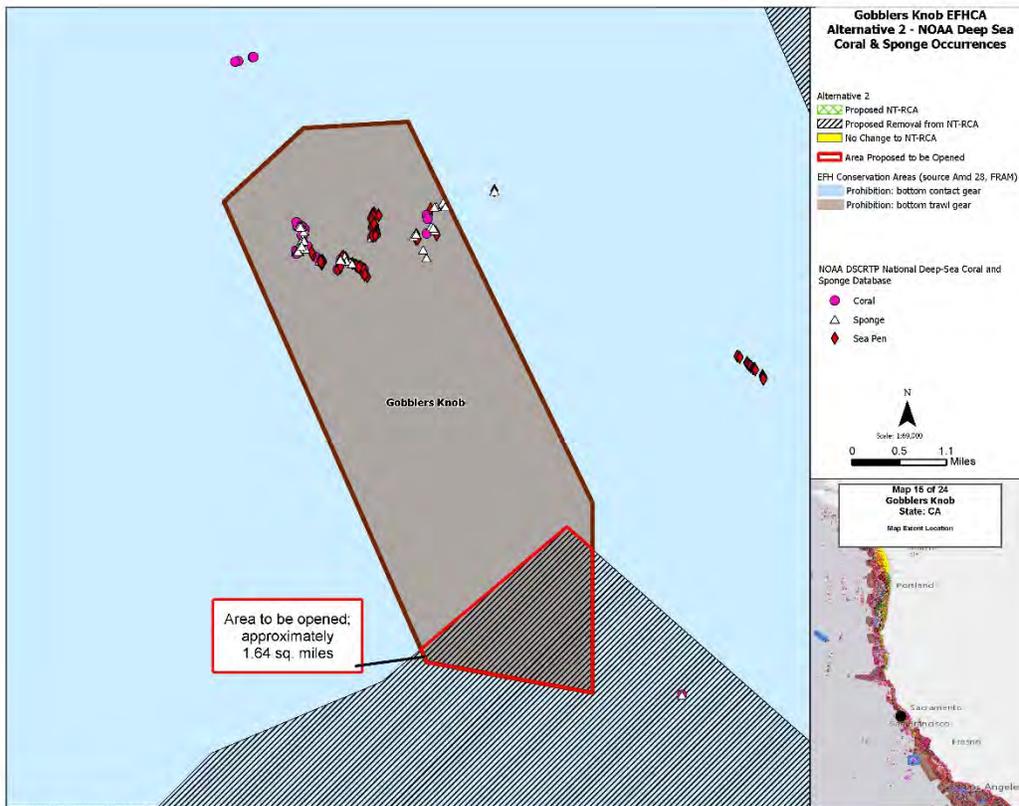
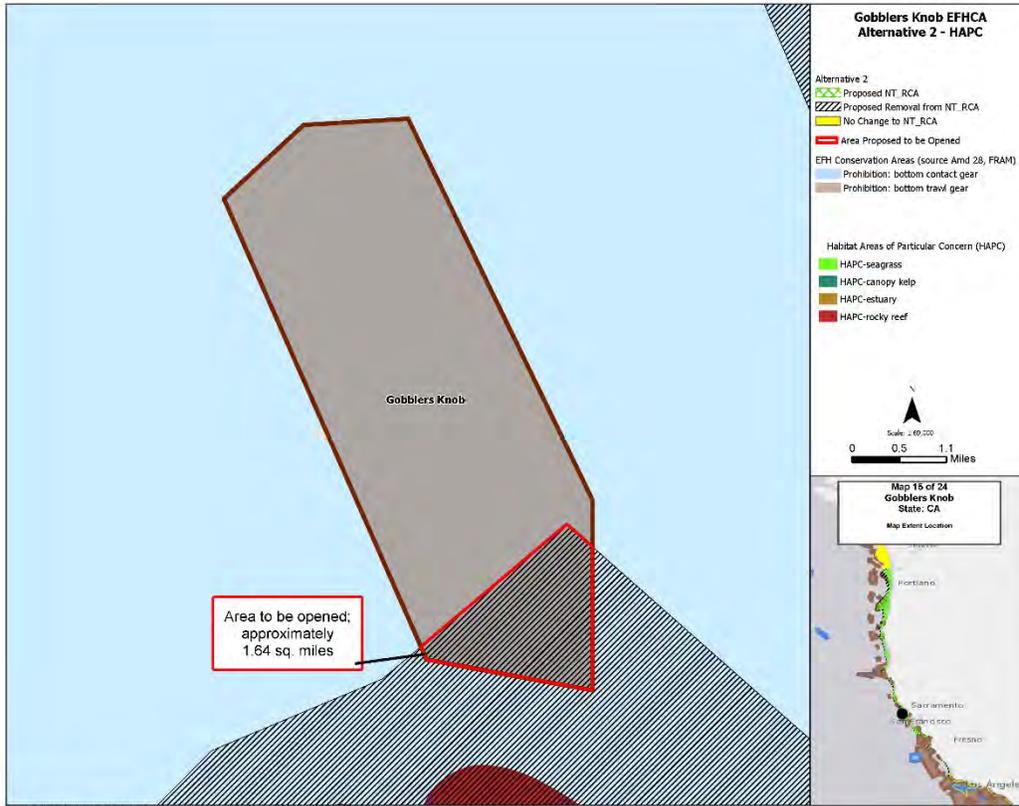
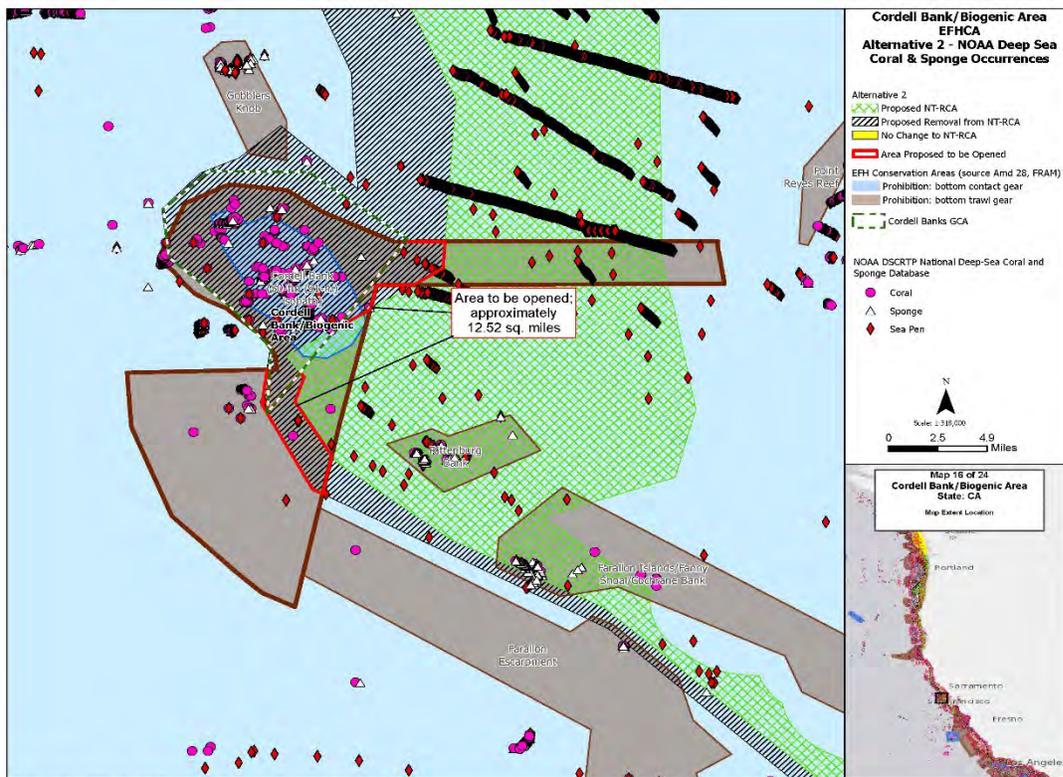
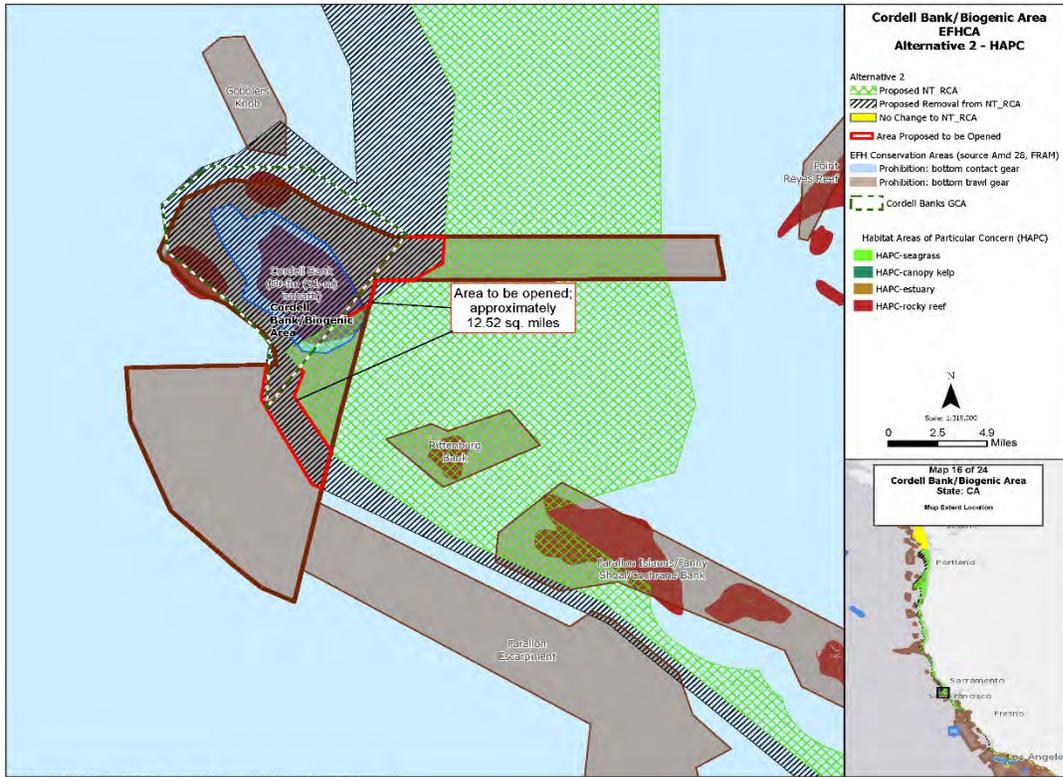


Figure 42. Gobblers Knob EFHCA



Note: The area proposed to be opened outlined in red includes a portion of the Cordell Bank (50-fathom isobath) bottom contact EFCHA (shown in blue) and would remain closed to all bottom contact gear types under Alternative 2.

Figure 43. Cordell Bank/Biogenic Area EFHCA.

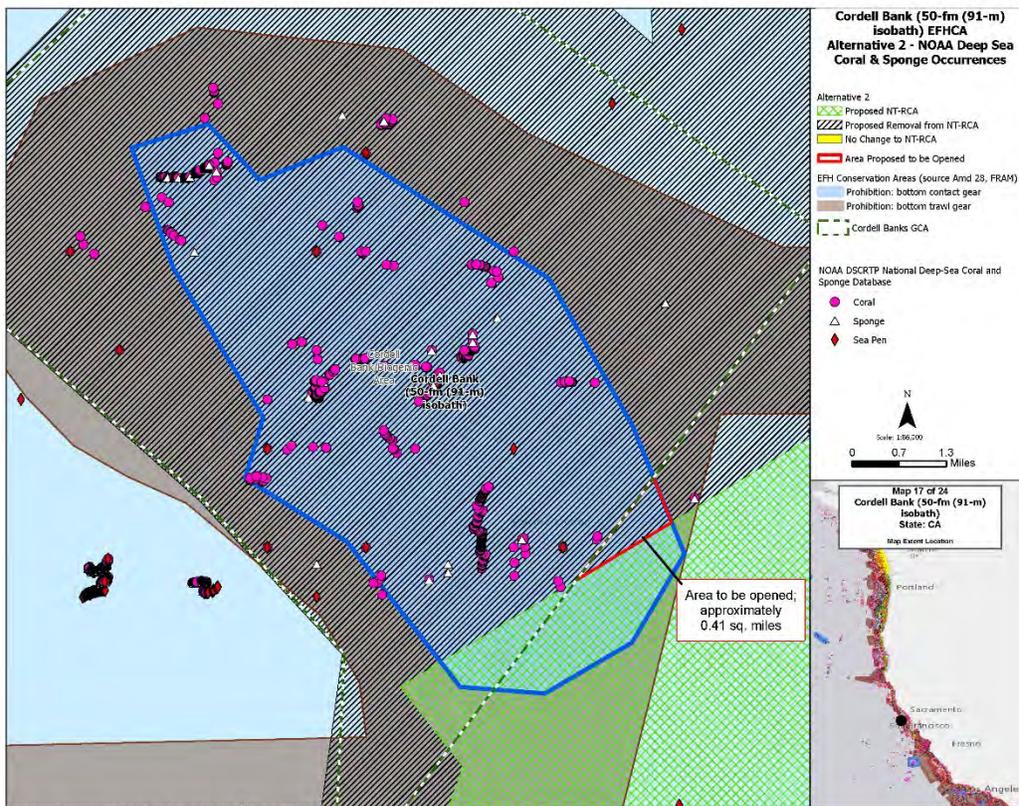
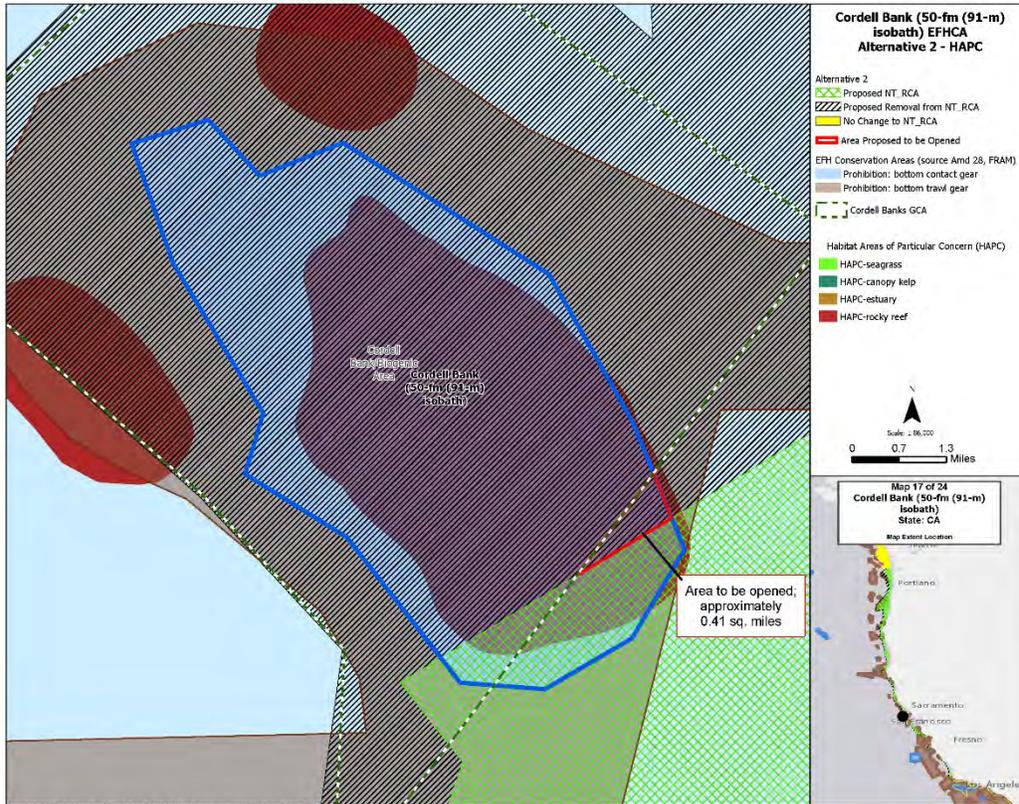


Figure 44. Cordell Bank (50-fathom isobath) bottom contact EFHCA

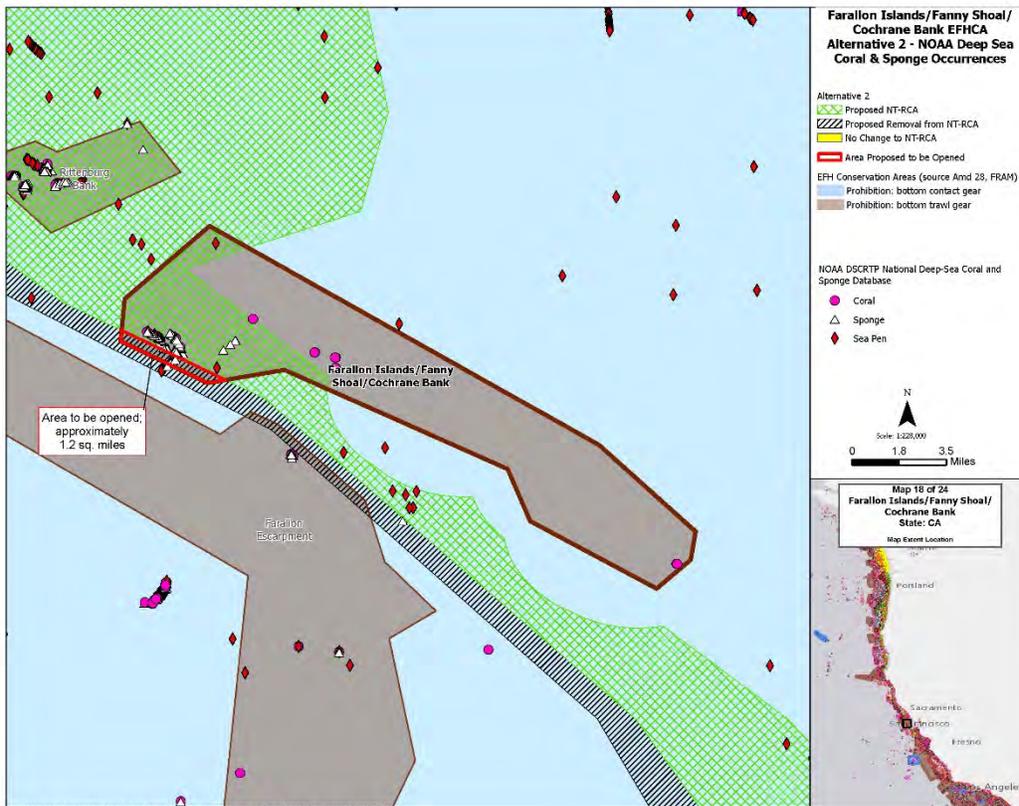
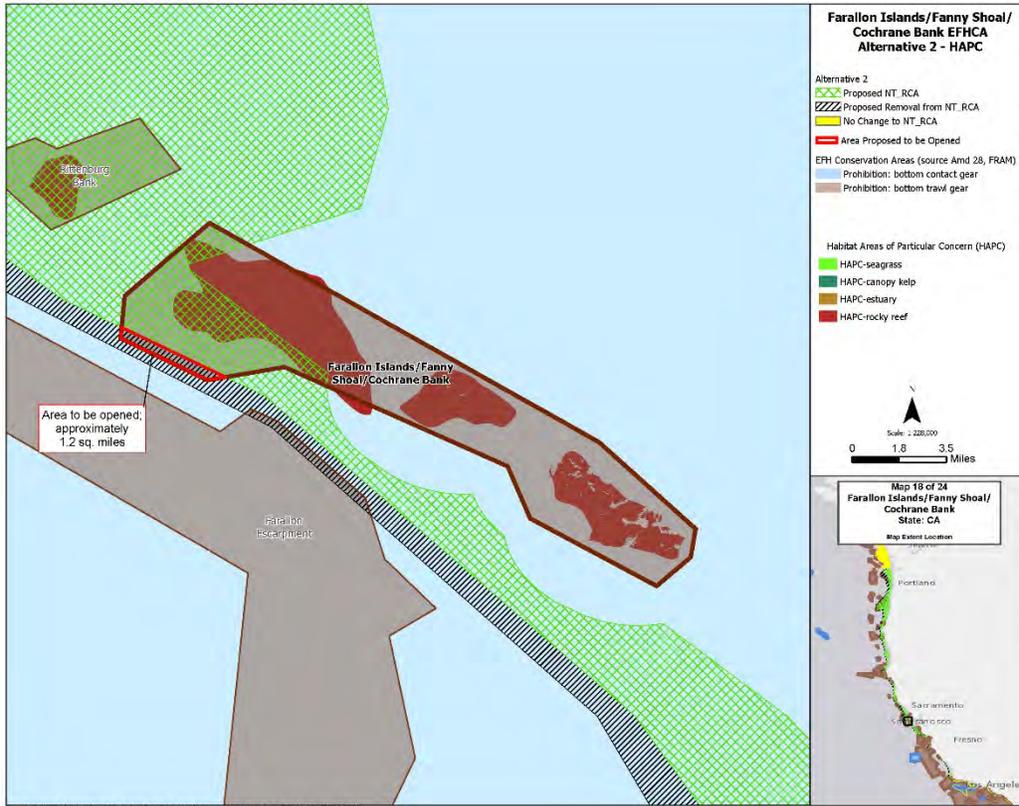


Figure 45. Farallon Islands/Fanny Shoal/Cochrane Bank EFHCA

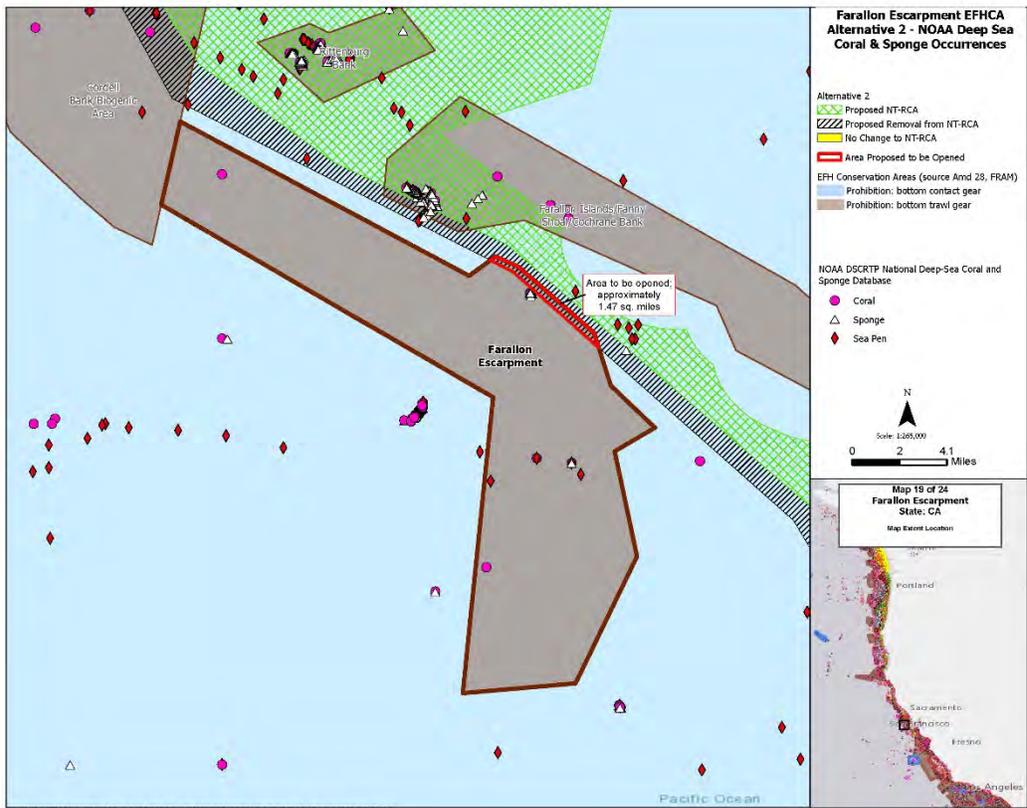
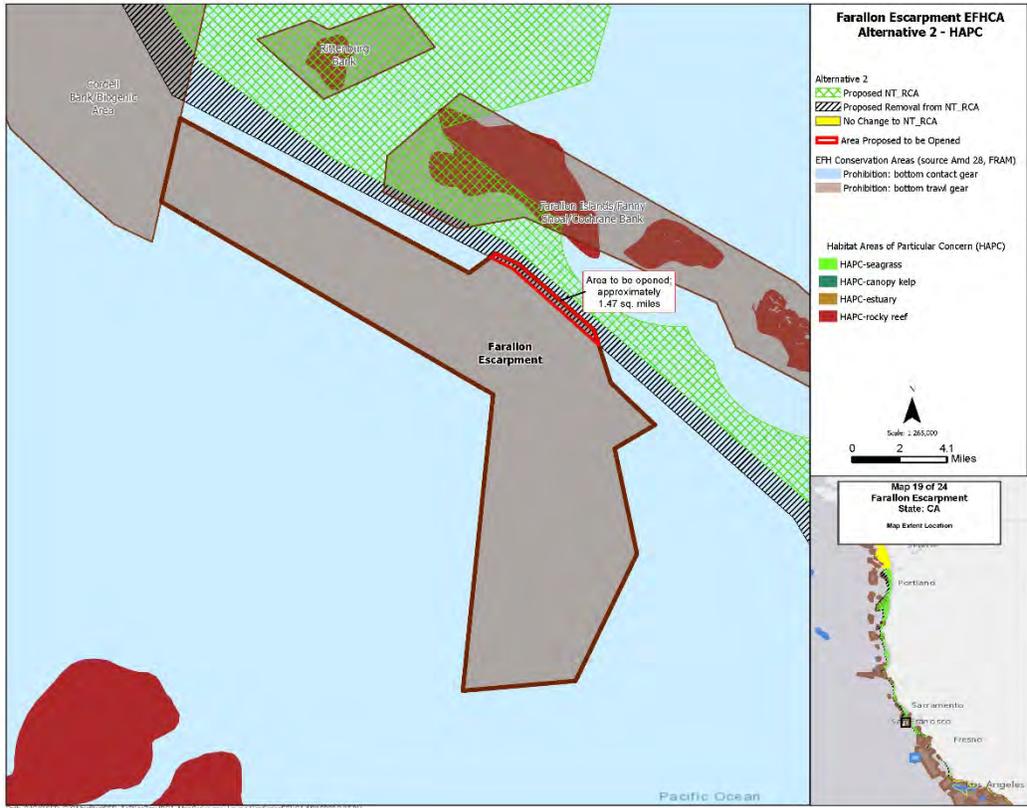


Figure 46. Farallon Escarpment EFHCA

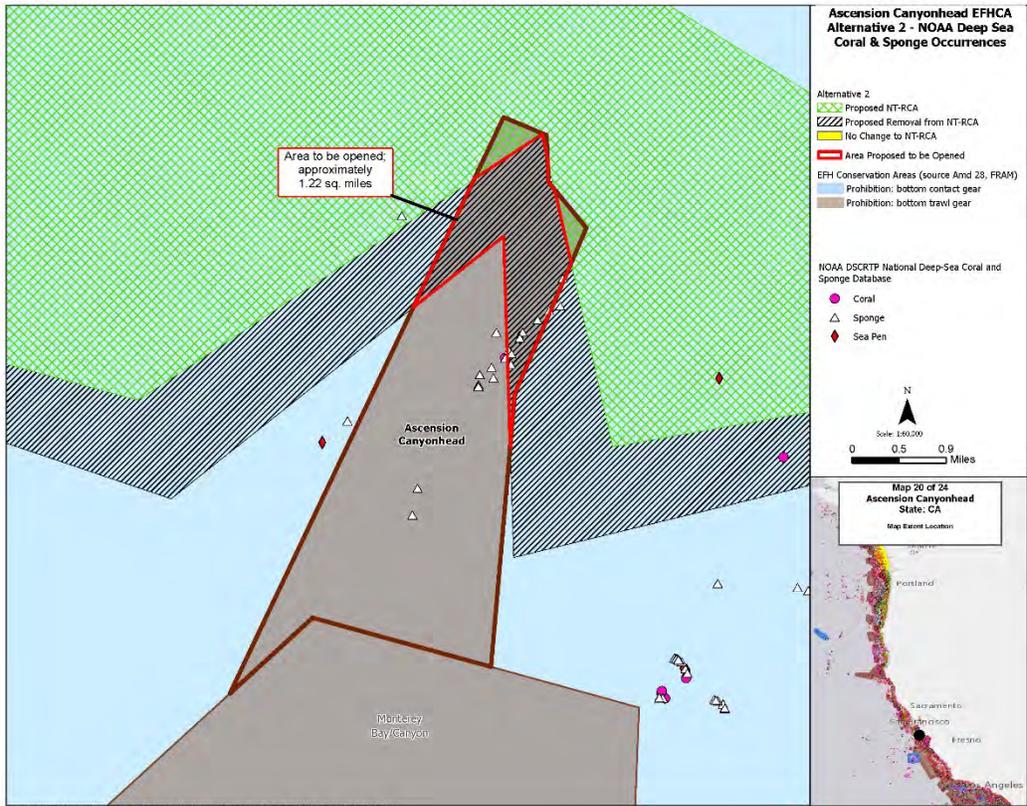
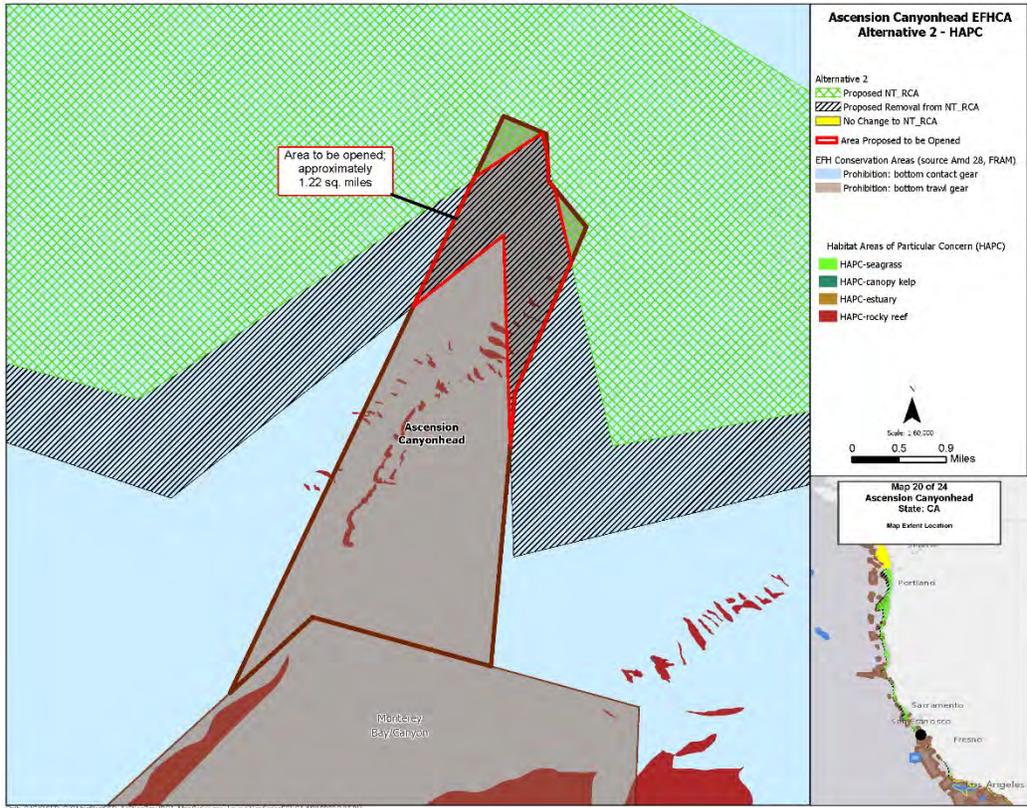


Figure 47. Ascension Canyonhead EFHCA

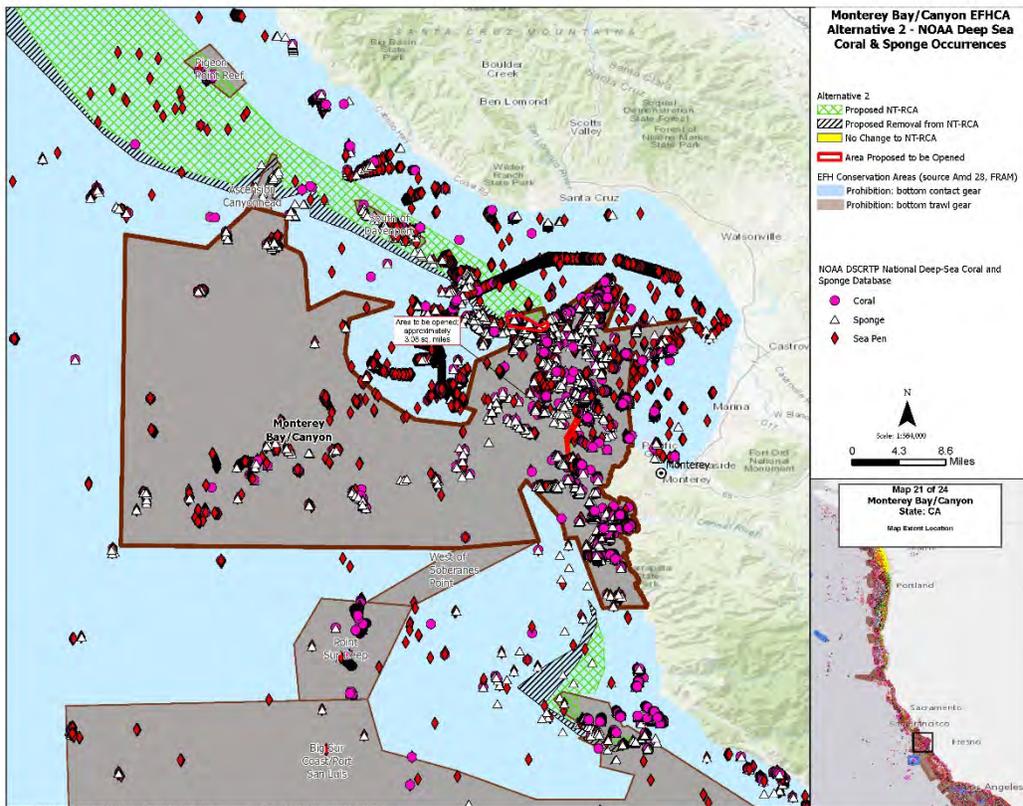
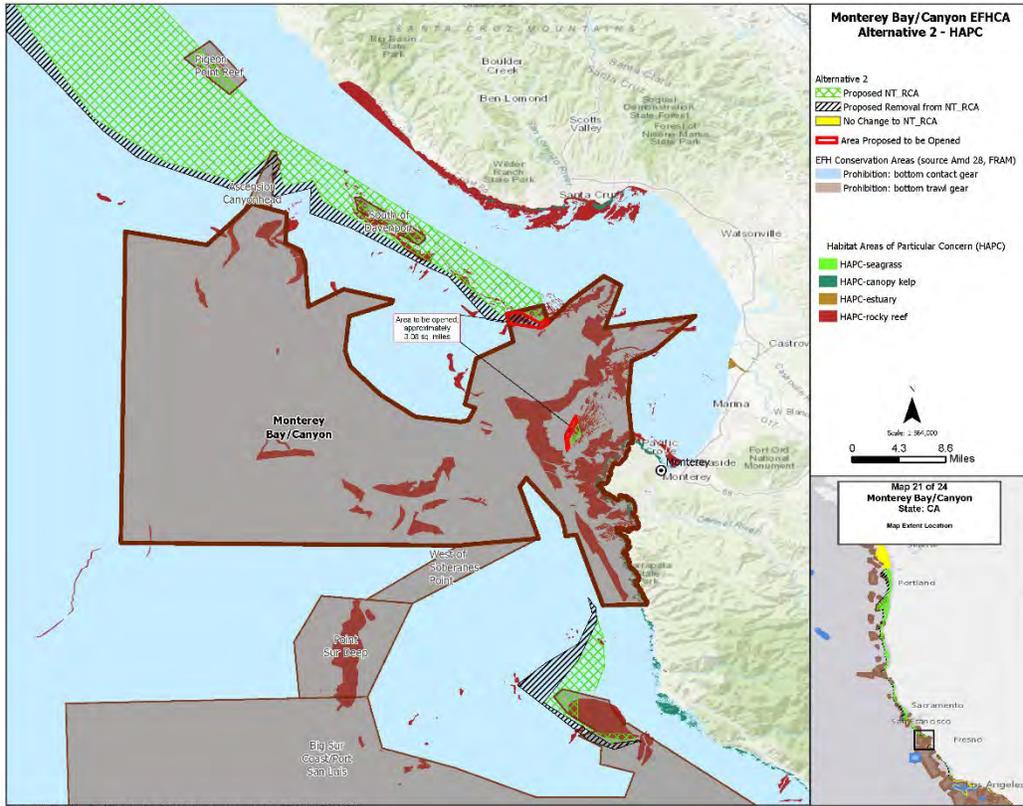


Figure 48. Monterey Bay/Canyon EFHCA

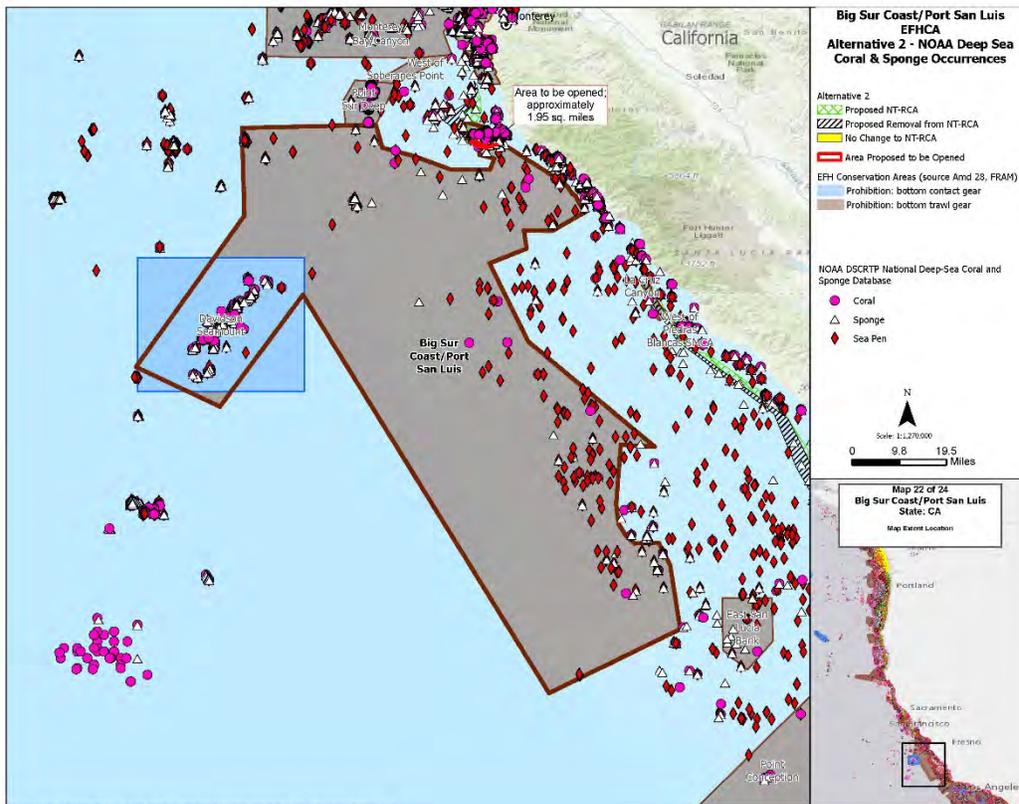
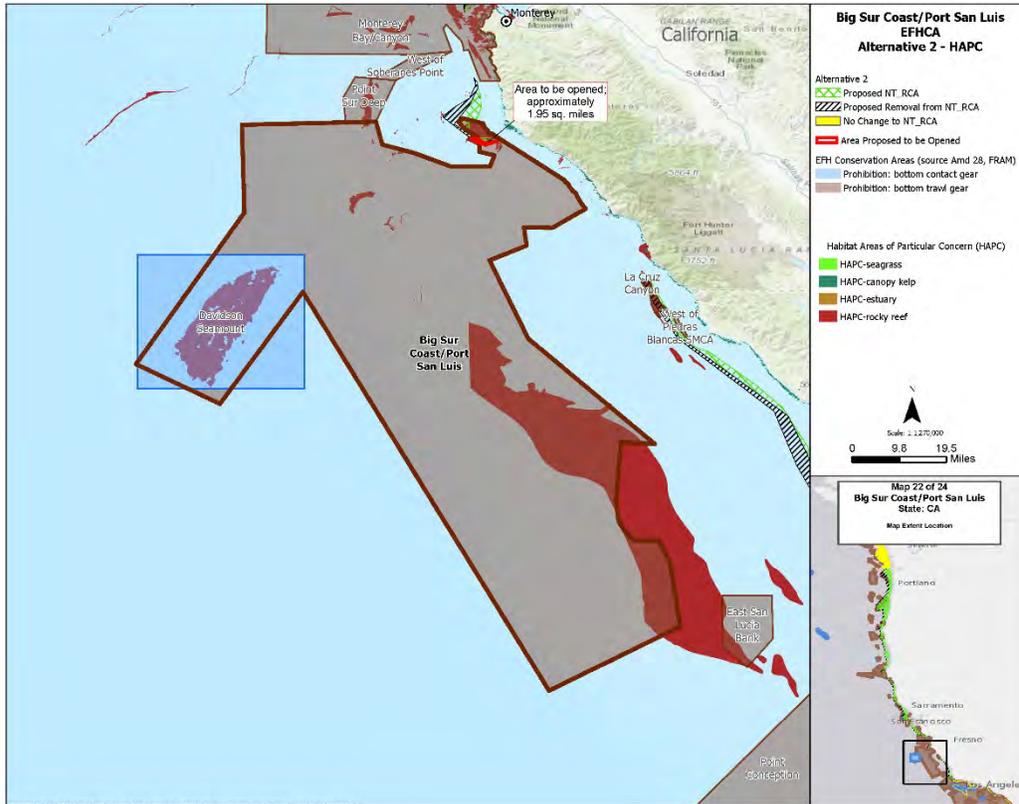


Figure 49. Big Sur Coast/Port San Luis EFHCA

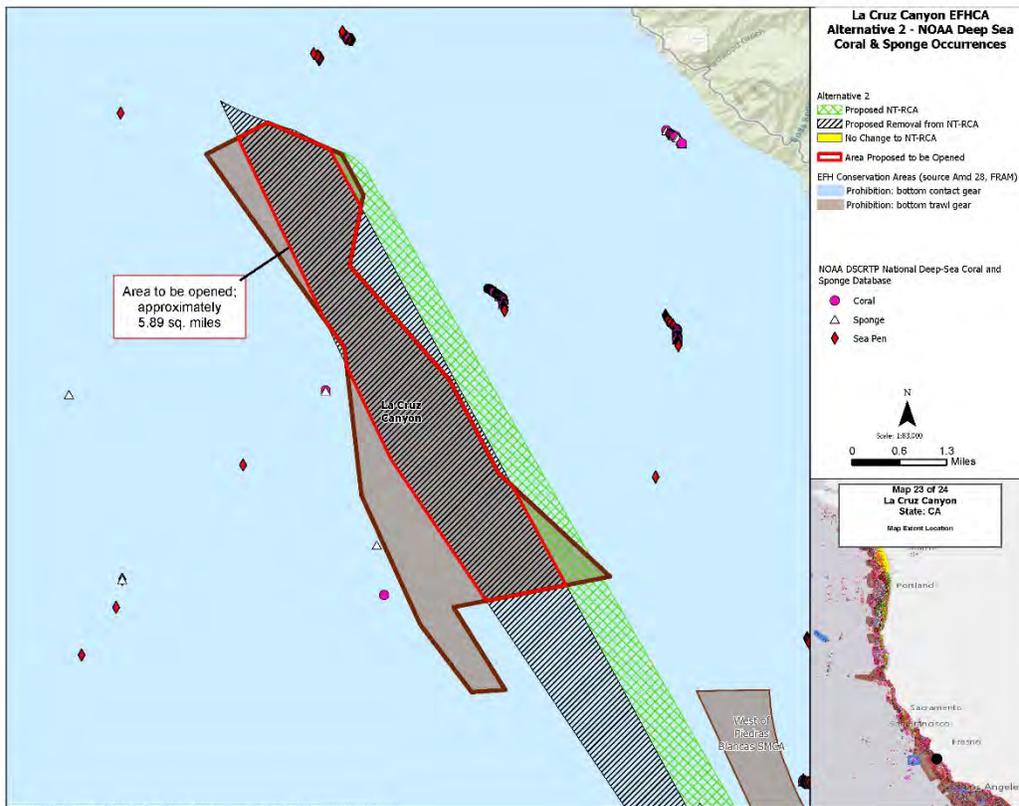
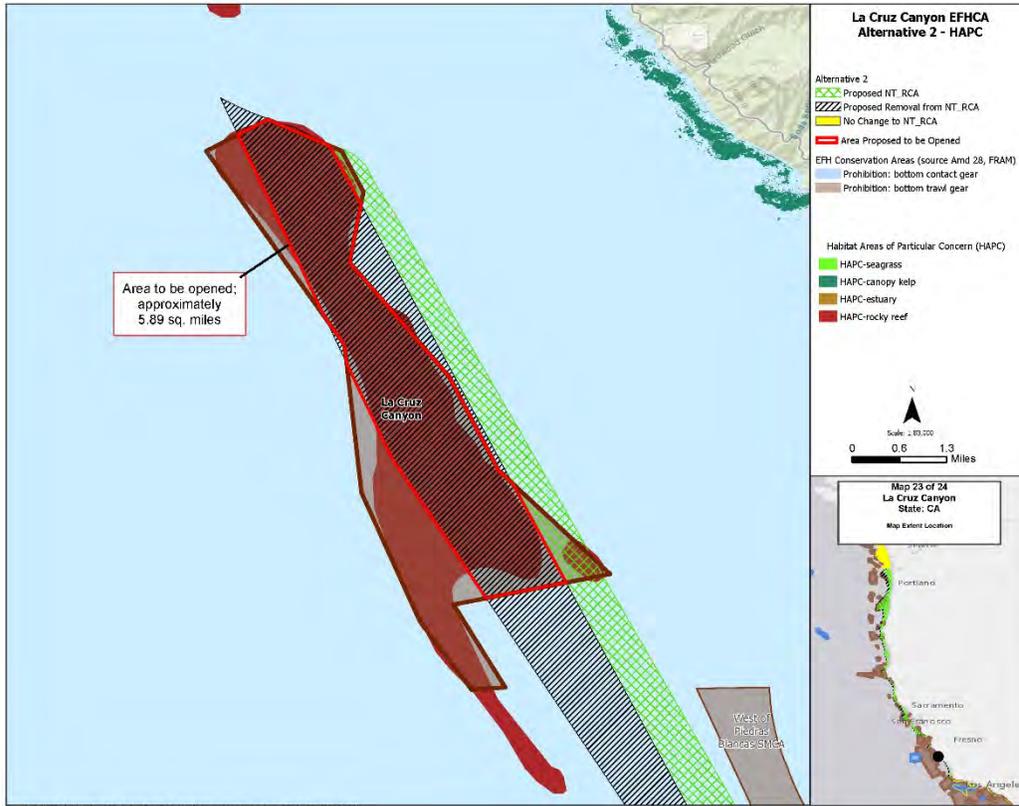


Figure 50. La Cruz Canyon EFHCA

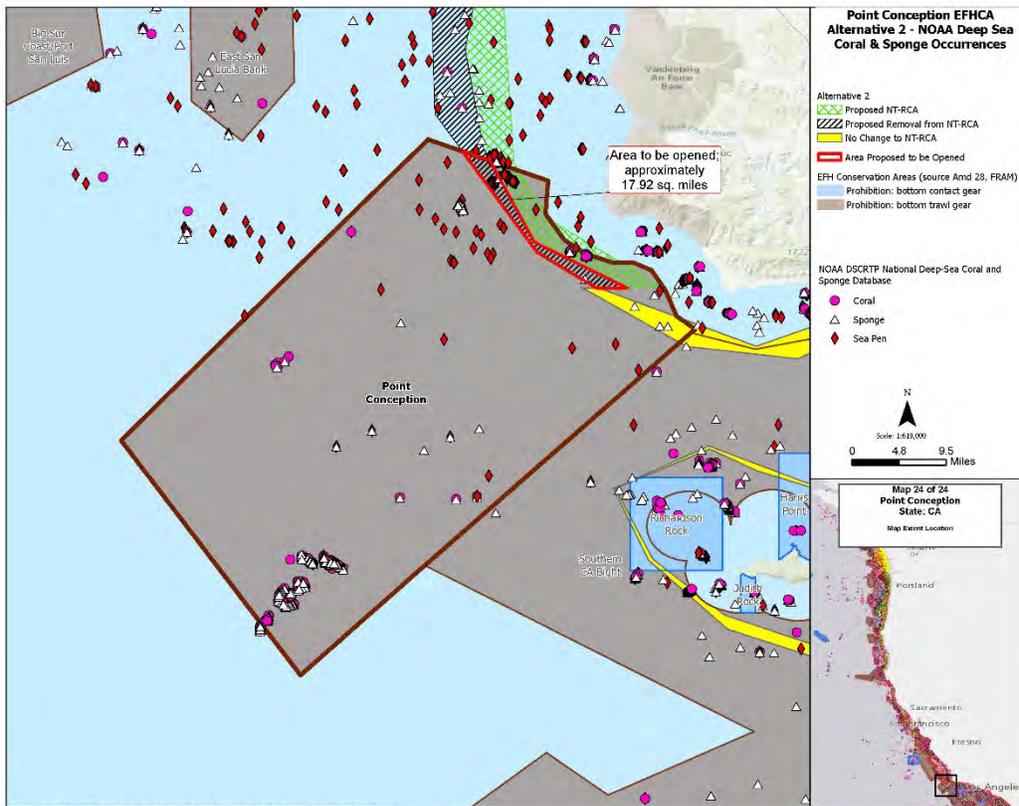
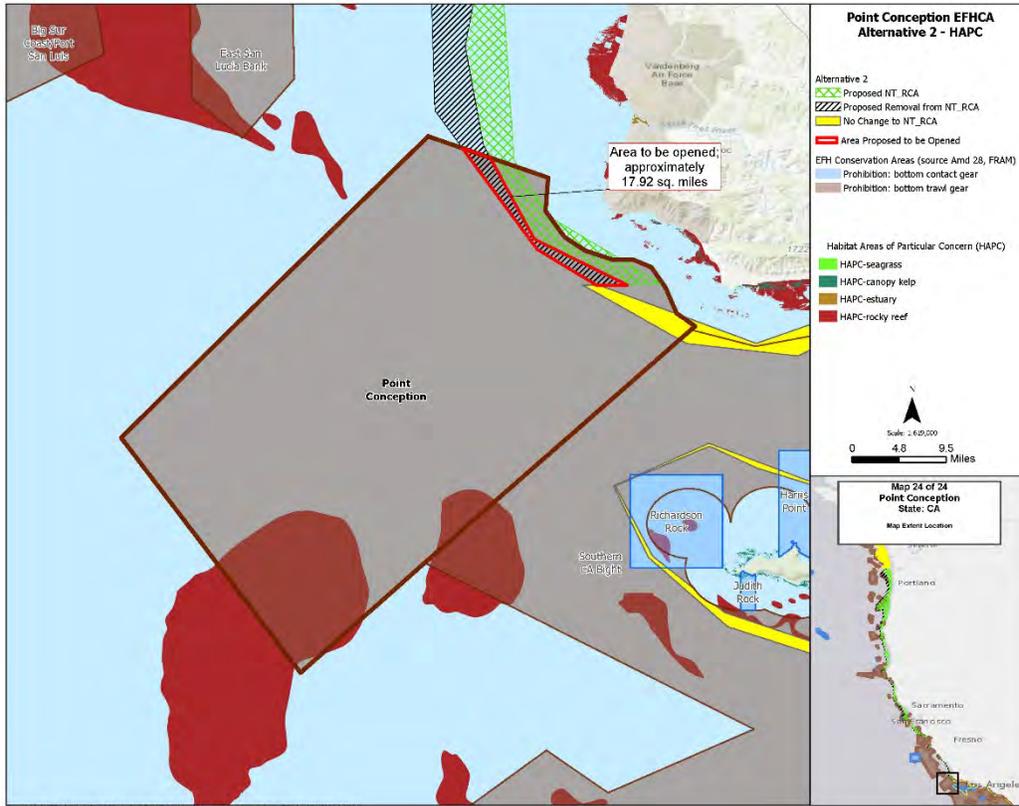


Figure 51. Point Conception EFHCA

3.7.2.2 Alternative 3

Alternative 3 would remove the CCA and implement eight area closures (hereafter known as “proposed groundfish closures”) to all groundfish vessels (commercial and recreational) with the purpose of protecting corals and sponges ([Agenda Item F.6.a, CDFW Report 1, April 2022](#)). Fishing effort would not be restricted outside of those areas unless an NT_RCA line were implemented around the islands. The removal of the CCA would open 5,091 sq. mi. to fishing¹⁹, of which nearly all (5,078 sq. mi.) is currently closed to bottom trawling through an EFHCA (see Figure 52). Note that the Santa Barbara bottom contact EFHCA would continue to prohibit pot or longline gears from fishing in that area, although non-bottom contact gear types would be permitted. The proposed groundfish closures would keep approximately 428 sq. mi. closed to non-trawl fishing effort under Alternative 3. All the proposed groundfish closures overlap with the current bottom trawl EFHCA except for the Northeast Bank groundfish closure, which overlaps with the DECA- a bottom contact EFHCA. As described above, habitat impacts vary based on the substrate type present (Figure 53).

¹⁹ Does not include any areas prohibited by the Channel Island National Marine Sanctuary around Santa Barbara Island.

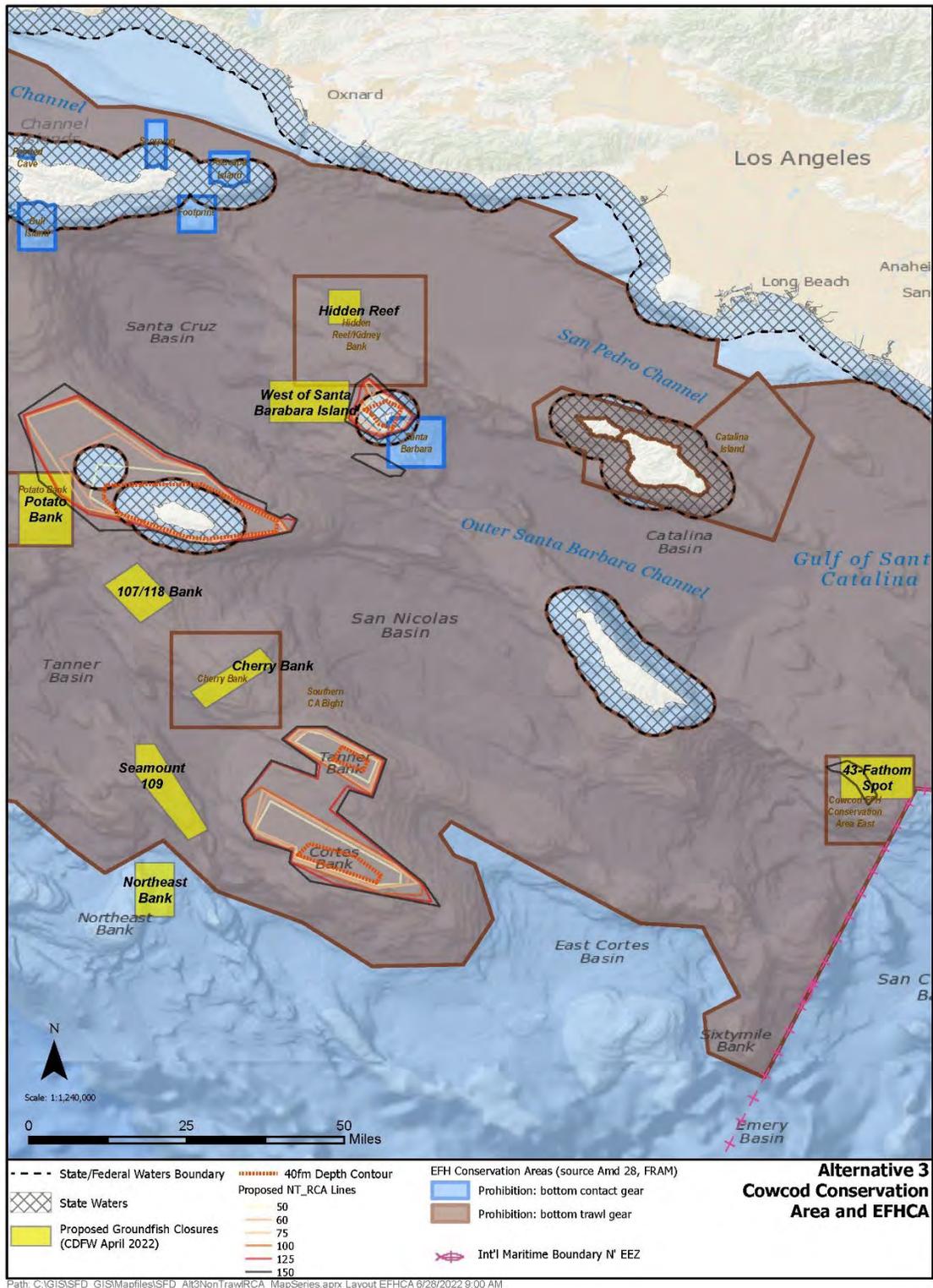


Figure 52. Alternative 3 overview with EFHCAs

Figure 54 and Figure 55 show an overview of the proposed areas to be opened and HAPCs, deep sea corals and sponges, and substrate types with the proposed groundfish closures noted in yellow. Figure 56 through Figure 60 provide a closer look at each of the map areas shown on Figures 29 and 30. Compared to No Action, there would be areas with HAPCs and coral/sponge presence that may be exposed to fishing depending on the configuration of the NT_RCAs around the islands. For example, there is a large amount of rocky reef and coral/sponge occurrences north of Santa Barbara Island and outside of the proposed groundfish closure (see Figure 57). Overall, however, there are proposed protections for coral/sponges and rocky reef habitats in the CCA boundaries which would mitigate the overall impacts to habitat. Non-trawl gear types are also likely to have fewer impacts to habitat types compared to bottom trawl gears, which would remain prohibited as described above. Overall, it is expected that Alternative 3 would not have a significant impact on habitat given the proposed mitigation measures and the gear types that would be permitted in the opened area.

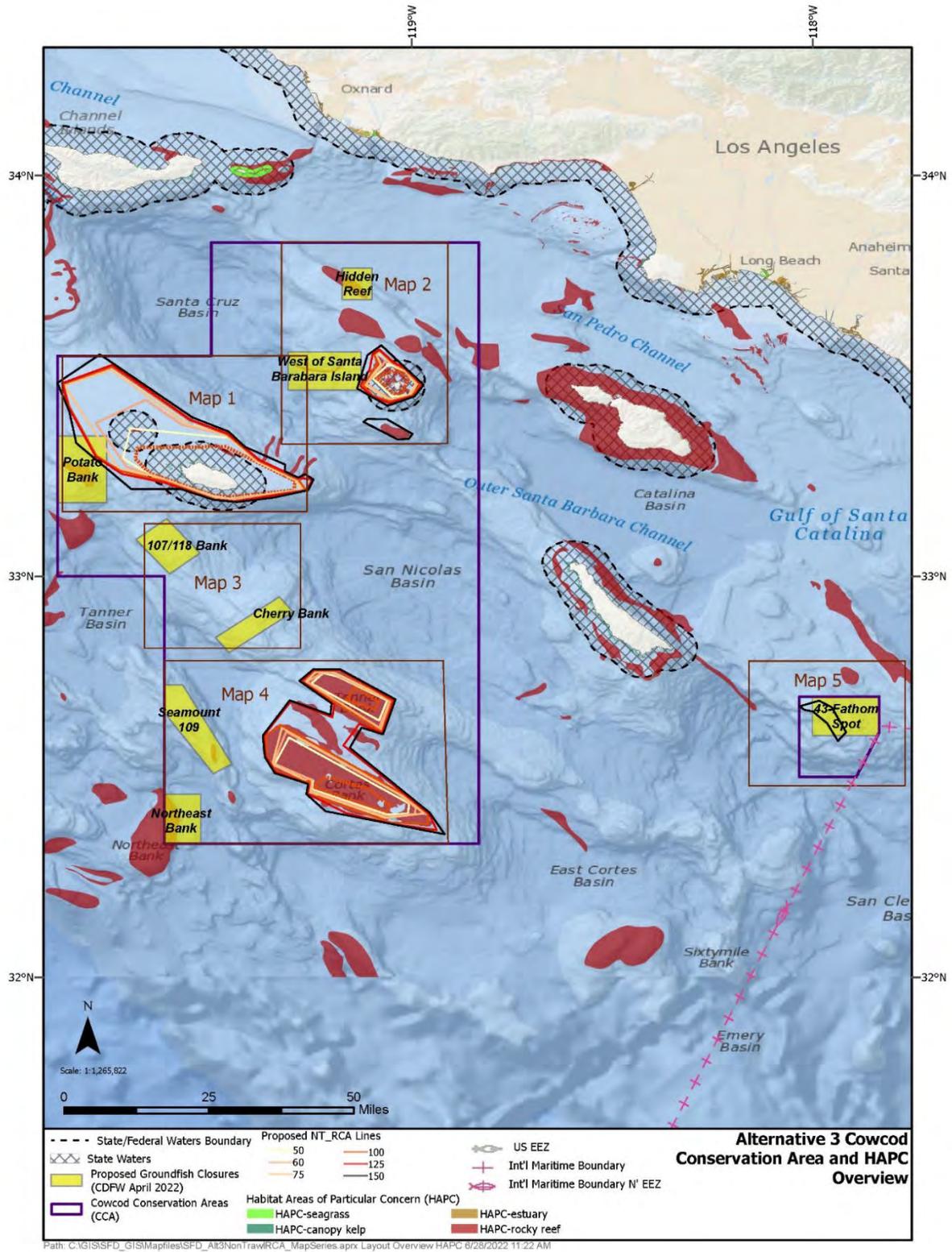


Figure 54. Overlay of HAPCs with Alternative 3

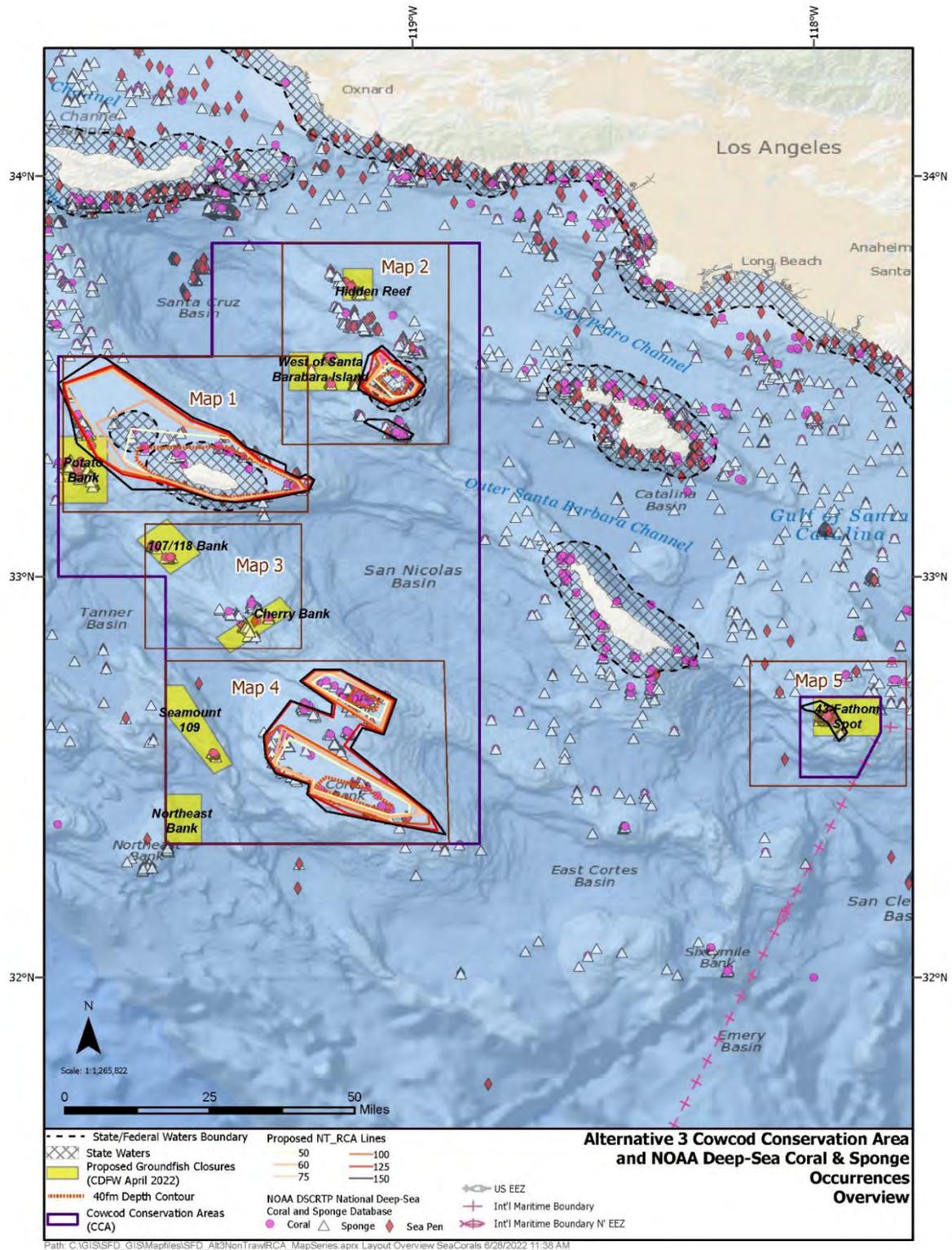


Figure 55. Deep sea coral and sponge occurrences within the Alternative 3 action area

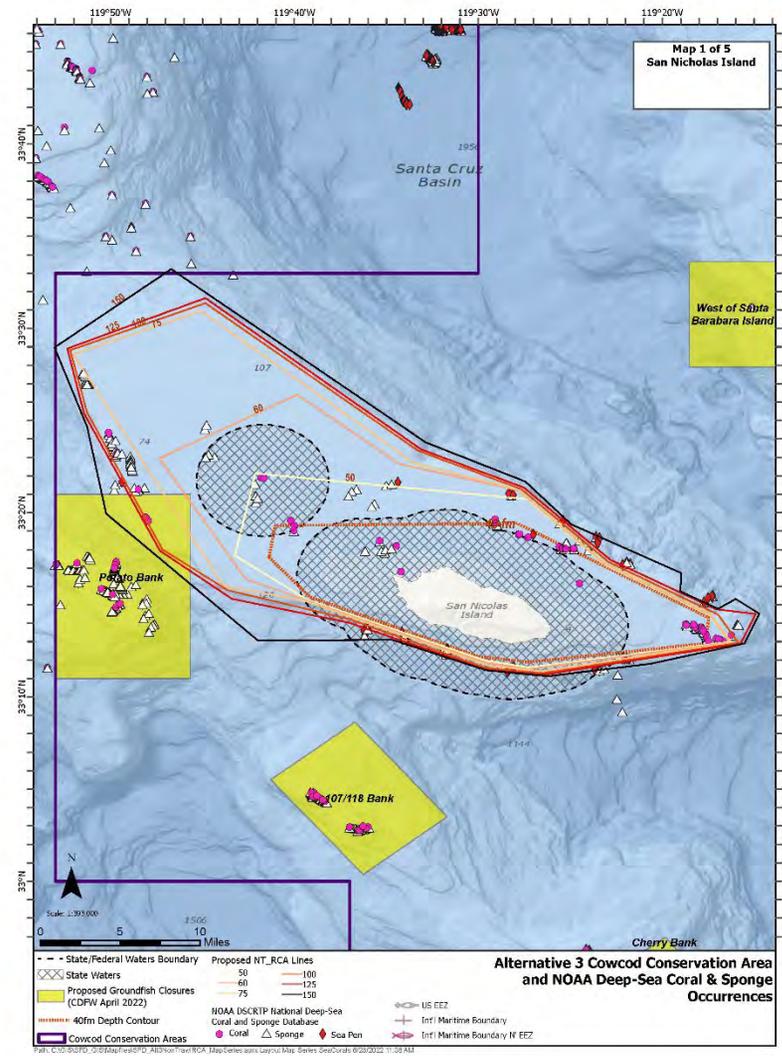
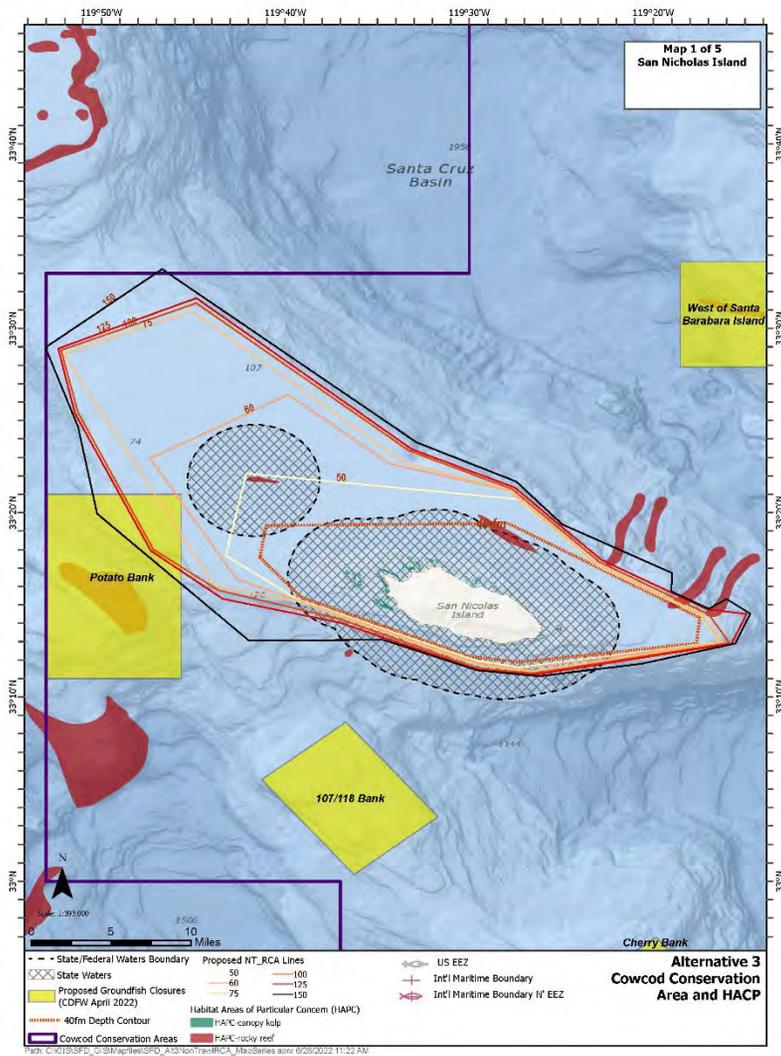


Figure 56. Alternative 3- Presence of HAPCs and deep-sea corals/sponges around San Nicholas Island

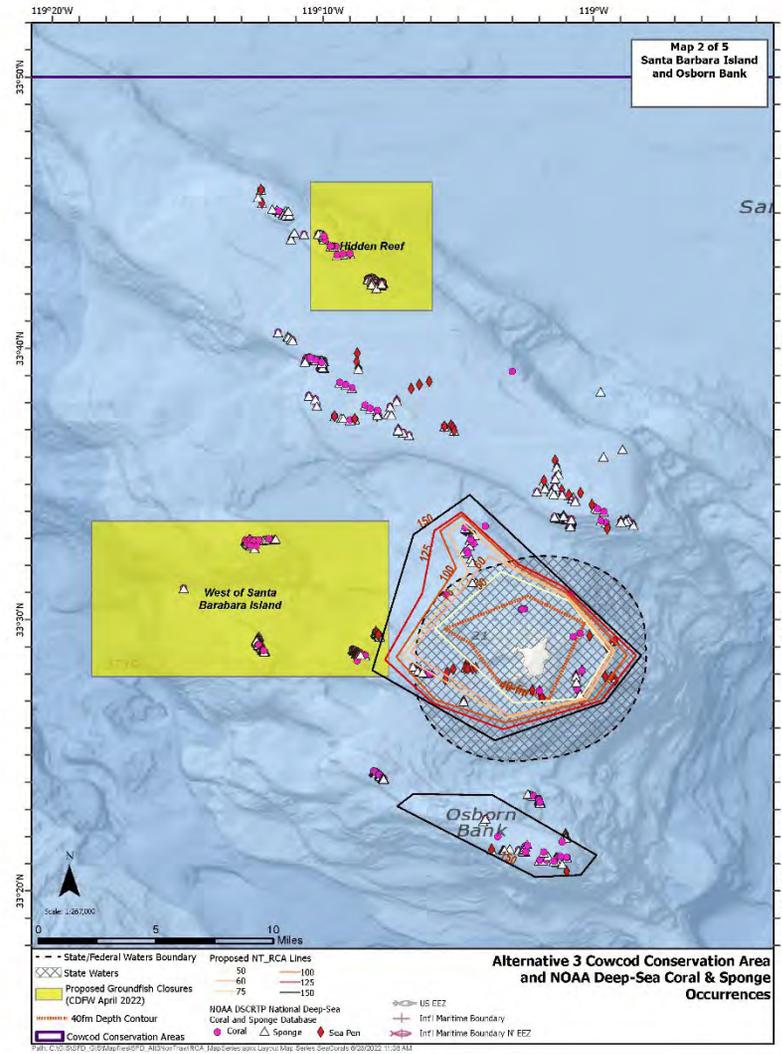
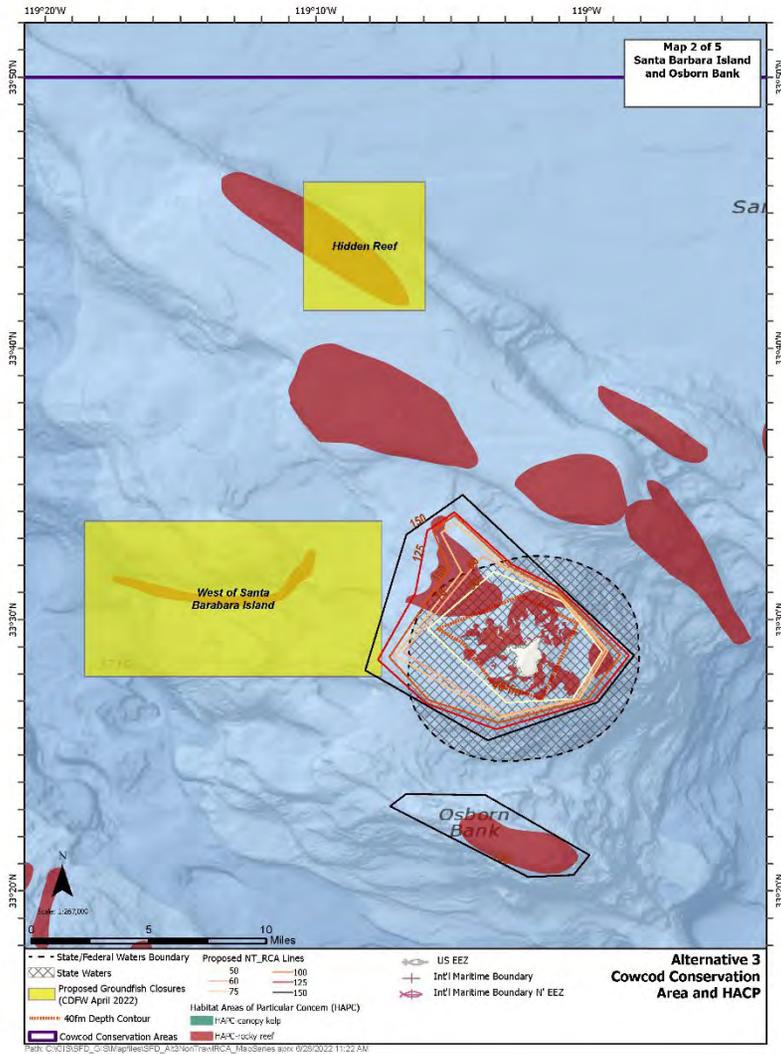


Figure 57. Alternative 3- Presence of HAPCs and deep-sea corals/sponges around Santa Barbara Island and Osborn Bank

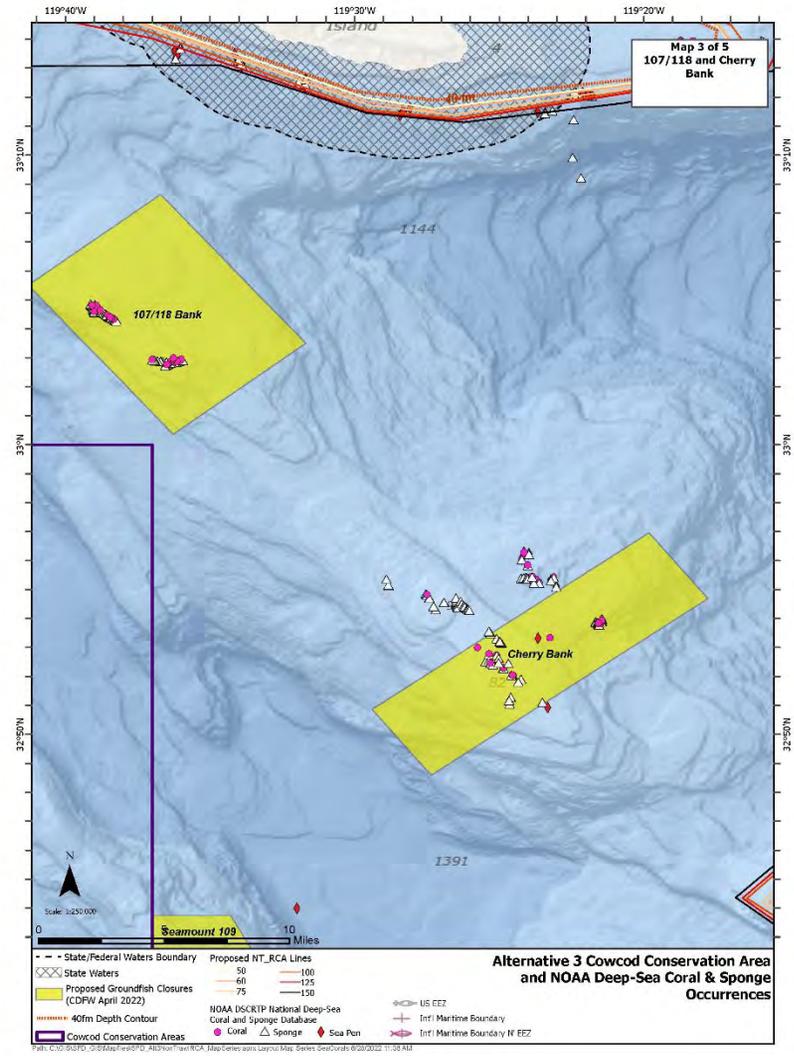
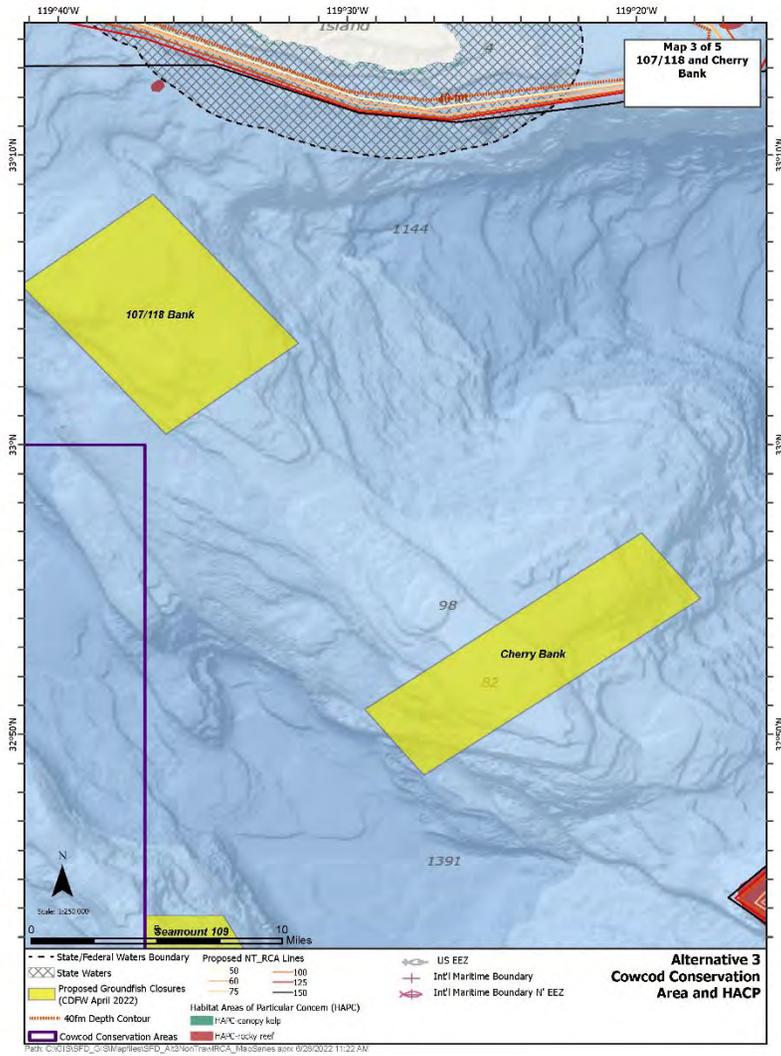


Figure 58. Alternative 3- Presence of HAPCs and deep-sea corals/sponges around 107/118 and Cherry Bank

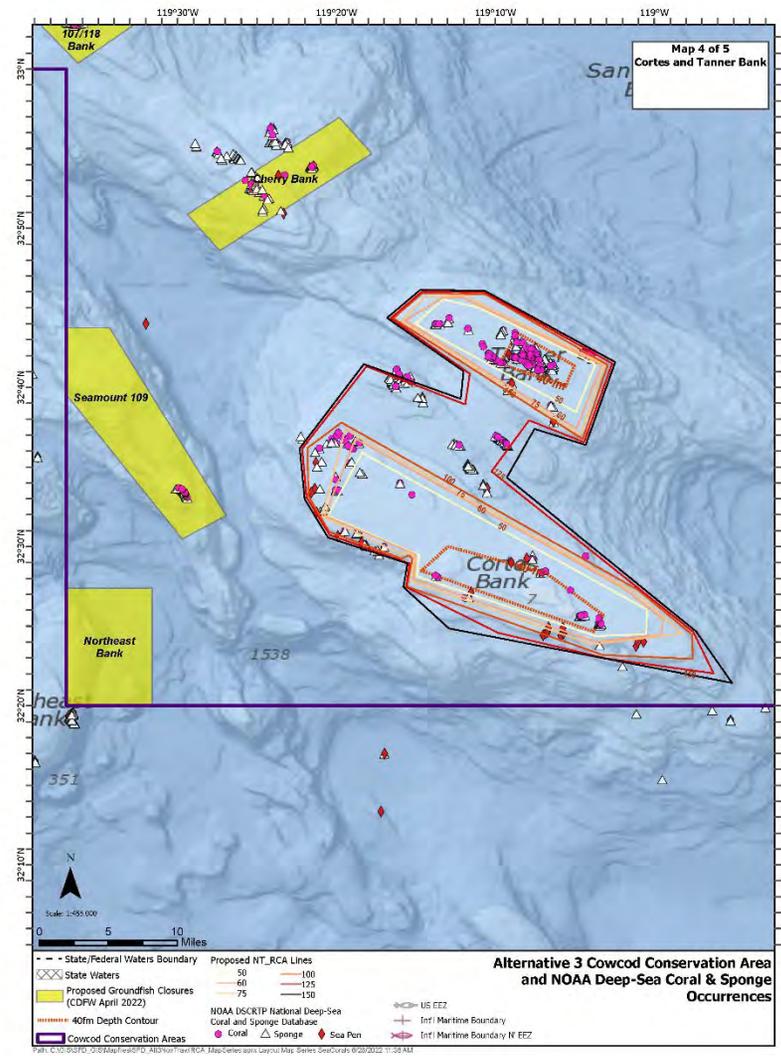
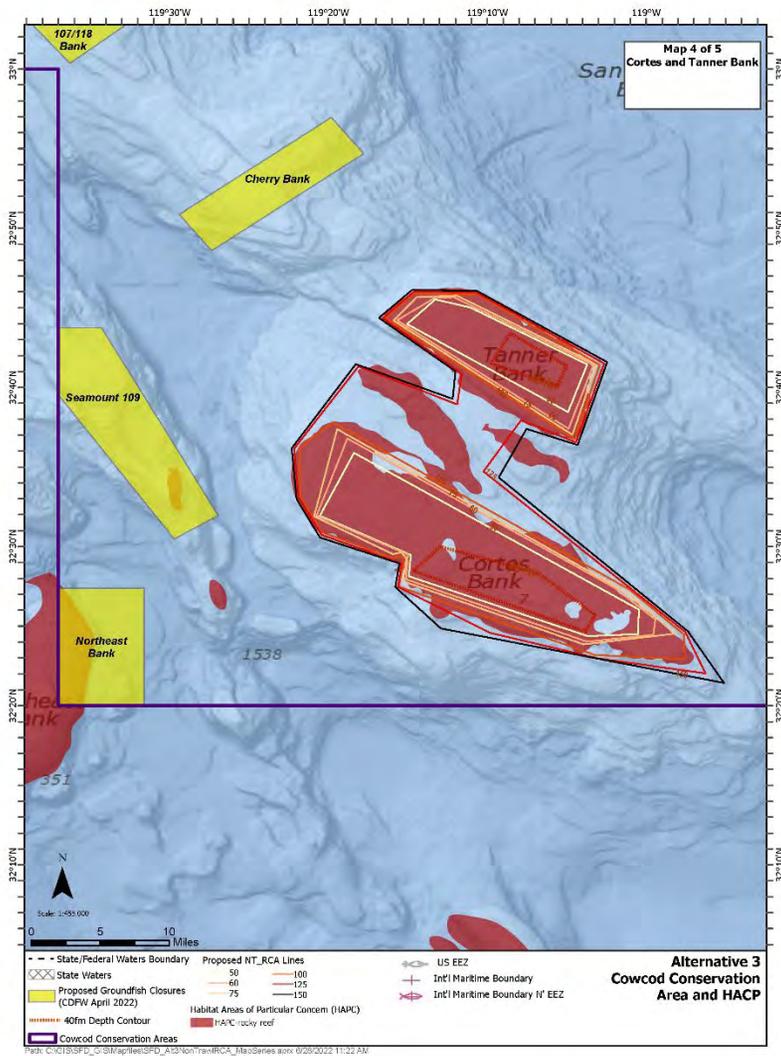


Figure 59. Alternative 3- Presence of HAPCs and deep-sea corals/sponges around Cortes and Tanner Bank

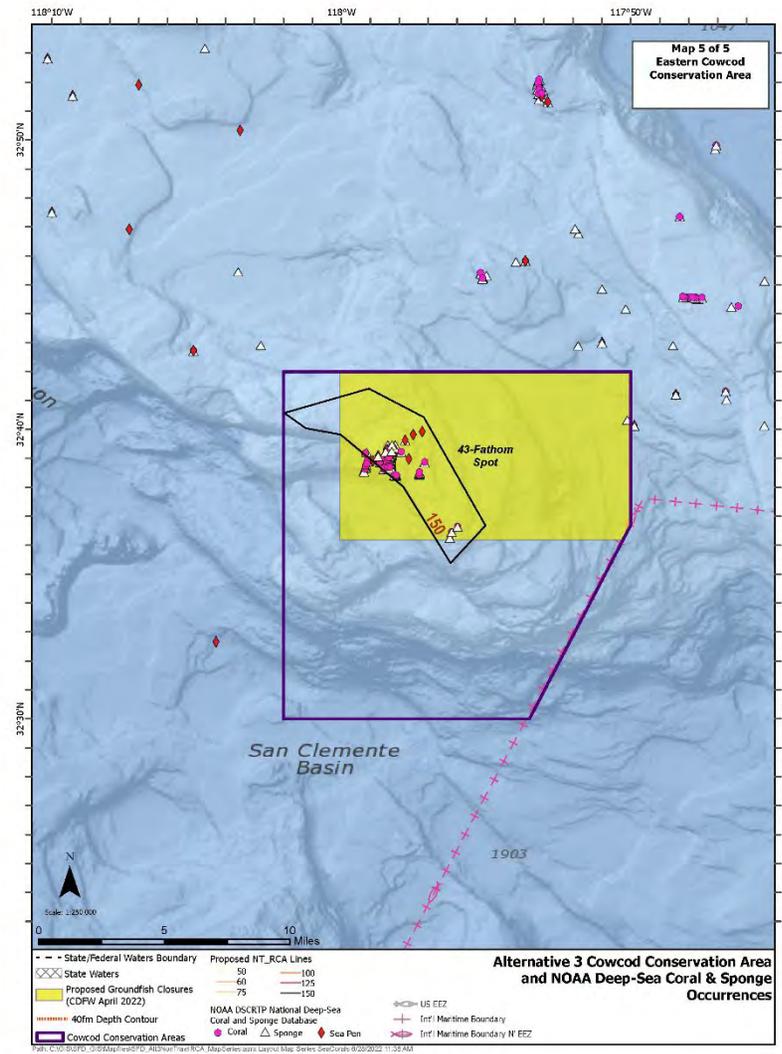
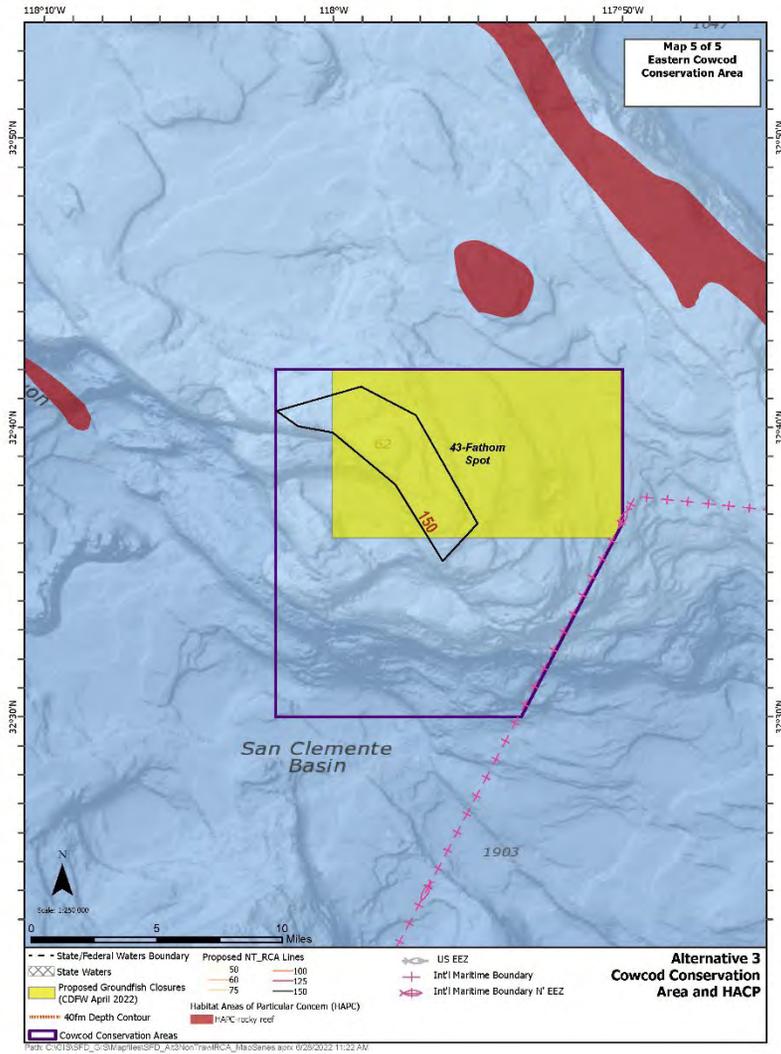


Figure 60. Alternative 3- Presence of HAPCs and deep-sea corals/sponges around Eastern CCA

Cumulative Effects on Habitat

Overall, the impacts to habitat under Alternatives 1 and 5 are like those described under the 2023-2024 Harvest Specification EA, as they are not proposing opening any additional areas to fishing. For Alternatives 2 and 3, there may be some impact to habitat with the reopening of the NT_RCA and CCA to fishing effort, particularly with bottom contact gear. However, it is important to consider that while these areas are potentially opening up to groundfish fishing under these alternatives, there are already state-managed fisheries (and other Federal fisheries) operating in these areas and the mitigation measures being considered (e.g., groundfish bottom contact EFHCAs or proposed groundfish closures) would limit substrate interactions.

[Tables 11 and 12 of Agenda Item F.6, Attachment 1, April 2022](#) describe the state-managed fisheries off Oregon and California that occur within the depths and areas proposed to be opened under Alternatives 2 and 3 respectively. In the area proposed to be opened under Alternative 2, the Dungeness crab and hagfish fisheries primarily fish with pot gear; therefore, habitat in this area is likely already impacted by these fisheries. Additionally, these fisheries are only subject to bottom contact EFHCA closures as described in Section 1.5.2, so there are likely already some impacts to the habitat within the bottom trawl EFHCAs proposed to be exposed. Outside of the bottom trawl EFHCAs, the groundfish bottom trawl fishery can operate with the removal of the trawl RCA starting in 2020 off Oregon and California. Overall, there may be a slightly negative cumulative impact on habitat with Alternative 2; however, with mitigation measures, it is likely to not be significant.

In the current boundaries of the CCA, there are several state fisheries that operate with bottom contact gear, including box crab, hagfish, and spot prawn. These fisheries would not be impacted by this alternative and therefore there could be additional cumulative impacts under Alternative 3. However, given the proposed mitigation measures, it is likely that the overall impacts would not be significant.

3.8 Ecosystem

3.8.1 Status/Affected Environment

Ecosystems consist of communities of organisms interacting with their physical environment. Within marine ecosystems, competition, predation, and environmental disturbance cause natural variation in recruitment, survivorship, and growth of fish stocks. Human activities, including commercial and recreational fishing, can also influence the structure and function of marine ecosystems. Fishing may change predator-prey relationships and community structure, introduce foreign species, affect trophic diversity, alter genetic diversity, alter habitat, and damage benthic habitats.

Section 3.4.3 of the 2015 Environmental Impact Statement (of which the 2023-2024 EA tiers off of) discusses the impacts of the groundfish fishery sectors on the ecosystem. We incorporate those documents by reference.

3.8.2 Effects of the Alternatives

3.8.2.1 Ecosystem

Under all of the alternatives, the impacts to the ecosystem are the same as those discussed in the 2023-2024 EA which concluded that there would be no significant impacts on the CCE. The alternatives presented in this package would add to the adaptive management system that manages the groundfish fishery that “continuously optimizes fishery and ecosystem protections.”

3.8.2.2 Climate

As described in the 2023-2024 Harvest Specifications EA, “NMFS ‘should consider (1) the potential effects of proposed actions on climate change as indicated by assessing the estimated greenhouse gas (GHG) emissions of the proposed action, and (2) the effects of climate change on proposed actions and their environmental impacts.’ (NOAA, 2017).” Similar to the proposed action for the harvest specification, these alternatives do not regulate individual fishermen’s decisions as to how far to travel and what engines to use. However, by changing the seaward boundary of the NT_RCA (Alternative 2), some vessels may choose to fish closer to shore (decreasing fuel consumption). On the other hand, Alternative 3 would open up areas previously closed to fishermen, resulting in fishing farther offshore which may increase that individual’s fuel consumption if they would have otherwise fished closer to shore. However, overall, we do not expect any of the proposed alternatives to substantially change the scale, intensity, or degree of fishing; the fleet’s overall fuel use would depend more on external factors (fuel price, market conditions, oceanographic changes affecting the location of the target groundfish, etc.). Therefore, we do not discuss further the effects of emissions on climate change.

Cumulative Effects on the Ecosystem

Overall impacts from the Proposed Action and alternatives, when combined with the effects of past, present, and reasonably foreseeable future actions, the incremental effect of the action will not result in significant cumulative impacts on the ecosystem.

Regulatory Impact Review

The President of the United States signed Executive Order (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 \$100 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.

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 the management goals and objectives can be found in Section 1.1 title “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 [Section 1.4.1.2 of 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. Section 1.5 above describe the sectors affected by the action. For a description of the directed halibut fishery, please see the [2022 EA for the Area 2A Pacific Halibut Fishery Management in 2022 and Beyond](#).

4.4 Description of the Alternatives

A description of the Alternatives is available in Section 2.

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

4.5.1 Analysis of Expected Effects: No Action

Impacts under No Action can best be described by the 2023-2024 Harvest Specifications EA. Under No Action, the NT_RCA and CCA would remain closed to fishing outside of that permitted in select areas (i.e., within 40 fm boundary of islands in CCA) or by select gear types (i.e., allowance for non-bottom contact hook-and-line style gears in the NT_RCA). Vessels would continue to be restricted from targeting healthy, underutilized stocks that inhabit the NT_RCA and CCA and have been closed off for over two decades. As described in Section 1.4.1, the NT_RCA and CCA were put into place to protect overfished species. In 2022, all but one species (yelloweye rockfish) is rebuilt and other stocks such as canary, widow, yellowtail, and cowcod are underutilized by the non-trawl sectors. While initially put into place to protect shelf rockfish species, the NT_RCA and CCA also prohibited access to other stocks such as sablefish and other slope species in the deeper depths of the two closures.

4.5.2 Analysis of Expected Effects: Alternative 1

Alternative 1 would allow for directed groundfish OA, LEFG, and IFQ gear switching vessels to utilize non-bottom contact hook-and-line gears within the boundaries of the NT_RCA from the Oregon/Washington border to the U.S./Mexico border. Under the 2023-2024 harvest specifications, the Council recommended that vessels in the directed groundfish OA sector be able to use specific configurations of non-bottom contact hook-and-line style gears with artificial bait within the NT_RCA. Alternative 1 would allow vessels to utilize additional gear configurations (to be determined at time of drafting of this document) and natural bait. Additionally, it would extend the opportunity to LEFG vessels to fish up to their LEFG trip limits and gear switching vessels in the IFQ sector to utilize their QPs rather than declaring into the OA sector.

As described in [Agenda Item F.4, Attachment 2, April 2022](#), participation in this fishery would be driven by several factors including opportunities in other fisheries, gear investments, permitting requirements, vessel design, and infrastructure. For directed OA vessels, it is likely that there could be positive socioeconomic benefits compared to No Action as vessels would be permitted to use natural bait or other gear configurations which could lead to an increase in catch of different species than under No Action or overall increase in catch. Based on the April 2022 analysis, the port communities of Brookings and Morro Bay would be most likely to benefit as they have the largest amount of groundfish landed in the non-sablefish hook-and-line fisheries, involvement (measured as the ex-vessel value in a port as share of coastwide ex-vessel value), and dependence (measured as a percent of each port's total landings revenue from all fisheries) of those communities on the sector as a whole (see Figure 11-1, Table 11-14, Figure 11-2).

For LEFG vessels, there would be a positive impact under Alternative 1 compared to No Action, particularly with the inclusion of Suboption 1, which would permit vessels to harvest up to their LEFG limits. As described above, under No Action, LEFG vessels that wish to participate in the non-bottom contact hook-and-line fishery as a directed OA vessel would be subject to the lower trip limits typical of OA fisheries. However, in addition to the benefit of natural bait and other gear configurations, the major benefit for LEFG vessels under Alternative 1 would be the selection of Suboption 1.

Vessels in the shorebased IFQ fishery that gear switch may be unlikely to participate in this fishery given that the primary target of “gear switchers” is sablefish. However, as described in [Agenda Item F.6, Attachment 1, April 2022](#), if sablefish fishing opportunities were to decline either through the consideration of gear switching limitations or if the stock status were to decline, this could provide an additional opportunity for those vessels to supplement their incomes with high value fish. Vessels would still be required to obtain necessary QPs to cover catch. Given the high attainments of widow and yellowtail rockfish in recent years, it may be unlikely for vessels to enter the fishery in areas off northern California or Oregon. However, off select portions of California, where the trawl fishery is primarily composed of gear switching vessels, species such as bocaccio, chilipepper, or other southern shelf rockfish species may be targeted in these areas.

4.5.3 Analysis of Expected Effects: Alternative 2

Under Alternative 2, vessels participating in the groundfish and directed halibut fisheries would be permitted to fish in the area seaward of 75 fathoms in the current NT_RCA from the OR/WA border to 34° 27' N. lat. using any legal non-trawl gear types. Previous analyses have focused on the impacts to the fleets in terms of the groups most likely to benefit in the non-sablefish targeted fisheries. While all West Coast communities in the action area would likely see some benefits, the port groups of Morro Bay, Brookings, and Monterey were identified as the most likely to benefit ([Agenda Item E.6, Attachment 1, November 2021](#)).

It is likely that vessels targeting sablefish might also benefit from the movement of the NT_RCA seaward boundary if larger sablefish are present, as has been suggested in previous discussions for the area off Washington ([Agenda Item E.6.a, Supplemental WDFW Report, November 2021](#)). As was described in Table 22 of the [LEFG catch shares program review](#), sablefish of larger size tend to receive a higher price per pound on average.

In addition to potentially receiving a higher price per pound for the sablefish caught, vessels could also see increased revenues from lower variable costs associated with fuel. Vessels would no longer have to travel out to 100 or 125 fm to fish for sablefish but could travel a shorter distance to find larger sablefish, leading to overall increased profits. Any potential benefits would be constrained by the available allocations for sablefish. Sablefish north of 36° N. lat. has historically been a highly attained species; however, upcoming biennia are expected to see higher allocations than in the past.

While the proposed action only impacts the NT_RCA boundary south of the Oregon-Washington border, vessels participating in the fishery may travel from Washington off Oregon to find sablefish. From 2017-2021, approximately a quarter of sablefish north landings into Washington by IFQ gear switching and LE trip limit vessels were caught in Oregon waters. This compares to more than half of all open access landings but less than 10 percent of primary LEFG landings.

Looking at all sablefish landings coastwide, the ports most involved (defined as the proportion of sablefish landings into a port group compared to coastwide landings) in the fishery by sector are ranked in Table 14.

Table 16. Ranking of Involvement of Port Groups in Sablefish Sectors

IFQ GS	LEFG	OA
Newport	Washington Ports	Fort Bragg/Bodega Bay
Astoria/Tillamook	Newport	Brookings/Coos Bay
Washington Ports	Brookings/Coos Bay	San Francisco
Morro Bay	Santa Barbara	WA Ports
Brookings/Coos Bay	Fort Bragg/Bodega Bay	Monterey
San Francisco	Monterey	Crescent City/Eureka
Monterey	Crescent City/Eureka	Newport
Fort Bragg/Bodega Bay	Astoria/Tillamook	San Diego
Crescent City/Eureka	Morro Bay	Astoria/Tillamook
	San Diego	Santa Barbara
	Los Angeles	Los Angeles
	San Francisco	Morro Bay

Directed halibut vessels would also be impacted by this alternative and be able to fish within the 75 to 100 fathom area currently closed to fishing within the NT_RCA. Participants in the fishery would also see similar benefits in terms of fuel saving if halibut can be found between 75 to 100 fathoms at the desired size and weight.

From 2017-2021, between 63 and 91 vessels have participated in the directed fishery. On average, 78 percent of directed halibut trips landed some amount of groundfish, but given that over 66 percent of trip revenues were from halibut, those landings could be incidental and to help vessels cover other costs such as fuel. Vessels might be able to take trip limits of other species within the 75-100 or 75-125 fm bin if opened to directed halibut, however, it would likely only be those vessels currently landing groundfish as they already are fishing with VMS.

Similar to the situation described above for sablefish, vessels participating in the fishery may travel from Washington off Oregon to find halibut. From 2017-2021, the percentage of directed halibut caught off Oregon and delivered into Washington ports ranged from 26 percent in 2017 to a high of 64 percent in 2020. Therefore, communities in Washington may also benefit from this action. The most involved port groups in the directed halibut fishery include Coos Bay, Newport, and Washington ports. California ports tend to be the least involved in the fishery.

While the changing of the boundaries for directed halibut vessels and directed groundfish vessels (or those halibut vessels retaining groundfish) would require separate regulatory changes (see Section 2.3), the costs

associated with having separate NT_RCA boundaries would be increased for enforcement and result in equity issues across the fleets. For example, if halibut vessels were to remain outside of 100 fathoms, then enforcement would have to monitor vessels on the halibut opener days regulating directed halibut vessels to a separate line than groundfish vessels. This would also be confusing to participants if they were retaining groundfish on a halibut trip.

Under Alternative 2, there are three suboptions that the Council could consider protecting sensitive benthic habitats in current bottom trawl EFHCAs. Suboption 1a would have a negligible impact to industry compared to No Action as groundfish bottom contact gear would continue to be prohibited in the areas exposed in current bottom trawl EFHCAs. This would mean that only non-bottom contact groundfish gears (such as troll gear) would be permitted in those specific openings. Directed halibut vessels (that don't retain groundfish) would not be subject to these closures on the few days of that fishery. Overall, there would still be positive socio-economic benefits under Alternative 2 with suboption 1a by opening a section of the NT_RCA to fishing, even if certain areas were to remain closed to bottom contact gear. While the Council could recommend suboption 1a for any of the exposed EFHCA areas, including those that staff identified as "Not applicable", it should be considered that enforcement costs would likely increase for any additional protections added. Suboption 1a would also potentially lead to administrative costs of having to monitor the EFHCAs for specific gear type usage.

Suboption 1b would close the entire bottom trawl EFHCAs to all groundfish bottom contact gear that have small areas exposed outside NT_RCA. As described in Section 3.7.2.1 above, this suboption would likely only apply in select circumstances. Staff identified four EFHCAs where this suboption may apply: Nehalem Bank/Shale Pile (Figure 25), Bandon High Spot (Figure 30), The Football (Figure 27), and La Cruz Canyon (Figure 38). It is possible that closing those areas outside the current NT_RCA boundaries could impact current fishing operations if vessels fish in those areas. Note that at the time of drafting of this document, directed halibut vessels (not retaining groundfish) would not be subject to this closure. However, these vessels would be gaining more fishing grounds overall under Alternative 2. Depending on the Council's preliminary preferred alternative, available fishing effort data could be examined on potential operational impacts of this suboption. This may increase costs associated with enforcement due to the increase in the number of discrete closures with gear-specific restrictions; however, the exact amounts are not quantifiable.

Suboption 1c as proposed by staff would add a groundfish bottom contact EFHCA to the entire bottom trawl EFHCA area, including that remaining within the proposed NT_RCA boundary. The impact to industry in the short term would be the same as under Suboption 1a or 1b (depending on the EFHCA area), as the area within the proposed NT_RCA boundary would remain closed to all groundfish non-trawl and directed halibut fisheries; however, on the enforcement perspective this would be less burdensome as the regulatory boundaries would be the same as those currently in place for bottom trawl gear. Additionally, this may create some efficiencies for the Council in future decision-makings, as the areas would already be closed to groundfish bottom contact gear if the Council chose to move the seaward boundary of the NT_RCA shallower. In other words, the Council would not need to consider additional closures for the groundfish fisheries in those areas as they would under Suboptions 1a or 1b that would be exposed under a future boundary move. However, if the Council chose suboption 1c for an EFHCA that extended into state waters, the states would need to take conforming action to prohibit groundfish bottom contact gear. It is unknown of the impacts of taking this action on industry.

Suboption 2 would prohibit all groundfish bottom contact gear in Heceta Bank area through the development of a YRCA (see Figure 14). As described in Suboption 1a, this would likely have little impact from No Action, as this area would remain closed to groundfish bottom contact gear and potentially allow only non-bottom contact gear configurations in the area. This would be another area for enforcement to monitor; however, the costs associated are unable to be quantified.

Suboption 3 would potentially develop additional new YRCAs. If developed, YRCAs would prohibit fishing to a sector or sectors in an area. Impacts to industry of implementing a YRCA would need to be considered at the time of implementation. As discussed above, YRCAs would only be enforceable for groundfish vessels or directed halibut vessels retaining groundfish, as the mechanism is currently not available for directed halibut in the Halibut Act regulations. If implemented, this would lead to additional enforcement costs which are again, unable to be quantified.

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

4.5.4 Analysis of Expected Effects: Alternative 3

Under Alternative 3, both the Western and Eastern CCA would be removed allowing recreational and commercial fishing in the area. Select areas (“proposed groundfish closures”) are proposed to remain closed to all groundfish vessels- both recreational and commercial.

Overall, this action is expected to have significant economic benefits to participants that have been prohibited from fishing in the area for over two decades. As described in Section 3.2.2 above, vessels are thought to be able to target sablefish, vermillion, bocaccio, and other shelf stocks. It is difficult to project any quantitative benefits of this opening given the length of the closure and unknown number of participants that may take up the opportunity in both the commercial and recreational sectors. However, given the limited opportunities in the nearshore due to restrictions on quillback rockfish (see 2023-2024 Harvest Specifications EA), it is likely that this alternative may become a main area of fishing effort for participants in southern California. For commercial vessels, external factors such as markets, fuel prices, and infrastructure will drive the overall level of benefit to the fishery of being able to fish in the CCA boundaries. On the recreational side this will be a crucial additional opportunity, especially in times where the fishery is closed outside of 50 fathoms and vessels are looking to provide customers with a full day’s catch on a tuna trip for example.

With regards to the proposed groundfish closures, while there would be a significant amount of area opened to fishing, there could be issues with vessels transiting back from farther offshore or in the general area of the former CCA. To be enforceable, vessels would need to be prohibited from carrying groundfish on board through these areas when coming back from an offshore trip. However, recreational vessels are not required to have VMS and therefore any monitoring of the areas offshore would require on-the-water observations- leading to increased costs to enforcement. In terms of impacts to industry, these proposed closures could lead to additional operational costs of having to transit around the area or forgo potentially good fishing areas on the premise of mitigating habitat impact. As described in Section 3.7.1, non-bottom contact gear which is used by both recreational and commercial vessels is thought to have minimal habitat impact.

There are no impacts to vessel safety expected under this alternative because the alternative does not create a “race to fish” nor force fishermen offshore to gain access to fish. Vessel captains will retain the ability to choose when and where to fish based on sea conditions and weather.

4.5.5 Analysis of Expected Effects: Alternative 5

Alternative 5 would develop BACs for use in controlling catch or bycatch of groundfish or other prohibited species in the non-trawl sectors. It could be implemented preseason or inseason at the lines described in Section 2.6.

The impacts to the fleet on implementing a BAC would be assessed with the most up to date information when the Council considers. While BACs could provide a mechanism for reducing impacts to groundfish or other species, like salmon, it is important to consider the inseason data that is, or rather isn’t, available for non-trawl fisheries. Unlike the at-sea whiting fisheries, there is no inseason reporting of set-level data

that could be used to determine areas of high bycatch by non-trawl vessels. The earliest that data could be analyzed to determine potential areas of high bycatch would be the following fall when WCGOP data is released. However, the non-trawl sectors (outside of IFQ gear switching vessels) are not required to have 100 percent observer coverage; therefore, the Council would be assessing implementing BACs on a limited data set, particularly if the concern was in the OA fisheries. While forthcoming logbook data may provide some additional insight into bycatch locations, further investigation into the timeliness of that data being available would need to occur once logbooks are implemented in the fishery. BACs, if developed coastwide, could be used to restrict activity within the current bounds of the NT_RCA or CCA to curb mortality closer to that seen under the current state of the fisheries and no changes to the regulations (i.e., status quo).

Overall, the socio-economic impacts of implementing a BAC would need to be determined at the time of implementation. Compared to No Action, BACs offer more flexibility than the current management measures available: modifying the NT_RCA boundaries or changing the fishing allowances within the CCA (e.g., move the 40 fathom line into 30 fathoms). If the Council were to select one or all of the other alternatives proposed under this action, BACs would also allow for vessels to fish in newly--opened areas but could close off specific areas of high bycatch to a specific sector or sectors.

While there are no expected costs to NMFS or enforcement with development of BACs for non-trawl gears, there could be costs during the implementation of the BAC. Specifically with regards to enforcement, this would result in additional area closures to enforce- particularly if the BAC is for only a specific gear or sector. There are no impacts to vessel safety expected under this alternative.

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

- Alternative 1 would provide additional flexibility for vessels using non-bottom contact hook-and-line gear to use natural bait to target healthy and underutilized midwater rockfish stocks. Additionally, LEFG vessels would be able to target at their higher trip limits and IFQ gear switching vessels to use their QPs within the bounds of the NT_RCA to fish these stocks. This alternative would likely increase annual revenue and the support of fishing communities.
- Alternative 2 would reduce the size of the NT_RCA and allow groundfish and halibut vessels increased access to targeted groundfish stocks closer to shore (resulting in reduced operational costs). While there could be potential impacts to both non-target (i.e., yelloweye rockfish) and benthic habitat in opening the NT_RCA, which has served as de facto habitat protection for nearly two decades, mitigation measures are being considered to limit these impacts overall.
- Alternative 3 would remove the CCA, develop new NT_RCA lines, and implement a series of proposed groundfish closures to protect corals and sponges. Overall, this would provide considerable opportunity to both commercial and recreational vessels in southern California to target underutilized shelf and slope stocks. This alternative would likely increase fishery revenue and the support of commercial and recreational fishing communities.
- Alternative 5 would develop BACs and could help mitigate bycatch of groundfish or prohibited and/or protected species either preseason or inseason. This could result in extension of fishing opportunity to a fleet (by preventing fishing in an area for groundfish) or to assist in preventing exceedance of annual catch limits or limits for protected species such as salmon.

4.7 Determination of Significant Impact

As noted above, under E.O. 12866, a regulation is a “significant regulatory action” if it is likely to: (1) have an annual effect on the economy of \$100 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 novel legal or policy issues arising out of legal mandates, the President’s priorities, or the principles set forth in this Executive Order. Pursuant to the procedures established to implement section 6 of E.O. 12866, the Office of Management and Budget has determined that this action is not significant.

Regulatory Flexibility Analysis

To be completed after final action.

Magnuson-Stevens Act and FMP Considerations

5.1 Magnuson-Stevens Act National Standards

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

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

The biennial harvest specifications and management measures undertaken and described in the 2023-2024 Biennial Harvest Specifications and Management Measures EA, establish harvest levels consistent with National Standard 1 and the harvest management framework described in Chapter 4 of the Groundfish FMP. This action does not revise the harvest management framework, or groundfish harvest limits. Proposed EFHCA and groundfish closures under Alternatives 2 and 3 protect groundfish habitat within the proposed opened areas, which contributes to productive fish populations and may help prevent a stock from becoming overfished due to loss of, or damage to, habitat. As these areas are primarily within current closed areas (with the exception of Alternative 2, suboption 1b and some fisheries within Alternative 3), it would not displace much fishing effort, and would be unlikely, therefore, to prevent the non-trawl fishery from achieving optimum yield. Opening the non-trawl RCA and the CCA will provide opportunities to achieve optimum yield.

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 available information, which includes substrate maps and deep-sea coral and sponge occurrences.

The best available data include non-trawl fish ticket and observer data and survey data from the IPHC and California hook-and-line survey. These data are used to estimate impacts of the proposed action on the socioeconomic environment, fish resources, and protected resources. As discussed in Section 4.5, there is less robust information about areas proposed for reopening because of the lack of recent fishing activity in those (currently closed) areas. In these cases, the available historic fish ticket data is used, and are the best indicators of historic importance of an area to the fishery.

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

The Council develops and designates management units for groundfish, which include stocks, stock complexes, or geographic subdivisions thereof. The proposed action does not change any management units for groundfish. This EA contemplates groundfish habitat protections and fishery management actions in a coastwide context, encompassing the geographic ranges for all groundfish stocks in the FMP. 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.

Section 4.5 describes the impacts of the alternatives and, where possible, presents impacts on a state-by-state basis and port-group basis. None of the alternatives would discriminate between residents of different states. While some alternatives are considering opening areas off specific states (i.e., Oregon and California), there is no restriction outside of proximity from preventing vessels from Washington from taking advantage of the new fishing area opportunities. As described in 4.5.3, vessels from Washington do fish off the Oregon coast. Decision-making occurs through the Council process, which facilitates substantial participation by state representatives and the public. For the preferred alternative, state-specific Council recommendations were crafted and integrated from an initial range of alternatives, designed to meet each state's priority management objectives and needs.

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.

Given that most of the EFHCA or proposed groundfish closures would be within current closed areas, there is likely no impact on efficiency or utilization of the resource in Alternatives 2 and 3. Groundfish bottom contact EFHCAs or the proposed groundfish closures could have a negative impact on utilization of fishery resources in the non-trawl groundfish and directed halibut fisheries depending on the suboption selected (e.g. closing a portion of a bottom trawl EFHCA outside the current NT_RCA to groundfish fishing under suboption 1b under Alternative 2). However, the NT_RCA and CCA reopening would likely more than offset any negative impacts on utilization in this 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.

EFHCAs and the new proposed groundfish closures in Alternative 3 are management measures to conserve and to protect groundfish EFH and other important benthic habitat like corals and sponges. The results of the impacts analysis are described in Section 3.7. Groundfish EFH is reviewed approximately every 5 years, which provides opportunities to re-evaluate available information and revise EFHCAs to respond to new information and variations, including information on fisheries, fishery resources, and catches. Alternatives 2 and 3 that contemplate changes to the NT_RCA and CCA consider and allow for variation and contingencies relating to fisheries, fishery resources, and catches. NT_RCA lines and BACs are management measures to control catch of groundfish and incidentally caught species by imposing time/area closures for vessels harvesting groundfish with non-trawl gear. Also, NT_RCA lines and BACs are time/area closures that can be closed, reopened, or modified pre-season or in-season to be responsive to the management needs of the fishery, based on most recently available information regarding the fishery, fishery resources, and catches.

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

Generally, by the Council and NMFS coordinating management, monitoring, and enforcement activities between the three West Coast states, duplication and, thus, cost are minimized. This action contemplates changes to the suites of spatial management tools relating to groundfish EFH and rebuilding overfished rockfish species. Adding new closures may increase the burden on enforcement resources, and removal of closures may decrease the burden on enforcement resources. In general, the boundaries of new and revised closed areas have been developed in consultation with enforcement consultants' expertise to optimize enforceability and avoid duplication.

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.

West Coast fishing communities depend on a portfolio of commercial and recreational fisheries to support year-round operations. Recent coastwide declines in commercial and recreational fishery opportunity for groundfish (e.g., copper and quillback) and non-groundfish species due to changing environmental conditions and changes in management have created considerable instability for many communities. Protecting and conserving groundfish EFH, relieving fishing restrictions, and enabling flexibility in management measures are anticipated to contribute to sustained participation by, and increased stability in, coastal fishing communities. All the alternatives take the importance of the fishery resources to West Coast fishing communities into account. The habitat protections and NT_RCA and CCA changes considered in this EA balance the conservation of fishery resources and habitat with providing for sustained participation for coastal fishing communities.

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 outside of No Action as described in the 2023-2024 Harvest Specifications EA. Mitigation measures currently available and proposed to be developed under this action (i.e., YRCAs, BACs) would provide additional tools to allow for minimization of bycatch. All species are projected to stay within their associated ACLs.

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

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

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

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

The 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 (Chapter 4). The effects of the proposed action on safety of human life at sea are evaluated in Section 4.6, and above under National Standard 10, in Section 5.

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.

Other Applicable Laws

Executive Order 13175 Consultation and Coordination with Indian Tribal Governments

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

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

Tribes with Federally-recognized groundfish fishing rights that fish off the coast of Washington may be impacted if the Council chooses to further analyze Alternative 4 (currently not analyzed in this document yet remains as part of the current range of alternatives). The proposed actions and other alternatives were developed through the Council process and, based on the enclosed analysis are not likely to affect the tribal fishery operations. Through the tribal representative on the Council and tribal comments submitted to NMFS and the Council, the Tribes have a role in the developing the proposed action and analyzing the effects of the alternatives; therefore, at this time the proposed action is consistent with EO 13175.

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References

To be completed for final action