Increasing habitat protection and economic opportunity through collaborative efforts to reconfigure groundfish Essential Fish Habitat Conservation Areas and the Trawl Rockfish Conservation Area

SUPPLEMENTAL REPORT

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Note: Participation in a working group does not necessarily reflect organizational or institutional endorsement of the outcomes indicated in this document.

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Introduction

This document contains supplemental information about the modifications to groundfish Essential Fish Habitat (EFH) Conservation Areas and the Trawl Rockfish Conservation Area (RCA) recommended by the EFH collaborative groups.

As indicated by the advance briefing book submission (Agenda Item H.8.b Public Comment 1), two distinct working groups were involved in evaluating potential EFH and RCA changes along the West Coast. One group focused on the region north of 40°10', and the other group focused on areas south of 40°10'. The two groups were products of different contexts and connections, and different individuals participated in each process.

The area recommendations described below are divided regionally. Three northern regions are identified: Canada to Cape Falcon, Cape Falcon to Cape Blanco, and Cape Blanco to 40°10'. The next two regions to the south—40°10' to Ano Nuevo, and Ano Nuevo to Point Conception—were described as "southern" regions in the advance briefing book submission. In this document they are labeled "central" regions, in order to differentiate them from the final region, which is Point Conception to Mexico. Further explanation of the regional distinctions, and the reason for re-labeling the central regions, is provided below.

The area modifications proposed in each region are the result of many hours of conversations among stakeholders, attempting to forge consensus. While significant progress was made over the past year, it was not possible to find full consensus on every area discussed. As such, each area is labeled with a status of the recommendation:

"Full Recommendation" means an area was discussed thoroughly, and acknowledged as a useful and acceptable change. Areas that are fully recommended have few if any outstanding issues to be resolved, and we believe can be supported by a wide range of stakeholders.

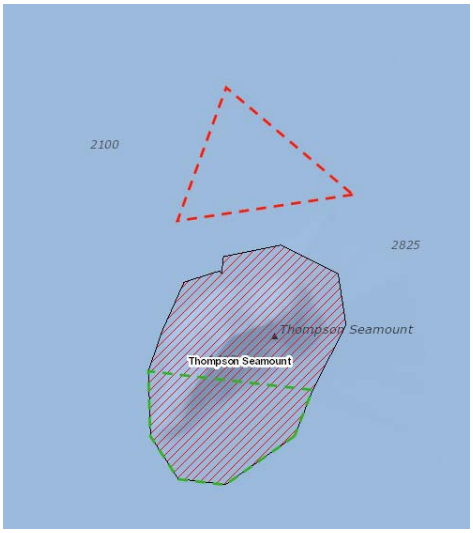
"Recommendation in Progress" indicates that an area was discussed and consensus may be reachable, but conversations are still in progress and some loose ends remain. Both the northern and southern collaborative groups will continue to work over the upcoming months as needed to resolve outstanding issues with respect to these areas, and will report to the Council prior to the April meeting on the final status of these areas.

"No Recommendation" indicates an area was discussed, but may not be amenable to consensus. In these situations, we show the area as a way of cataloging the conversations that happened, and showing the Council how the concepts and shapes evolved. Discussions may continue on some of these areas over the upcoming months, with the hope of developing consensus, but no projection is made as to the likelihood of that happening.

To represent the status of recommendations visually, the following coloring system is used in map images in this document. Please note that these maps are purely hypothetical, and no changes are actually being recommended to the Thompson Seamount EFH Conservation Area.

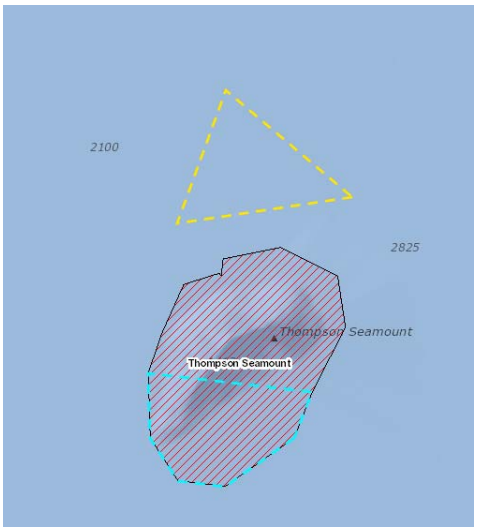
Green = "Full Recommendation" opening
Red = "Full Recommendation" closure

In the hypothetical map to the right, the red triangle would represent a new closure area with "Full Recommendation" status, and the green semicircle on the south side of the existing EFH Conservation Area would represent a re-opening of part of that area with "Full Recommendation" status.



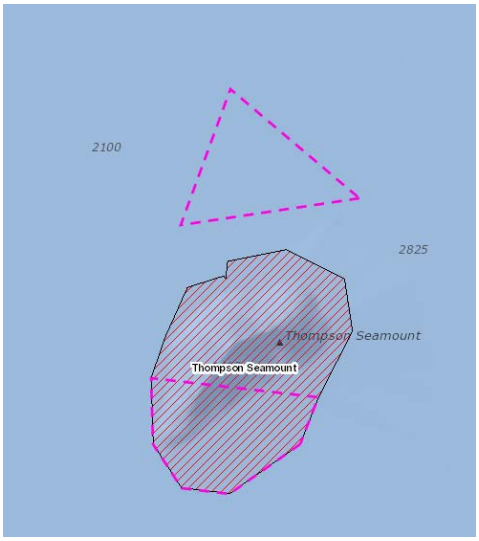
Blue = "Recommendation in Progress" opening
Yellow = "Recommendation in Progress" closure

In the hypothetical map to the right, the yellow triangle would represent a new closure area with "Recommendation in Progress" status, and the blue semicircle would indicate a re-opening with "Recommendation in Progress" status.



Pink = "No Recommendation" opening or closure

In the hypothetical map to the right, the pink triangle would represent an area that was discussed as a possible closure but was given a "No Recommendation" status. The pink semicircle would indicate an area that was discussed as a possible re-opening but was given a "No Recommendation" status. Context as well as the accompanying descriptions are used to differentiate between openings and closures in this case.



Northern Regions

The northern collaborative grew out of an intention to build bridges and find common ground between industry and environmental NGOs. It was a concerted effort to focus on solutions, and to demonstrate that smarter management decisions can be made when both industry and conservation stakeholders are at the table.

The northern group established a process of port-by-port meetings along the northern coast, with meetings in Eureka, Crescent City/Brookings, Coos Bay, Newport, and Astoria. Smaller discussions also were held with individual participants in the bottom trawl fishery, including the handful of trawlers who fish out of Washington State. Between twenty and thirty meetings were held in total, along with numerous individual conversations. In those meetings and conversations, the northern group spoke with and received input from dozens of skippers and permit holders from all three West Coast states. The twin goals of a robust fishing industry and a resilient benthic ecosystem served as the guideposts, in all conversations about openings, closures, and modifications.

In the five major trawl ports noted above, the northern collaborative followed a four-meeting approach to gather input from fishermen. The first meeting involved introductions and setting out ground rules for discussion—including the important caveat that nobody was agreeing to anything by participating in the conversations, and everyone reserved the right to disagree or not support any ideas that might come out of the discussions. With this in mind, the northern group laid out the reasons for collaborating on EFH and RCA modifications, and explained the nature of the Council's EFH 5-year review process. The Council's decision to make changes to the Trawl RCA at the same time as EFH was also explained. The inclusion of the RCA in the conversation sparked disagreement from a few industry representatives, but did allow for a more comprehensive discussion of which areas are open to trawling and which areas are not.

At the second meeting in each port, fishermen and NGO representatives discussed in detail the areas off the coast of that port. The intent was to exchange as much information as possible, so the collaborative group asked fishermen about the areas in which they tow for groundfish or shrimp, and areas they fished historically that are now closed. In many cases, fishermen shared plotter data to show tow tracks vis-à-vis relevant habitat features and closed areas. The plotter data, combined with fishermen's extensive historical knowledge, allowed for a tremendous depth and degree of resolution in understanding fishing patterns off the West Coast. NGO representatives, in turn, identified possible candidate areas for new protection and explained the habitat data supporting their suggestions. The group evaluated the alignment between fishermen's understanding of the seafloor and the habitat data, and in areas of disagreement, the

confidence level of the habitat data was examined. Where fishing effort overlapped with habitat features, the group discussed the possibility for compromise. Over 76 different areas north of 40°10'were discussed in the second round port meetings.

In the discussions, the northern collaborative attempted to avoid debates over the science (e.g., exactly how much habitat protection is enough, or what specific role is played by corals or sponges). Recognizing these questions are out of reach given the current state of knowledge, the collaborative group instead approached the habitat issue in terms of providing protection to habitat that is known to be sensitive to bottom trawl gear, such as rocky reefs, mixed cobble or boulder areas, and areas with structure-forming invertebrates. Furthermore, because the stated goal of the collaborative was to improve protection of sensitive habitat while also increasing fishing opportunity for the fleet, it was unnecessary to identify the precise trade-off point at which habitat protection is outweighed by lost fishing opportunity. By improving along both dimensions, the intent of the collaborative was to create a policy alternative that can be identified as preferable to the status quo without needing to resolve the high-level debates. This approach was generally successful in avoiding unproductive conversations, and resulted in discussions that were oriented around specific areas and tangible changes.

The third meeting in each port involved sketching potential re-openings and new closures using the SeaSketch tool. SeaSketch is a web-based mapping platform produced by the McClintock lab at UCSB that allows users to share views of maps, post file uploads to discussion forums, and provide explanatory text. It also allows users to highlight specific base layers, such as nautical charts, as well as tailored data layers, such as existing EFH Conservation Areas, RCA areas, coral and sponge hotspots and fishing effort. The collaborative group used SeaSketch to capture discussions of proposed EFH additions and re-openings in real time, during the third port meetings. Subsequently, the sketches were cleaned up and documentation was added to reflect the specific rationale for each change.

After the third round of port meetings, the northern collaborative drew up a straw man package of changes for the north of 40°10' region. The straw man package included potential changes discussed in the various port meetings, as well as a few ideas that emerged from smaller discussions and individual conversations. For each potential change, the collaborative group provided a nautical chart map, a narrative description of reasoning, and waypoints formatted for plotter software. This allowed industry members to examine the straw man changes on their own computers and provide suggestions and refinement to maximize fishing opportunity while minimizing habitat impacts. The package was also circulated to conservation groups, allowing them to analyze the same coordinates and provide suggestions on whether changes were needed to ensure that sensitive high relief, biogenic, and other important habitats are well protected.

In the fourth round of port meetings, feedback from industry and NGOs was collected relative to the straw man package. Specific areas were discussed, and some broader feedback was raised as well. The collaborative group worked to synthesize input from both trawlers and conservation groups, modifying areas as needed, with the goal of coming to a final recommendation for each of the areas discussed. Given the nature of the feedback and conversations to date, the group was able to identify final recommendations in many areas. In other areas, the discussions were not fully complete, and the collaborative group took the step of revising the relevant shape based on feedback, with the understanding that further discussion would be needed after the September Council meeting to finalize the recommendation. Still other areas were identified where consensus seemed unlikely. There, the working group revised the relevant shape based on any specific information provided in industry or NGO feedback, and then designated the area as one in which the collaborative had no recommendation.

Overall, the northern collaborative encountered a significant amount of interest and support for the dual goals of improved fishing opportunity and improved habitat protection. The outreach and port meeting process provided a thorough vetting for ideas and engaged a wide range of stakeholders, and the collaborative group believes the recommendations coming from this process will improve the area management of bottom trawling off the West Coast.

1. Canada to Cape Falcon

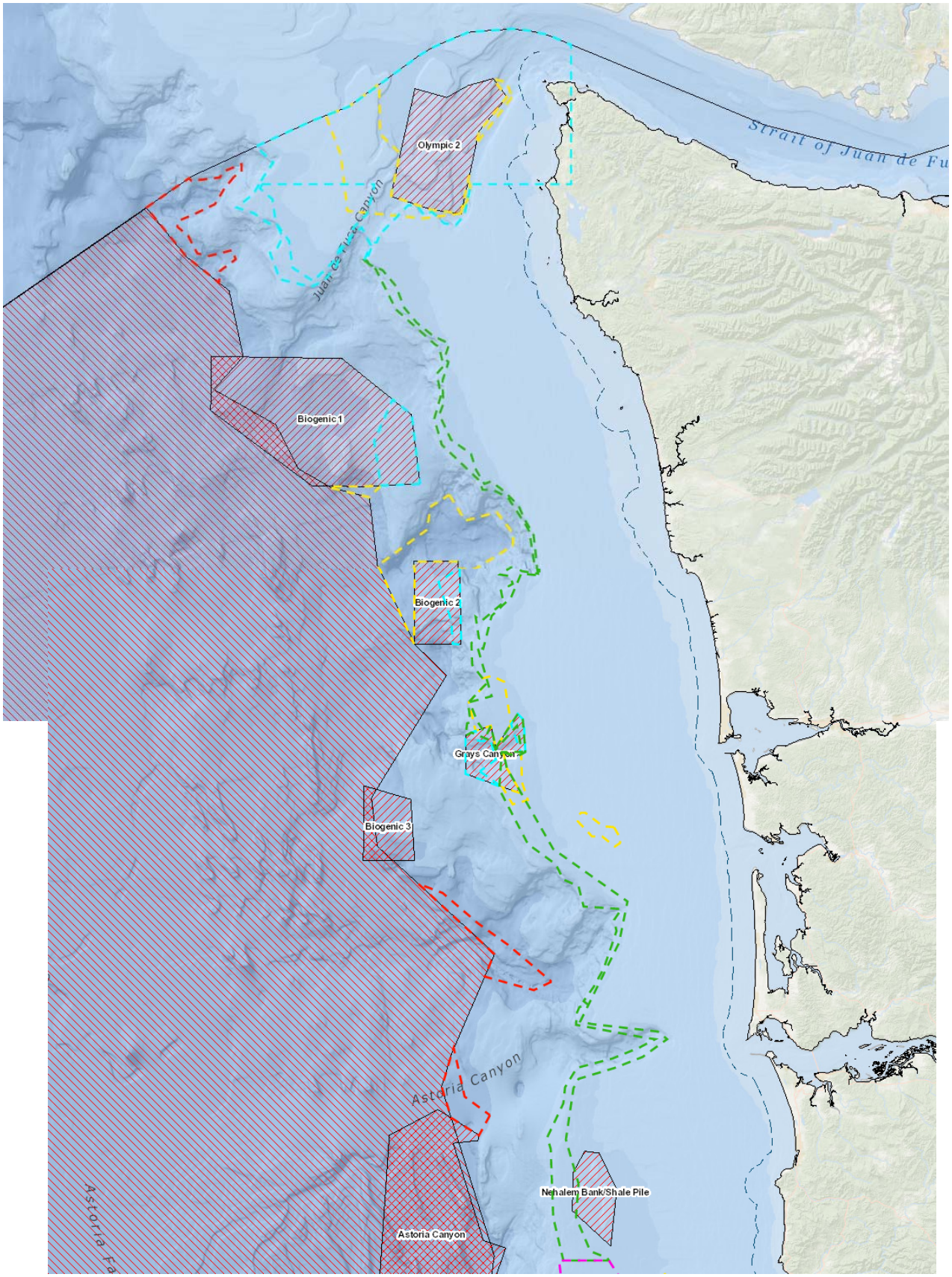
The area between Cape Falcon and Canada is characterized by numerous offshore canyons, a steep shelf-slope break, and deepwater basins. Hard and mixed substrate is prevalent throughout the area. There are numerous records of black coral, gorgonian coral, glass sponges in the region, as well as many other types of structure-forming invertebrates. It is also a rich fishing ground, contributing much of the catch and revenue for fishery participants in Astoria (the largest non-whiting bottom trawl port on the coast). As such, it was an ideal testing ground for the concept of improving habitat protections while simultaneously improving opportunity for the fleet.

Four port meetings were held in Astoria, and numerous individual conversations were conducted with individual fishermen in the region as well. The northern collaborative group also reached out directly to Washington trawlers, shared draft coordinates with the Treaty Tribes, and discussed potential modifications with the Olympic Coast National Marine Sanctuary. The port meetings were typically attended by 5-6 industry representatives, and the same core group of fishermen participated in almost every meeting. Overall, there was a high level of interest in the concept, and a large number of “Full Recommendation” areas emerged from the collaborative process there.

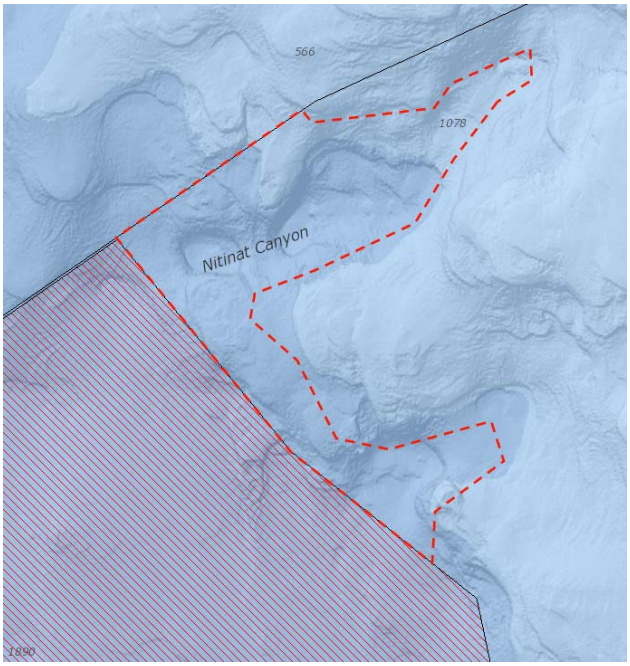
Table 1. Area Recommendations from the Canadian Border to Cape Falcon.

Area Name	Type	Status
Nitinat Canyon	EFH Closure	Full Recommendation
Olympic 2 Northeastern Modification	EFH Closure	Recommendation in Progress
Olympic 2 Southeastern Modification	EFH Closure	Recommendation in Progress
Olympic 2 Western Modification	EFH Closure	Recommendation in Progress
Biogenic 1 Eastern Modification	EFH Opening	Recommendation in Progress
Biogenic 1 Southern Modification	EFH Closure	Recommendation in Progress
Biogenic 2 Eastern Modification	EFH Opening	Recommendation in Progress
Biogenic 2 Northern Modification	EFH Closure	Recommendation in Progress
Grays Canyon Eastern Modification	EFH Opening	Recommendation in Progress
Grays Canyon Northern Modification	EFH Closure	Recommendation in Progress
Grays Canyon Southern Modification	EFH Closure	Recommendation in Progress
Grays Canyon Western Modification	EFH Opening	Recommendation in Progress
Willapa Shelf	EFH Closure	Recommendation in Progress
Willapa Deep	EFH Closure	Full Recommendation
Astoria Deep	EFH Closure	Full Recommendation
Trawl RCA Canada to 48°00’	RCA Opening	Recommendation in Progress
Trawl RCA 48°00’ to 45°46’	RCA Opening	Full Recommendation

Region 1 Overview:



Nitinat Canyon



Several Astoria fishermen mentioned that the canyon walls of Nitinat Canyon are very steep and can be difficult to fish, and that there are defunct cables in the area. The area under consideration also is quite deep, mostly over 600fm. Overall this area was indicated to be a low-priority area for fishing, in part due to the telephone cables running through it. The upper north side of the canyon, however, near the EEZ boundary, has shrimping grounds that were historically important.

From a conservation perspective, the interesting aspects of this canyon are the steepness of the bathymetry in this canyon complex, as well as several black coral and glass sponge records. Submarine canyons generally are known to be areas of enhanced productivity due to upwelling that is channelized along the axis of the canyon. Much of this canyon is also predicted to be high-suitability coral habitat, based on the data layer in the EFH Data Catalog.

This shape was drawn based on fishermen's input, tracing the 400fm contour on the north side, which is sufficient to maintain the northern shrimping grounds. The line then drops down to the 600fm contour for the southern side of the canyon, and swings around the 600fm contour for the smaller canyon feature to the south. This configuration allows DTS tows on the slope to be maintained, while protecting the deeper areas. One waypoint was moved out to capture a glass sponge record, around the 537 reading on the nautical chart.

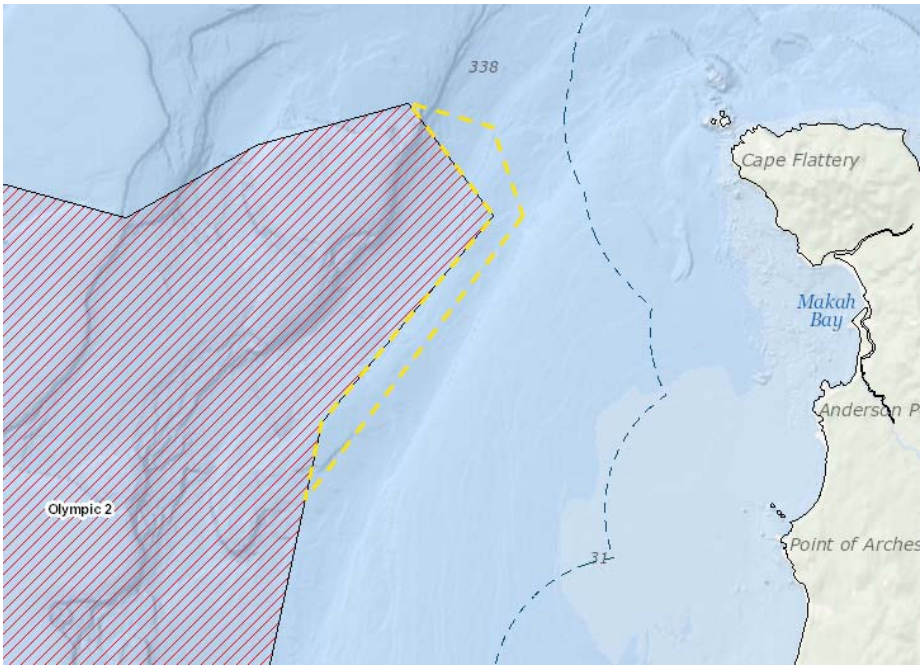
In terms of implementing this area, the majority of it is shallower than 700fm, so it may be preferable to designate an EFH Conservation Area rather than simply adjust the 700fm line here. If desired, the seaward edge of the shape could be moved outward somewhat to make a straight line (i.e., the seaward line of this shape does not have to run flush up against the 700fm line, in case that line is ever adjusted or removed).

Olympic 2 Northeastern Modification

This is a thin strip of ground on the northeastern side of the existing Olympic 2 EFH Conservation Area. It was identified based on the presence of hard and mixed substrate, which

in this area is mapped with high confidence. Research dives also have been conducted on the edge of the existing Olympic 2 area, which found numerous gorgonian and stony corals. This strip of ground would provide a small buffer of unexplored area adjoining the dive sites.

Being north of Cape Alava and located on the shelf, this area currently is entirely covered by Trawl RCA. As such, the expansion of Olympic 2 EFH Conservation Area suggested here would simply maintain protection for the area if the Trawl RCA is removed.

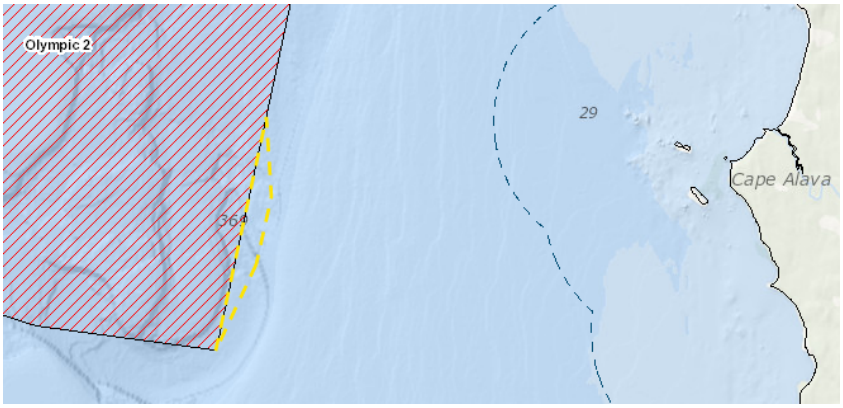


Fishermen indicated no current bottom trawl effort exists in this region, and while historical tows are located nearby, they generally avoided the hard bottom areas and occupied slightly shallower waters. The EFH Data Catalog bottom trawl effort layer for 2002-2006 corroborates this, showing high bottom trawl effort adjacent to the area identified here.

The shape sketched here is drawn tightly around the hard and mixed substrate areas, and is slightly under-inclusive in order to avoid closing trawlable areas on the shoreward side.

This area, as well as the other two modifications to Olympic 2 EFH Conservation Area noted below, are located in the Makah Usual and Accustomed (U&A) fishing area. The western modification also may be located within the Quinault U&A. The coastal treaty tribes are autonomous sovereigns and manage their own fishing activities, and the changes described here would strictly apply to non-tribal fishermen. The treaty tribes and NMFS are currently working to develop a Habitat Framework to better characterize habitats, as well as species dependence on them, within the U&As. The area modifications described here are not intended to replace or alter that process. Furthermore, any area modifications that are adopted ultimately by the PFMC will be subject to government-to-government consultation between the United States and the tribes, as underscored by the Council's June 2015 motion.

Olympic 2 Southeastern Modification



This small expansion of Olympic 2 EFH Conservation Area is oriented around a distinct hard and mixed substrate feature that is mapped with high confidence. The eastern half of this feature is currently outside Olympic 2 EFH Conservation Area, and the expansion sketched here would bring out the southeastern boundary to fully encompass the feature. Research dives have been conducted in this area (straddling the boundary of the Olympic 2 area), finding bubblegum corals, gorgonians, and other hydrocorals.

Based on conversations with fishermen and the data layers, it appears there is no bottom trawl fishing in the area sketched here. One fisherman spoke to trawling along the 60-70fm contour, but south of the area indicated here. The EFH Data Catalog bottom trawl effort layer for 2002-2006 reflects fishing effort in a north-south pattern on the shelf to the east of the area sketched here, and little near the actual feature in question.

The area sketched here is fully within the Trawl RCA, and the expansion of Olympic 2 would simply maintain protection for the area if the RCA is removed.

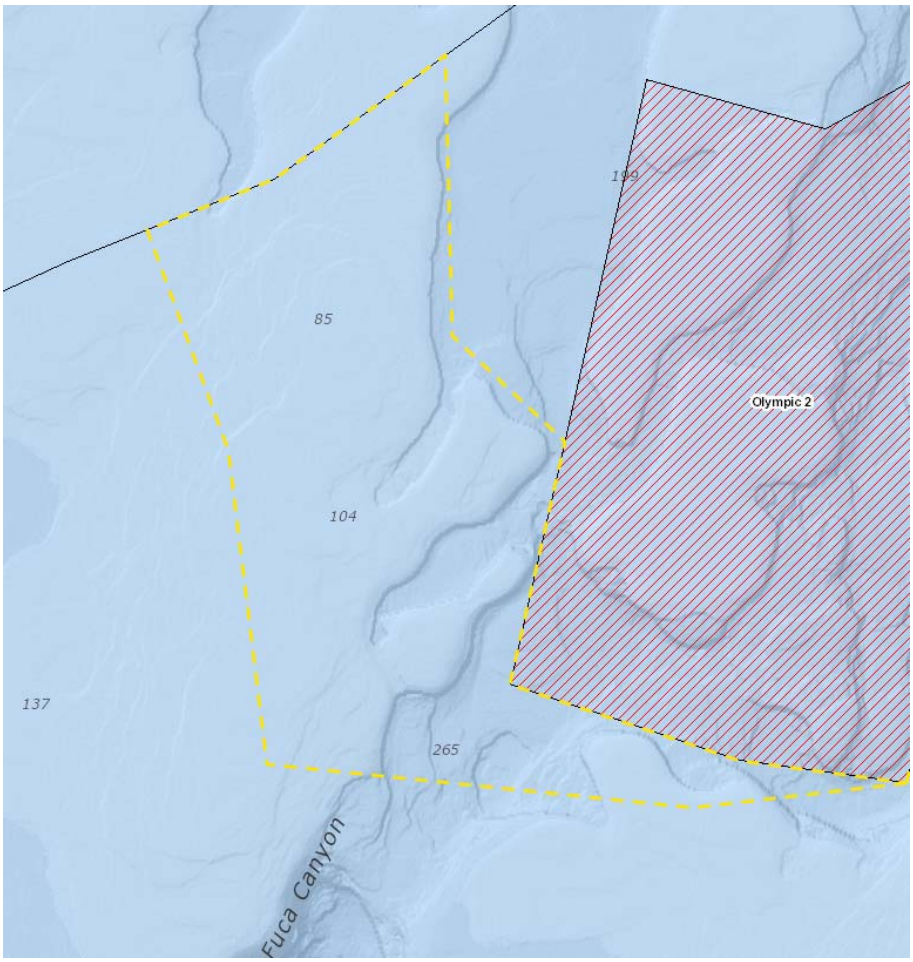
The shape is drawn tightly around this hard/mixed substrate feature, in order to keep historical trawl areas unobstructed, and the area is slightly under-inclusive of the feature for this reason.

Olympic 2 Western Modification

The upper Juan de Fuca canyon and adjoining shelf area was identified early on as an interesting habitat area, based on the presence of hard and mixed substrate (mapped with high confidence), numerous research dives, and abundant coral and sponge observations.

A number of research dives have been conducted in this region, and some of them can be viewed as clusters of coral or sponge records in the EFH Data Catalog coral/sponge observation data layer. Some of the dive sites are located within the current Olympic 2 EFH Conservation Area, while others are outside. One set of dive sites outside the EFH Conservation Area is located just south of it, while another set of dive sites is located to the west of it. These research dives

observed numerous corals and sponges on the seafloor. Site characterization from the dives ranges from boulder and hard substrate areas to cobbles, gravel, and sand/mud. Mixed substrate areas encompass a range of grain sizes, including areas of sand and gravel or cobbles. High-relief areas appear to be relatively rare, though glacial erratics and other types of glacial sediment create relief in some areas.



The collaborative group discussed with fishermen their usage patterns in this northern shelf area, and it sounded like the area shallower than 100fm has rough patches scattered around, and is not used heavily by non-tribal trawlers. Fishermen generally agreed with the characterization of the seafloor presented by the dive reports and substrate maps. While the northern shelf is not uniformly bad bottom, and there are tows scattered about the area (i.e., if a fisherman knows the area well, it is possible to avoid rough patches and tow in certain spots), fishermen indicated that overall it is a fairly low-priority area for bottom trawling. The effort data from the EFH Data Catalog corroborates this description. Bottom trawl effort from 2002-2006 shows a few pockets of activity on the northern part of the shelf, and some tows coming up Juan de Fuca canyon from the south. The 2006-2010 data layer also shows high effort in Juan de Fuca canyon, and little on the northern shelf.

The area sketched here stays well inside 100fm, as indicated by fishermen, and sticks closely to the mapped hard and mixed substrate areas. On the south side, the shape is under-inclusive of the mixed substrate because at least one Astoria fisherman indicated that the area around the compass rose (on the nautical chart) and westward to the Juan de Fuca canyonhead is usable ground. On the north side, the shape avoids an area of well-mapped soft substrate in the notch between the existing EFH Conservation Area and the hard/mixed substrate to the west; this area

would stay open to maintain access to historical tows there. The shape also avoids pockets of higher-intensity bottom trawl activity as shown in the EFH Data Catalog layers. One research dive site would be excluded by the shape as drawn here—a set of dives conducted on the eastern side of Juan de Fuca canyon, visible as a cluster of coral-sponge observation records. In that area, researchers found mostly sea pens and sea whips, with no hard corals, and generally soft sediment bottom.

The year-round Trawl RCA covers almost all of the shape suggested here. As such, extending the Olympic 2 EFH Conservation Area would provide continuity of protection if the RCA is lifted. Note that some of the research dive sites with documented hard and mixed substrate are located outside the current EFH Conservation Area but within the Trawl RCA, and therefore would be exposed to bottom trawling if the RCA were lifted but the EFH Conservation Area not extended to cover them.

This area, as well as the other two potential changes to Olympic 2 described above, is labeled as a "Recommendation in Progress" because the collaborative believes further input and conversations between stakeholders could be useful. The areas sketched represent "best effort" attempts to synthesize the various sources of information and viewpoints, but should not be viewed as full consensus at this point. Furthermore, as noted above, these areas are located within tribal U&As, and any potential changes must be discussed with the relevant tribes during government-to-government consultation.

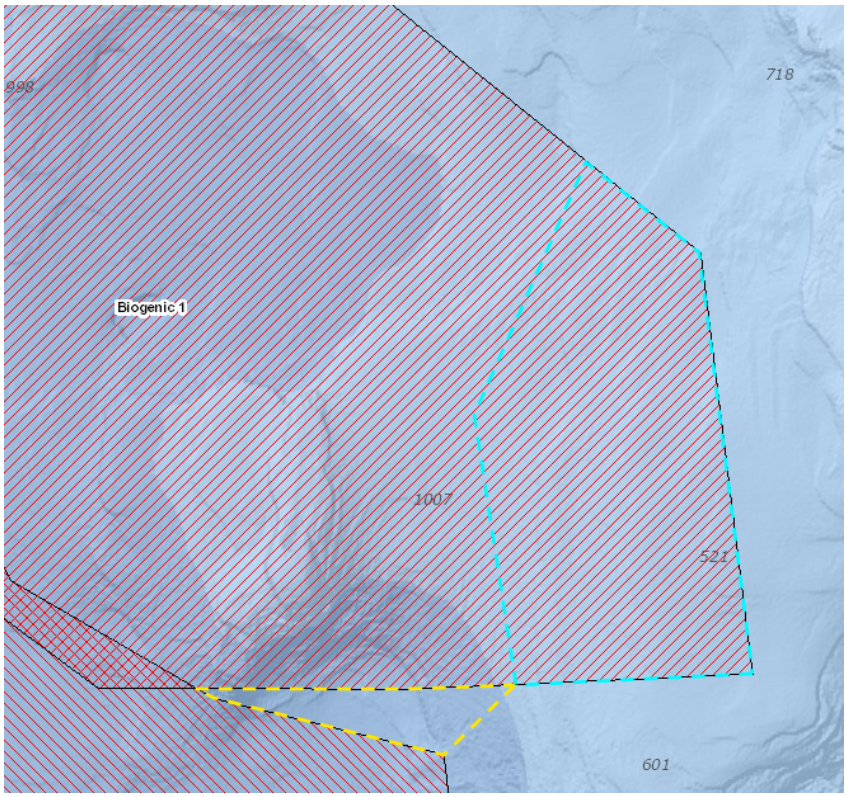
Biogenic 1 Eastern Modification

Several Astoria fishermen described the eastern portion of Biogenic 1 EFH Conservation Area as comprised of soft muddy bottom, and stated that it would be useful to have this area open to increase fishing opportunity. It sounded like this area is known as a productive DTS area, and does not have rough patches or pinnacles that would make it un-fishable from a bottom trawling perspective. The area indicated is primarily in the 300-450fm range.

No hard or mixed substrate shows up in the EFH Data Catalog layers for this area, though the confidence level in that data is mostly low (high-resolution mapping has not been conducted). A number of coral and sponge observations are recorded in the area from the trawl survey, including black corals and glass sponges. No research dives have been conducted in the area, to the best knowledge of the northern collaborative.

The area was originally sketched larger, as including the north-south oriented ridge to the west (topping out around 350fm) and surrounding areas. The re-opening line was moved east to

maintain protection for the ridge, and shrink the area, at the request of NGOs. The redrawn line was based on feedback from a fisherman knowledgeable about the area.



This area is classified as a "Recommendation in Progress" because the final configuration is fairly recent and needs to be vetted with a wider audience. The area also may be within the U&As of the Quileute, Quinault, and Hoh, and would have to be discussed in government-to-government consultations.

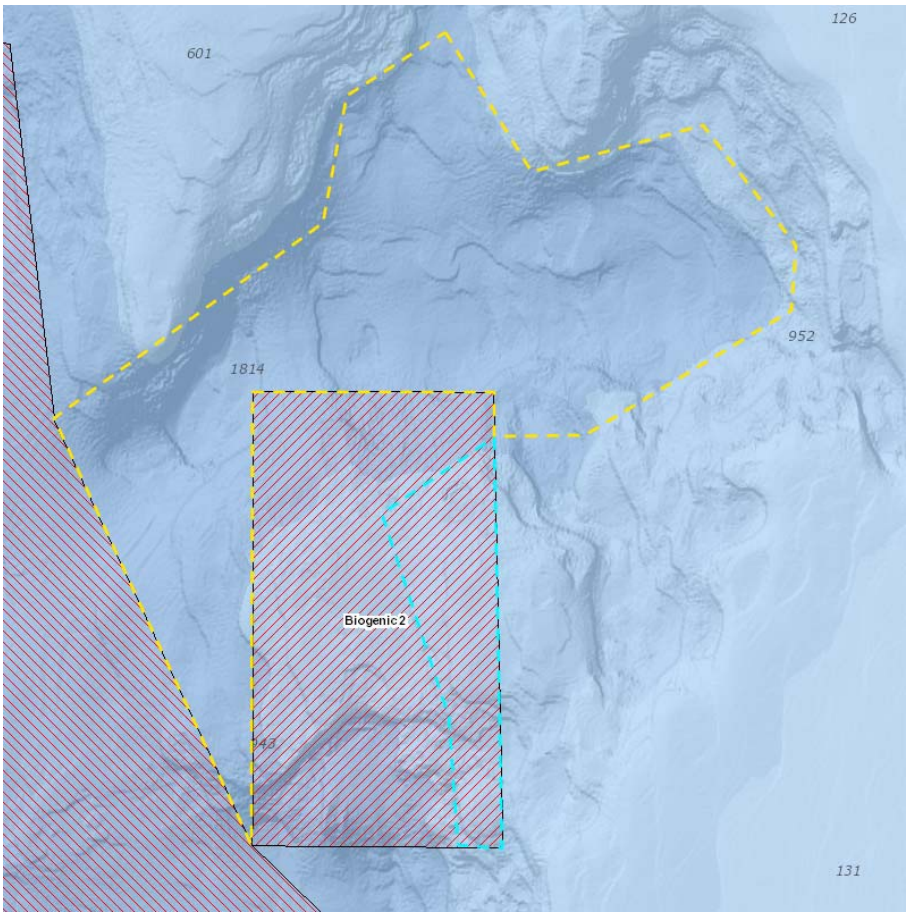
Biogenic 1 Southern Modification

This area is designed to fill in an awkward gap between the 700fm closure and the Biogenic 1 EFH Conservation Area. Astoria fishermen indicated they do not trawl in the area. It is fairly deep, ranging from the 500s to over 800fm. This change is essentially cleanup, and was not a primary focal point of conversations with the fleet.

While this area was not particularly controversial among stakeholders, it is listed as a "Recommendation in Progress" because it is part of a package with the eastern modification to Biogenic 1 EFH Conservation Area described above. To the extent that area needs further discussion, this area does as well. And as with the eastern modification to Biogenic 1, this area is potentially within tribal U&A fishing areas.

This area could be implemented either as a modification to the 700fm line (because the wedge is largely beyond 700fm in depth), or as an expansion to the existing Biogenic 1 EFH Conservation Area.

Biogenic 2 Northern Modification



This area is designed to expand protection for Quinault Canyon. Conservation groups were interested in the canyon feature based on productivity, as well as some areas of localized higher coral/sponge bycatch reflected in the WCGOP observer data. Astoria fishermen confirmed the presence of corals and sponges on the northeast side of the canyon, consistent with records from the trawl survey. Fishermen also noted that the central and southwestern parts of the canyon are very deep and not usable for bottom trawling. The upper sides of the canyon (300-500fm), however, were indicated as useful fishing grounds that should remain open. No hard or mixed substrate shows up in the EFH Data Catalog layers for this area, though the confidence level in substrate information is low.

The initial shape sketched for this area tried to follow a contour line somewhat below 500fm (often around 600fm), to ensure that tows on the sides of the canyon remain open. Feedback from Astoria fishermen was received requesting that the northern boundary be moved deeper, so that it runs closer to the 773 reading on the nautical chart, and that the waypoint marking the northwest corner of the polygon be moved closer to the 650 reading. These changes were made, and one waypoint was removed for simplicity, in the course of finalizing the shape.

This area is categorized as a "Recommendation in Progress" because it is part of a package with the reopening to Biogenic 2, described below, and at least one NGO indicated reservations about that reopening. No specific concerns were voiced about this closure, once the modifications described above were made. Note that this area is likely within the U&A for the Quinault Indian Nation, and potentially for the Hoh Tribe as well.

Biogenic 2 Eastern Modification

This is a re-opening requested by Astoria fishermen to restore access to the full "cauliflower" area on the southeastern shoulder of Quinault Canyon (so named due to the appearance of the 300fm line on the nautical chart). Opening the area indicated would restore tows in the 300-400fm range. Astoria fishermen stated that opening this area would create improved opportunity for targeting the DTS complex.

There are several coral and sponge observations in this potential re-opening area, all from trawl survey records. No research dives have been conducted in the area, to the best knowledge of the collaborative. Most of the records are sea pens and unspecified sponges, but there is at least one black coral record (*bathypathes sp.*), one stony coral (*scleractinia sp.*) record, and several glass sponge (*aphrocallistes sp.*) records. Because of the source of these records—the trawl survey—the exact locations where these corals and sponges were growing is unclear. No hard or mixed substrate is recorded in this area, though high-resolution mapping has not been conducted so the confidence level in substrate data for the area is low.

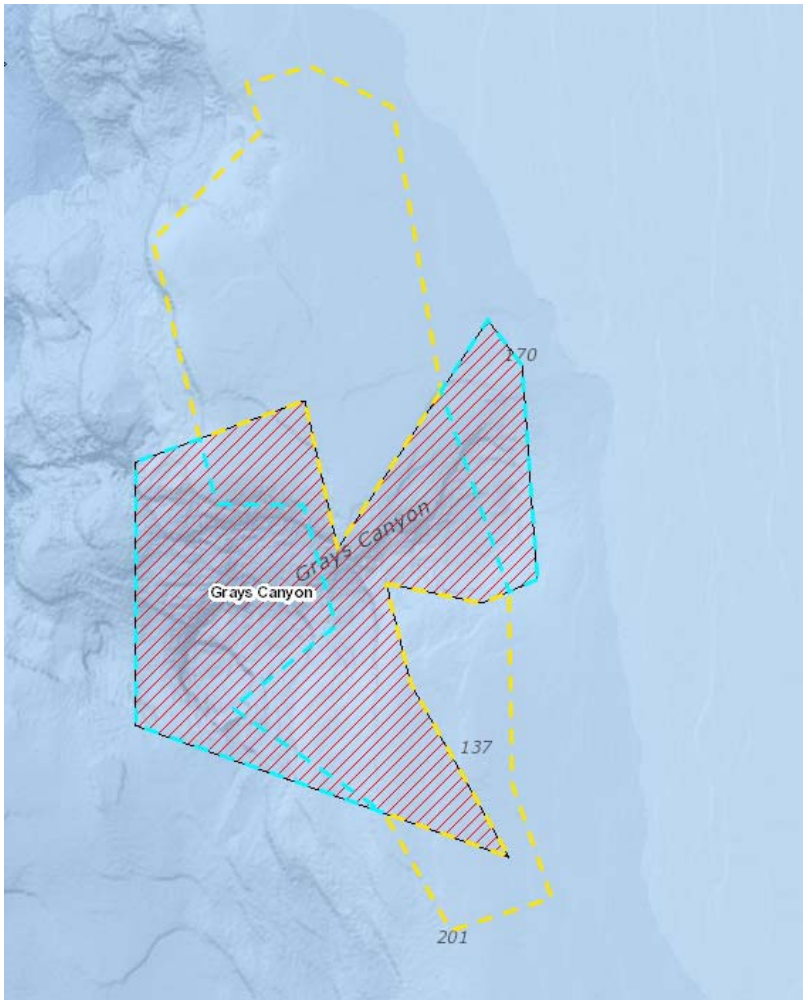
This area is classified as a "Recommendation in Progress" because some NGOs indicated they had concerns with the re-opening. The area also is likely within the U&A for the Quinault Indian Nation.

Grays Canyon Northern Modification

This area is known from research dives to have an unusually high density of sponges, and is referred to colloquially as a "glass sponge reef." Liz Clarke and Paul Johnson have studied this area, among others, and documented the volume of glass sponges as well as the possibility that the sponges are accumulating into reef-like masses on the seafloor. Some of the research dive sites are visible in the coral/sponge observation data layer in the EFH Data Catalog, as dense clusters of glass sponge observation records. Most of the dives, however, are not reflected in the EFH Data Catalog. Trawl survey records supplement the research dive data, providing a few additional coral and sponge observations for the area, including at least one glass sponge, black coral, and stony coral.

The site characterization from Dr. Clarke's 2010 dives is published, and indicates this area to be relatively low relief, located at the edge of the continental shelf, and covered by sediment with areas of cobble and boulders and occasional exposed rocky bottom. The high density of sponges, along with groundfish presence, was quantified via video analysis of AUV transects. Methane seeps also appear to be present in the area, but limited information is available on them.

At least one Delta submersible dive was conducted in this area in the 1990s, the footage of which was analyzed by an OSU grad student in 2006. The precise dive location is unclear, though, and the video findings were lumped together with other dive sites, making this a less useful source of information.



In port meeting discussions, fishermen corroborated the scientists' site characterization, noting that there are some rough patches and a fair amount of corals and sponges on the north shoulder of Grays Canyon. There seemed to be general agreement that this area could be protected, and would not represent much of a loss of fishing opportunity so long as the lines are tailored well.

The original draft shape for this area was larger and extended farther east, but was reduced based on feedback from Astoria fishermen—including trawl track locations on plotters—showing that the eastern edge of the original sketch overlapped with important shrimping areas. The shrimp effort data layers tend to agree with the fishermen's feedback, as they overlapped with the eastern side of the original draft shape. (The shrimp data layers are comprised of VMS pings, rather than trawl tracks, so they are only an indirect proxy for effort.) Based on this feedback, the area was reduced in size and re-drawn around the shrimp effort as shown in plotter screen shots, so as to leave the shrimp grounds open.

Part of the area proposed to be added to Grays Canyon EFH Conservation Area is currently within the 100-150fm Trawl RCA and therefore currently closed to bottom trawling. That portion of the area also shows no shrimping activity. Expanding the Grays Canyon EFH Conservation Area to cover this area would maintain protection going forward, assuming the RCA is removed (and to the extent the area has recovered, that recovery would be preserved).

This area and the other three modifications to Grays Canyon EFH Conservation Area described below are likely within the Quinault U&A, so all of these potential modifications would need to be discussed in government-to-government consultation with the Quinault Indian Nation.

Grays Canyon Eastern Modification

In Astoria port meetings, fishermen mentioned that they would like access to the so-called "Dolly Parton tow," in order to increase fishing opportunity when canary rockfish quotas go up in the future. That tow runs north-south around 90-100fm in depth, across the canyonhead of Grays Canyon. Currently the boundary line of the Grays Canyon EFH Conservation Area is located very close to the tow area, making it difficult for fishermen to trawl there without getting a ticket due to drifting or movement during haul-back.

The re-opening sketched here would move the boundary line of Grays Canyon EFH Conservation Area to the west, opening up the canyonhead and giving fishermen ample room to access the "Dolly Parton tow."

No hard or mixed substrate appears in the EFH Data Catalog substrate layers for this area, though the level of confidence in that information is low. Reports from fishermen suggest that the seafloor in and around the canyonhead is generally soft and muddy. A handful of glass sponge observations exist in this area, from trawl survey hauls.

There were a few dives in this area by the Delta submersible crew in the 1990s, and data from those dives was reported by a graduate student at OSU in a 2006 masters' thesis. One dive site was within the current Grays Canyon EFH Conservation Area, and is in the area of proposed reopening. Video analysis from the dives showed high number of crinoids, as well as sea urchins and sea pens. Some sponges and anemones were observed, as well as a few gorgonian-type corals. The video analysis was aggregated across all of the dives in the area (3 or 4 in total), so it is not specific to the one dive site located in the potential re-opening. If needed, it may be possible to re-draw this shape so as to leave closed the dive site in question. Further conversations with fishermen would be necessary in that case.

Grays Canyon Western Modification

This re-opening is intended to restore fishing opportunity on the western side of the canyon. The northwestern tip of the current EFH Conservation Area gets very close to a tow running up a small canyon to the north of Grays Canyon (heading northeast toward a 199 reading on the nautical chart), making it difficult to access that tow without risking a ticket. The existing EFH

Conservation Area also cuts off an east-west dover tow along the north wall of Grays Canyon, in the 200-300fm range. Finally, the current EFH Conservation Area has compressed fishing along the south side of the canyon in the 350fm range, and creates an enforcement risk for fishermen accessing those areas. For these reasons, Astoria trawlers were interested in opening the west side of the Grays Canyon EFH Conservation Area.

The EFH Data Catalog substrate layers suggest this area is soft sediment, though confidence in that information is low as the area has not been mapped with high-resolution sonar. Fishermen agree that the area is primarily soft muddy bottom, and they noted that the area was heavily fished historically.

Even though the area sketched here for re-opening is predicted to have high suitability for corals and sponges, relatively few coral or sponge observation records exist in the EFH Data Catalog. One unspecified sponge, one sea pen, and three glass sponges were recorded by trawl survey hauls in the area.

Overall, the re-opening in this area is designed to be part of a package with the other modifications to Grays Canyon EFH Conservation Area (described above and below), which should improve both habitat protection and fishing opportunity.

Grays Canyon Southern Modification

This modification, taken together with the preceding changes, would re-orient the Grays Canyon EFH Conservation Area from an east-west hourglass shape to a north-south hourglass shape, opening the axis of the canyon and protecting the shoulders on both sides. This particular area is intended to expand protection on the south shoulder of the canyon, covering a small patch of predicted hard substrate as well as surrounding areas of likely soft bottom. At least one gorgonian-type coral was recorded by the trawl survey in this area, suggesting the presence of some hard or mixed substrate. A few fishermen also noted the presence of some trawl hangs in the area.

The original draft shape for this area extended further south and east, but Astoria fishermen provided feedback that the draft version was too large and encroached on shrimping grounds in the 80fm range. The shrimp effort data layers generally supported this feedback (though again, the shrimp data layers are based on VMS pings rather than tow lines, so they cannot be interpreted very precisely). Using a fisherman's plotter showing shrimp trawl tracks, the boundary line was redrawn and moved west so as to avoid shrimping areas. In the area that is no longer proposed to be closed, there is a "rky" notation on the nautical chart, but fishermen said any rocky-ness in that area is very limited and does not affect fishing.

Part of this southern extension is currently in the year-round Trawl RCA, so protection for that part would simply be maintained upon removal of the RCA.

Willapa Shelf

This area is designed to encircle a set of trawl hangs known to exist in the 50-70fm depth on the shelf, north of Willapa Canyon. Fishermen explained that there is heavy shrimping in this region, but areas with known hangs are avoided. Plotter data showing trawl tracks was used to identify and sketch the area shown here.

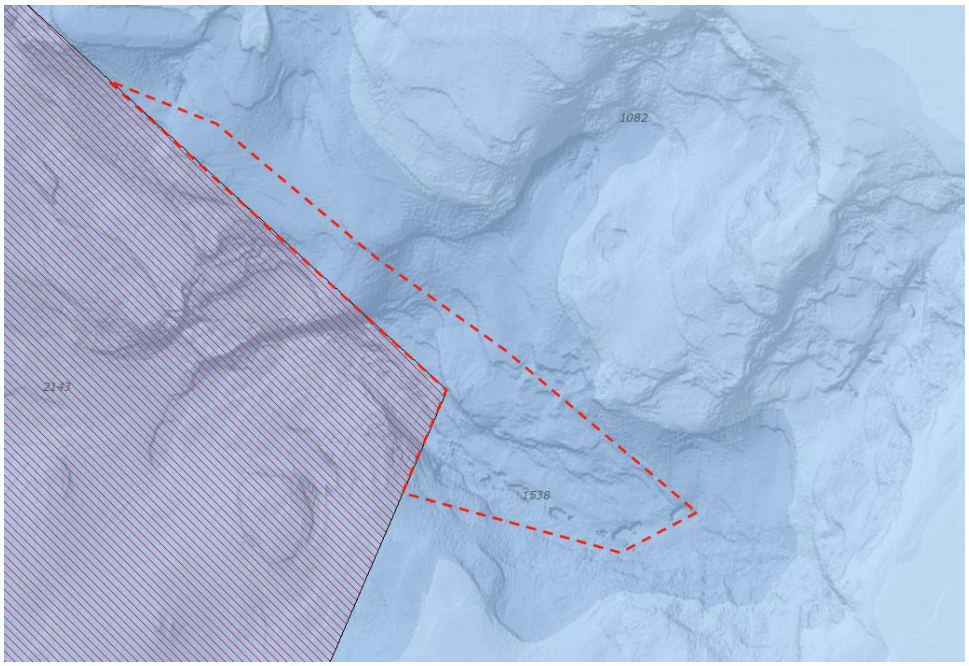
Two patches of predicted hard substrate (low confidence) are included in this shape, as is one patch that was mapped with medium confidence and found to have hard and mixed substrate. Fishermen's understanding of the bottom is similar; trawl hangs and avoided areas generally indicate the existence of more rugged terrain on the seafloor. Some fishermen described this area as "clay humps," and said that the hangs were due to the presence of clay beds, rather than exposed bedrock or boulders. No research dives have been conducted in the area.

An earlier draft of this shape was circulated for feedback, and Astoria fishermen indicated the coordinates were wrong. Based on specific feedback and plotter data, the shape was re-drawn to its current form. After these revisions, some gorgonian and black coral records from the trawl survey, which were included in the original draft shape, are now left out of the protected area. That said, the specific places where those corals were growing is uncertain, since they were recorded at the end of survey tows and not in situ.

This area is classified as a "Recommendation in Progress" because it was revised recently, and it needs further vetting. Also there has been some discussion of whether or not it is worth the effort to put an EFH closure here, given the small size of the area. Some stakeholders mentioned it might make sense to not add a regulatory closure, and instead simply rely on fishermen's hang records to provide de facto protection through avoidance.

Willapa Deep

This area originated in an interest by some NGOs in refining the 700fm line to include more of the deeper slope areas, and in particular canyon features given their upwelling function. The deep portion of Willapa Canyon sketched here was discussed in port meetings, and fishermen indicated it was low-value fishing grounds due to the depth (600-900fm). Very little bottom trawl effort is shown by the EFH Data Catalog layers, and the area is far too deep for shrimping. The area was included in the draft package circulated to the fleet for feedback, and received relatively little interest. The collaborative group interprets this as indicating few people would be affected by the potential closure.



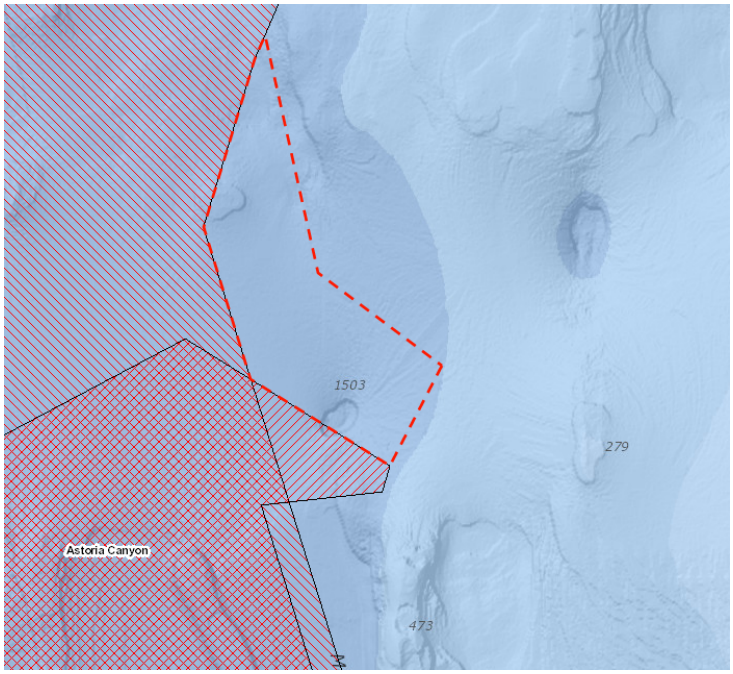
Substrate data layers in the EFH Data Catalog indicate this area is soft bottom, with a low confidence level. Coral and sponge observations from the trawl survey are located nearby, but not within this area. Portions of this area are predicted to have high-suitability habitat for corals, according to the model results in the EFH Data Catalog. No research dives have been conducted in the area.

In terms of implementation, this area probably should be classified as an adjustment to the 700fm line, rather than as a distinct EFH Conservation Area, as much of the area is beyond 700fm.

Astoria Deep

This area has a similar origin and discussion process to the Willapa Deep area described above. It was identified as a relatively deep area of the slope with little fishing effort and potentially interesting habitat due to its placement at the foot of Astoria Canyon. The southern half of the

shape sketched here has fairly rugged topography and drops below 800fm, and the northern half encompasses an undersea ridge rising up above 600fm. Patches of inferred hard substrate exist in the EFH Data Catalog substrate layers, but fishermen's understanding is that these patches are likely clay or other types of dense sediment, rather than actual rock. A research dive was conducted in 2006 further up Astoria Canyon from this area, which found an extremely high density of sea pens; it is unclear whether those organisms inhabit the deeper areas as well.

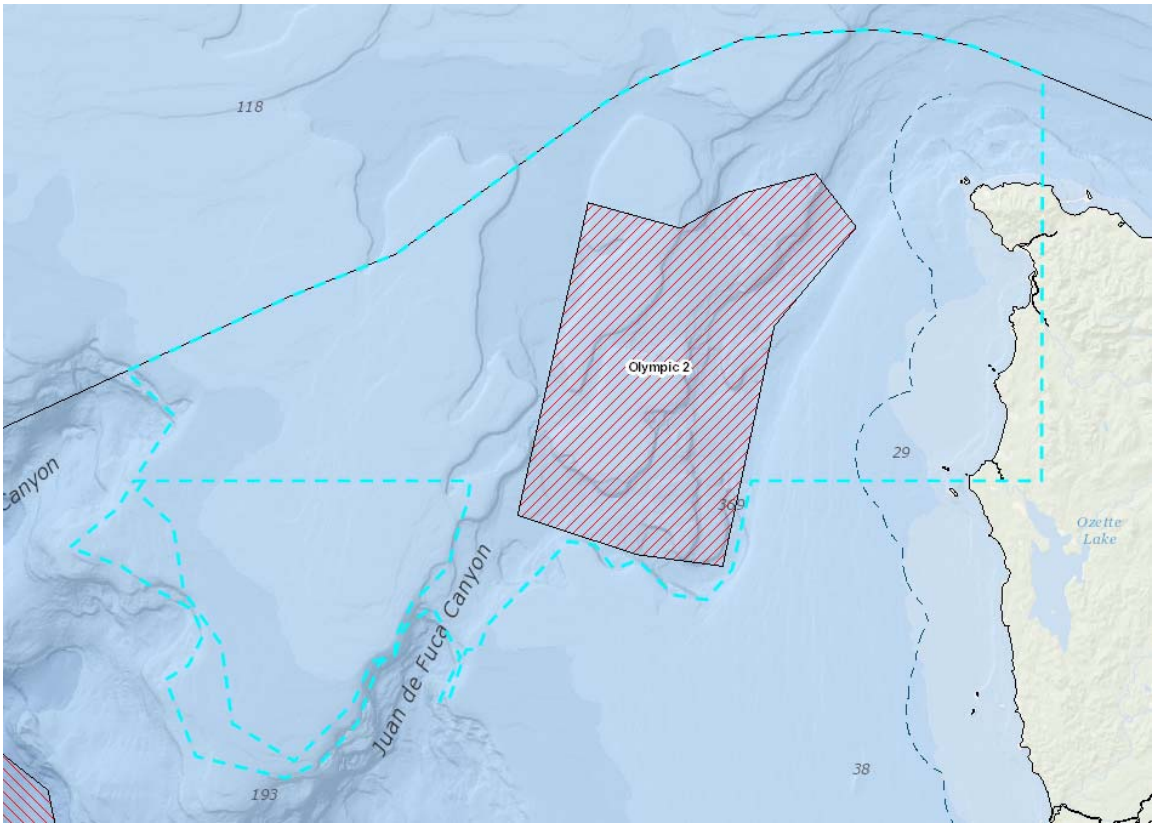


The area sketched here was included in the draft package that went out to the fleet in June, with a specific request for input on whether anyone fishes in this area. Nobody indicated they did, and conversations in the Astoria port meetings reflected relatively little interest on behalf of the trawl fleet. The area is very deep, and does not appear to receive any fishing effort.

To implement this area, the 700fm line could be adjusted inward or the existing Astoria Canyon EFH Conservation Area could be expanded northward. In the latter case, it could make sense to draw the revised Astoria Canyon EFH Conservation Area so that there is some overlap on the seaward side, in case the 700fm line were to change in the future.

Trawl RCA Canada to 48°00'

From Canada south to Cape Alava (48°10'), the Trawl RCA extends from shore to the 150fm line, seasonally moving out to the 200fm line. Under this regulation, bottom trawling is prohibited across the entire shelf north of 48°10'. South of there, the year-round Trawl RCA occupies the area between the 100fm and 150fm lines. Given the shape of the shelf-slope break, the 100-150fm Trawl RCA runs south from the 48°10' line, bends east, and heads up Juan de Fuca Canyon, extending back up to the 48°10' line. From there, the 100-150fm Trawl RCA reverses course and runs south along the eastern side of Juan de Fuca Canyon, and onward down the coast.



There is a significant overlap between the northern Trawl RCA and the potential modifications to Olympic 2 EFH Conservation Area described above. The changes proposed to Olympic 2 EFH Conservation Area are designed to provide protection for areas that contain sensitive habitat features, such as hard/mixed substrate or documented coral/sponge abundance, and many of these areas are located in the Trawl RCA. As such, removal of the RCA without an expansion of the EFH area would risk exposing a number of the sensitive habitat features—an outcome viewed as problematic by some stakeholders.

Because the modifications to Olympic 2 EFH Conservation Area are intertwined with the Trawl RCA, the collaborative group designated a subset of the RCA as a distinct area for consideration. The area is labeled "North of 48°00'" for convenience, but it is actually the parts of the Trawl RCA that are north and west of Juan de Fuca Canyon (see map above). Changes to this subset of the Trawl RCA are intended to be linked to changes to the Olympic 2 EFH Conservation Area, as a package, in order to account for the connections between them.

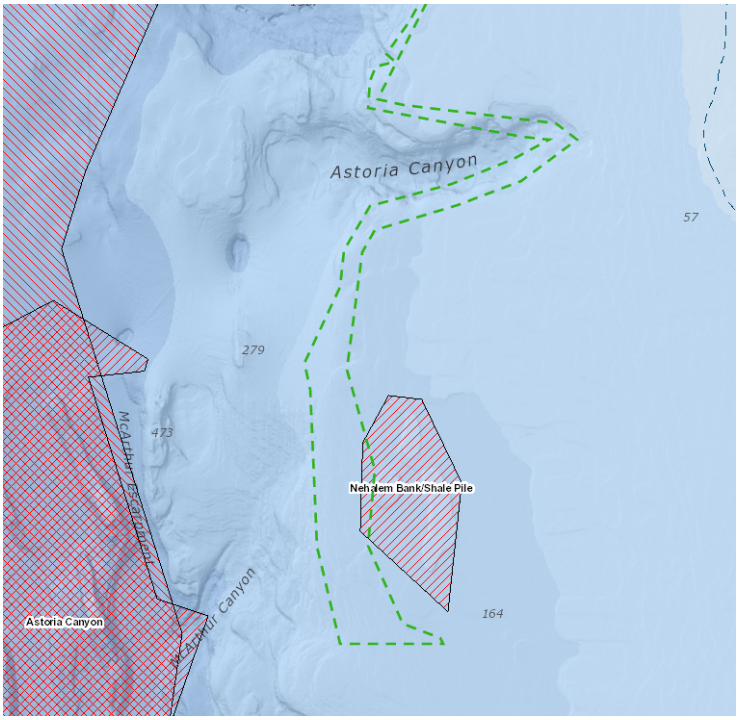
This area is designated as a "Recommendation in Progress" because the corresponding modifications to Olympic 2 EFH Conservation Area are still under consideration. It is the understanding of the collaborative that, if the EFH changes described above are made, there is solid consensus that the Trawl RCA in this northern region could be removed safely. Lastly, note that changes to the Trawl RCA may involve government-to-government consultation with coastal treaty tribes, as virtually the entire RCA in this region is within tribal U&As.

Trawl RCA 48°00’ to 45°46’

South of Juan de Fuca Canyon, the collaborative group heard general support from industry for removing the Trawl RCA. Fishermen were not concerned, by and large, with the potential for hitting overfished species. Rather, they voiced a desire to take responsibility for their own bycatch, given the full accountability that comes with catch shares and 100% observer coverage.

Fishermen also indicated that the Trawl RCA between Juan de Fuca Canyon and 45°46’ is primarily comprised of soft muddy bottom. The substrate data layers in the EFH Data Catalog agree with this characterization, showing only a few isolated patches of hard or mixed substrate in this section of the Trawl RCA (although confidence level in the substrate data is low for most of the RCA). One patch of hard and mixed substrate exists on the east side of Quinault Canyon, as well as one patch south of Grays Canyon (which would be captured by the proposed changes to Grays Canyon EFH Conservation Area), and one patch southwest of Nehalem Bank.

There are a number of coral and sponge observation records in the Trawl RCA south of Juan de Fuca Canyon and north of 45°46'. Most of the records are from the trawl survey and are comprised of unidentified sponges and sea pens, though some black coral and glass sponge records also exist. One research dive site is located within this area, on the very north end (close to Juan de Fuca Canyon). At that dive site, scientists observed muddy bottom and numerous sea pens.



A relatively small portion of the Trawl RCA in this region would be converted to an EFH closure, under the package of modifications described above. Specifically, just the areas of the Trawl RCA to the north and south of Grays Canyon would be included in newly-designated EFH Conservation Areas. Given the predominantly soft muddy bottom of the Trawl RCA in this part of the coast, stakeholders generally viewed this as sufficient to ensure the important habitat features in the RCA are protected. The question of representative habitat protection (i.e., maintaining a certain percentage of the shelf-slope break closed) received less focus in the port meeting discussions, but it was noted that overall effort levels are much lower than in the past, and this confers a degree of habitat protection across the entire northern region.

In this part of the coast, much of the Trawl RCA is within tribal U&As, so any changes would be subject to government-to-government consultation.

2. Cape Falcon to Cape Blanco

The area between Cape Falcon and Cape Blanco is characterized by a number of nearshore and offshore reefs and high spots, surrounded by a broad and largely soft shelf. The key ports in this area are Newport, Coos Bay, and to a lesser extent Astoria. All three are major trawl ports and together represent the bulk of landings and revenue in the bottom trawl sector.

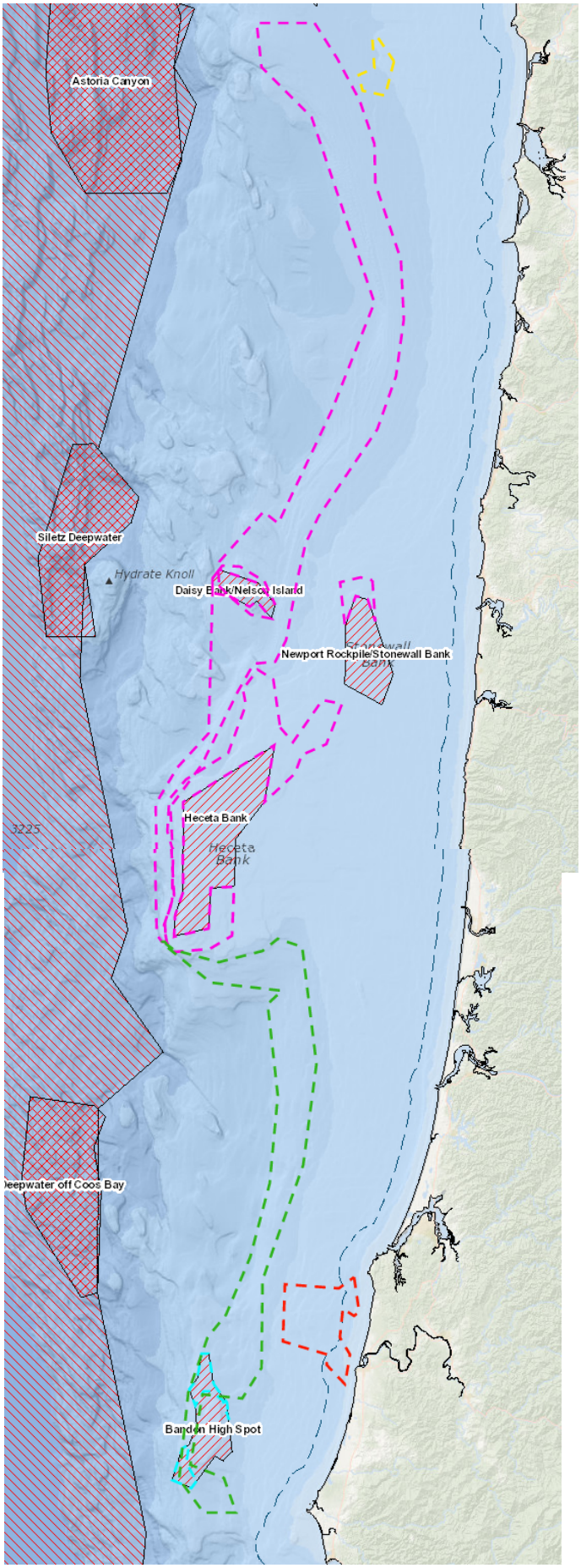
In this region we held meetings in Coos Bay and Newport. Some fishermen in Astoria also fish in this area and offered comments on potential modifications, particularly toward the northern end of the region. The Coos Bay meetings had large turnout and strong participation. Over a

dozen permit holders and skippers attending the first meeting there and participation by a committed core group of fishermen remained strong throughout the process. The Newport meetings had reasonable turnout but significant turnover in participants, so few fishermen attended more than one meeting. Scheduling during fishing season is always challenging, and the turnover in Newport participants may have contributed to the difficulty finding consensus there. The area off Newport ended up being the only area of the coast where not a single "Full Recommendation" was generated. The Coos Bay process was productive, and yielded a number of "Full Recommendations" and "Recommendations in Progress."

Table 2. Area Recommendations from Cape Falcon to Cape Blanco.

Area Name	**Type**	**Status**
Garibaldi Reef	EFH Closure	Recommendation in Progress
Stonewall Bank Modification	EFH Closure	No Recommendation
Daisy Bank Northern Modification	EFH Closure	No Recommendation
Daisy Bank Southern Modification	EFH Closure	No Recommendation
Daisy Bank Western Modification	EFH Opening	No Recommendation
Heceta Bank Modification	EFH Closure	No Recommendation
Arago Reef	EFH Closure	Full Recommendation
Bandon High Spot Northern Modification	EFH Opening	Recommendation in Progress
Bandon High Spot Southern Modification	EFH Opening	Recommendation in Progress
Trawl RCA 45°46' to 43°57'	RCA Opening	No Recommendation
Trawl RCA 43°57' to 42°50'	RCA Opening	Full Recommendation

Region 2 Overview:



Garibaldi Reef

This area was identified initially based on the hard substrate designation in the EFH Data Catalog, which is mapped with medium confidence. The collaborative discussed the area with members of industry in Astoria and Newport, and included a draft shape for this area that was essentially an outline of the hard substrate areas. The straw man package included a specific request for feedback on this area, as it was acknowledged that the draft shape needed work.

In feedback from industry, the northern collaborative group heard several relevant things about this area. First, shrimp fishermen indicated that the "fingers" of hard substrate on the southern end of the reef have areas of soft sandy bottom between them, and those sandy areas can be good for shrimping. The shrimp VMS ping data layers tend to support this, as they cover at least the southern and eastern portions of the reef. Shrimp fishermen expressed a preference that the "fingers" portion of the reef not be closed, so they can continue to tow up the sandy stretches between the fingers.

Second, a groundfish trawler mentioned that Garibaldi Reef can be a good place to target widow and yellowtail rockfish. While these species are usually targeted with midwater gear (and therefore would not be affected by the EFH changes under discussion), some fishermen do not have the ability to use midwater gear and would be limited by a bottom trawl closure. The EFH Data Catalog bottom trawl effort layers show minimal effort over Garibaldi Reef in both time frames, but midwater gear usage in the area may not be reflected in those data sets. In any case, there was some reluctance from a groundfish perspective to see a closure on the reef because it could limit opportunities to target widow and yellowtail rockfish.

In the 1990s, Delta submersible dives were conducted on the northern and southern ends of the reef. The northern dives found a high number of sponges and crinoids, as well as gorgonian corals. The southern dive sites found abundant sea urchins, some crinoids and sea pens and sponges, and relatively few gorgonian corals. Other than these research dives, all the

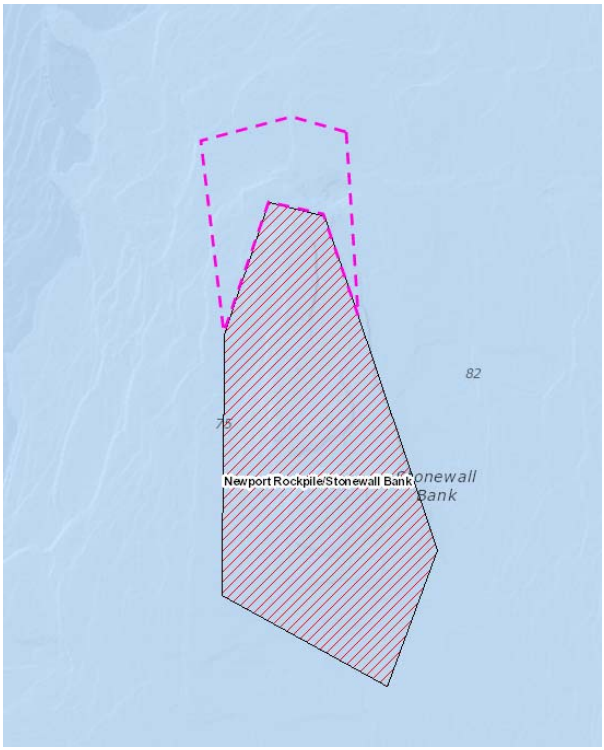
coral/sponge records in the area are from the trawl survey, and they are mostly sea pen observations (with one black coral record on the northern part of the reef).

Based on the scientific information and the feedback from industry, the northern collaborative group made an attempt to re-draw the shape around Garibaldi Reef. On the north side, the shape was made just a bit smaller, to try to allow some widow and yellowtail targeting with bottom trawl gear around the sides of the reef. The northern area was not reduced very much, however, because the northern submersible dives clearly showed sensitive habitat and little room existed to shrink the area while still including the dive sites. On the southern end, the boundary line was brought up significantly, so as to allow shrimping in the sandy beds between the fingers of rock. This involved exposing the southern dive sites, but because those sites did not find the same kind of sensitive habitat as the northern sites, this was viewed as less problematic. Also, shrimp fishermen indicated they exclusively target the sandy areas between the fingers, making it unlikely that they are fishing where the southern dives occurred.

Even with these modifications, however, the Garibaldi Reef area remains at an incomplete stage, and accordingly is labeled a "Recommendation in Progress." The revised shape needs to be vetted by both shrimpers and groundfish fishermen, and also discussed with conservation NGOs. Overall, Garibaldi Reef is a well-recognized feature and does appear to contain areas of sensitive habitat, but the usage patterns make it somewhat complicated to design a workable EFH Conservation Area.

Stonewall Bank Modification

This area, like all of the areas in the Newport region, is classified as "No Recommendation" due to a lack of consensus to date among stakeholders. The shape and description provided here are intended to inform the Council of the collaborative's thought process and to summarize the discussions relevant to this area; they are not intended as a recommendation of any kind. No indication was received that members of industry regard any changes to this region as acceptable, nor that NGOs would necessarily support anything described here.



Stonewall Bank was initially identified for discussion based on the apparent hard substrate that runs north from the existing Stonewall Bank EFH Conservation Area. The substrate data is designated low and medium confidence according to the EFH Data Catalog, but fishermen generally corroborated that there are areas of hard bottom extending north from the current closure.

In discussions in Newport and Astoria, the collaborative group asked members of industry about this area and heard that some spots are indeed rough and not towable. It was also noted that some spots are soft bottom and fishable, and that fishermen would not want to see them closed. In particular, fishermen mentioned there are a few points where it is possible to tow a bottom trawl across the area designated as hard substrate by the EFH Data Catalog, suggesting that the bottom in those spots is either not hard, or if it is hard, that it is flat and does not have hangs.

Some coral and sponge observation records exist in the in the area, primarily from the trawl survey, including gorgonian-type corals. One research dive was conducted in this area in 2013, just north of the existing EFH closure and within the hard substrate area indicated by the EFH Data Catalog. The substrate at the dive site was characterized as 78% mud, 15% cobble, and 7% boulder, and the level of relief was classified as 92% low-relief, 4% medium-relief, and 4% high-relief (with medium defined as 1-2 meters and high defined as over 2 meters of relief). Structure-forming invertebrate observations were displayed in the aggregate across four dive sites in the Stonewall Bank area, so observations for this specific dive site are not clear. That said, anemones, sponges, sea pens, cup coral, gorgonian coral, and hydrocorals were observed in the Stonewall Bank dive sites.

With this information in mind, the collaborative group included a draft shape in the straw man package that was circulated to industry, essentially tracing the boundary of the hard substrate according to the EFH Data Catalog. The collaborative asked industry members for specific feedback on which areas are rough bottom, and what kind of shape, if any, might be workable for a northward expansion of Stonewall Bank EFH Conservation Area.

Little specific feedback was received from industry in terms of how to design a workable area, other than the comment that long narrow areas (like the draft shape) can cut off a lot of tows and make it difficult to fish in the region. More generally, fishermen and industry representatives expressed opposition to any expansions to EFH Conservation Areas in the region. At the same time, the collaborative received feedback on the straw man package from some NGOs recommending that the draft area for Stonewall Bank be retained and even expanded.

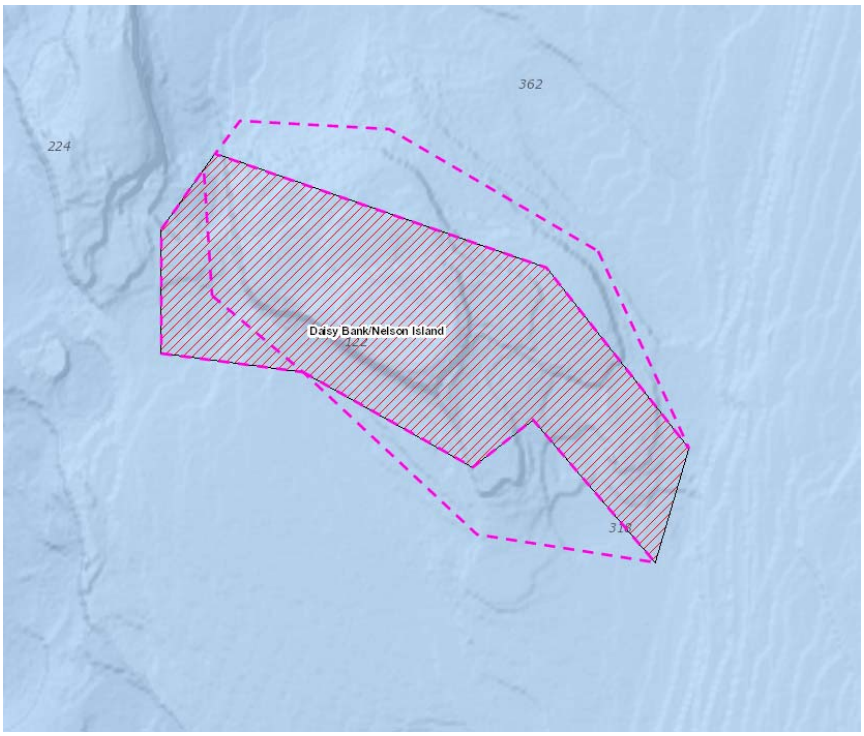
Given the feedback received, the collaborative group trimmed the shape to a simpler form, shown in the map above. This change removes the long northern extension, making it easier to navigate the area from a fisherman's perspective but potentially excluding some sensitive

habitat. The revised shape is classified as "No Recommendation," however, and should not be interpreted as being endorsed by any stakeholders. It simply represents the next step that the collaborative would be likely to take, if discussions were to be continued between the September Council meeting and the June 2016 Council meeting when the Council is scheduled to adopt a preliminary preferred alternative. If no further discussions take place or consensus does not emerge, the Council will have to make a decision without the benefit of stakeholder alignment.

Daisy Bank Northern Modification
Daisy Bank Western Modification
Daisy Bank Southern Modification

These areas, like all of the areas in the Newport region, are classified as "No Recommendation" due to a lack of consensus among stakeholders. The shapes and description provided here are intended to inform the Council of the collaborative's thought process and to summarize the discussions relevant to this area; they are not intended as a recommendation of any kind. No indication was received that members of industry regard any changes to this region as acceptable, nor that NGOs would necessarily support anything described here.

Daisy Bank is a known high spot off Yaquina Head, currently covered in parts by a no-trawl EFH Conservation Area. The actual feature is complex, with a plateau at the top of the bank in the 80-100fm range, steep slopes on the sides of the plateau, and then several lower ridges and humps surrounding the plateau. High-resolution bathymetry mapping was conducted in 2012, and the resulting maps in the EFH Data Catalog show the feature fairly clearly.



The current EFH Conservation Area at Daisy Bank is oriented east-west, covering the plateau and some of the surrounding areas. Substrate data (medium confidence) indicates mostly mixed

substrate, with a few patches of inferred hard substrate. Several coral and sponge records from the trawl survey exist in the area, including some glass sponges.

Two submersible dives were conducted on Daisy Bank in the 1990s, the video from which was analyzed in an OSU master's thesis in 2006. They found a number of sponges, some crinoids and basketstars, and few other invertebrates. Sponges were more common at the dive site higher up on the bank. Dive footage showed the substrate to be cobble/boulder up on the plateau, and soft sediment with pebble/cobble below the sides of the bank.

More recently, four ROV dives were conducted on Daisy Bank in 2013. One dive site was located on a lower ridge west of the plateau, one site was on a slope-trench heading down from Daisy Bank further west, one site was to the north of the bank on flatter surrounding terrain, and one site was shoreward of the bank around some of the smaller features surrounding the plateau. Video from those dives showed anemones, sponges, sea pens, and gorgonian-type corals, though results were not broken out by site, so the specific locations are unclear. Seafloor characterization ranged from all mud on the one hand to a majority cobble with bedrock and boulders on the other. Relief was generally low (defined as less than one meter of relief).

Currently the year-round Trawl RCA covers Daisy Bank fully, as well as a wide swath of the surrounding areas. No shrimping activity occurs in the Trawl RCA around Daisy Bank, given the depth range.

The northern collaborative group discussed Daisy Bank with fishermen and NGO representatives, both in the Newport port meetings and in individual conversations. Fishermen agreed that there is some rough bottom on and around Daisy Bank, but diverging feedback was received on the specific location of the bad ground. Some people described the hard/mixed substrate as running more in a north-south direction across the bank, and others described it as oriented more in an east-west direction.

Some fishermen expressed an interest in reducing the size of the Daisy Bank EFH Conservation Area (tailoring it to their view of the rough spots) or removing it altogether, while NGO representatives expressed interest in expanding its size. Industry representatives and some fishermen indicated opposition to an expansion.

The collaborative group included a draft modification to Daisy Bank EFH Conservation Area in the straw man package circulated to the fleet for feedback. The shapes in the straw man package would have reoriented the trawl closure in a north-south direction, cutting off the eastern and western ends of the current closure and adding areas on the north and south sides. No specific feedback on ways to adjust the shape was received from the fleet.

Because no clear recommendations emerged from the port meeting discussions and straw man feedback request, the collaborative group made an attempt to revise the straw man shape for Daisy Bank based on the available information. The boundary was re-drawn based on the high-resolution bathymetry data from 2012, tracing the plateau and lower ridges with a moderate buffer around them. The lines were then adjusted to include areas where research dives had been conducted, as many of the ROV and submersible dives found interesting habitat. Finally, the western edge of the current closure was trimmed because it sounded like fishermen were working the deeper waters to the west of Daisy Bank and this change could provide some relief in terms of reducing the risk of a ticket when trawling in that area. The westernmost dive site, moreover, was 100% muddy low-relief bottom, suggesting the habitat in that area is less sensitive.

The resulting shape, shown above, is classified as "No Recommendation," and absolutely should not be interpreted as being endorsed by any stakeholders. It merely represents the next steps that the collaborative would be likely to take, if we end up having an opportunity to shop around a revised version for feedback. If no further discussions take place or consensus does not emerge, the Council will have to make a decision without the benefit of stakeholder alignment.

Finally, note that because Daisy Bank is covered by the Trawl RCA, whether or not the bank or its surroundings are opened to trawling will depend on what happens with the RCA in this region.

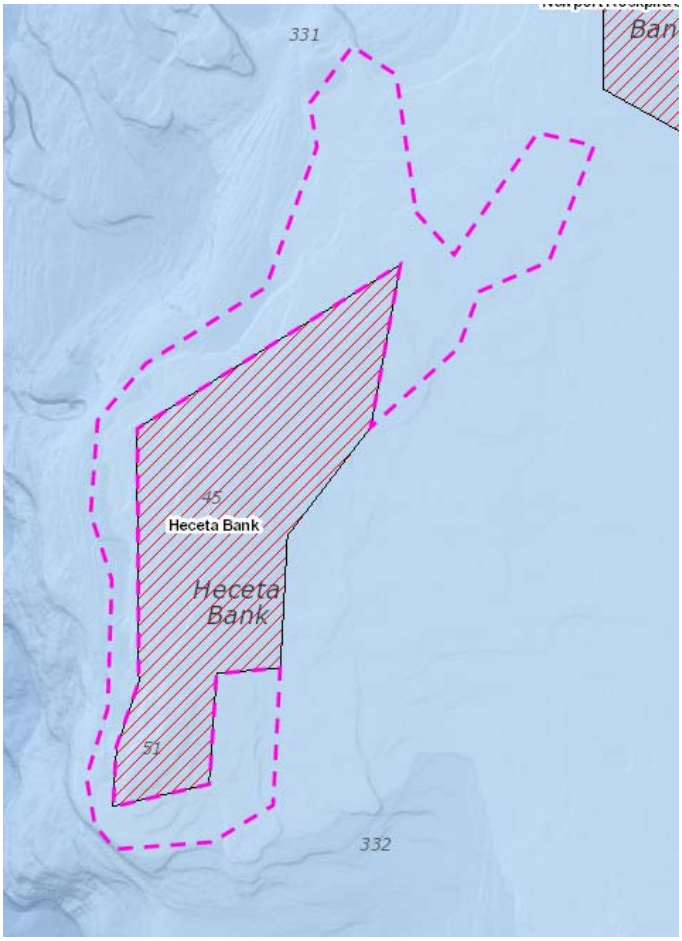
Heceta Bank Modification

This area, like all of the areas in the Newport region, is classified as "No Recommendation" due to a lack of consensus among stakeholders. The shape and description provided here are intended to inform the Council of the collaborative's thought process and to summarize the discussions relevant to this area; they are not intended as a recommendation of any kind. No indication was received that members of industry regard any changes to this region as acceptable, nor that NGOs would necessarily support anything described here.

Heceta Bank was identified for discussion based on the presence of hard and mixed substrate outside the current EFH Conservation Area. The western portion of the bank has been subject to high-resolution mapping, and a band of hard and mixed substrate extends out past the existing EFH Conservation Area, to approximately the 100fm contour line. The eastern and northern portions of the bank have been mapped with medium and low confidence levels; the resulting data layers show hard substrate extending out from the existing EFH Conservation Area to the north, surrounding the tip of the current closed area, and forming two fingers heading north and northeast. On the eastern side of the bank, the existing EFH Conservation Area aligns fairly well

with the substrate data layers, except in the southeast corner where some hard and mixed substrate extends out from the current boundary. Also, a smaller patch of likely hard substrate exists shoreward of Heceta Bank, as a distinct area.

One research dive was conducted by the Delta submersible in the 1990s to the west of the existing EFH Conservation Area, in the area of mixed and hard substrate. Video footage from that dive showed a high amount of crinoids, as well as a few sponges, anemones, and gorgonian corals. In 2013, five ROV dives were conducted in the area of hard substrate to the north and east of the EFH Conservation Area. Some of the dive sites showed a significant amount of exposed bedrock, while other sites were dominated by boulders and cobbles, and still other sites were primarily mud with some boulders. Most sites were classified as low-relief (defined as under one meter of relief), while a few sites showed more rugged topography. Video footage showed anemones, sponges, cup corals, and gorgonian corals, though the dive report does not provide quantification by site, so it is not clear how many of these invertebrates were found in each location.



The top of Heceta Bank is known to be a nursery area for rockfish; this area already is covered by the existing EFH Conservation Area. The question raised by NGO representatives was whether protection could be extended around the sides and base of the bank, so as to cover the feature more fully and include the areas of hard and mixed substrate that are currently outside the EFH Conservation Area.

Heceta Bank was discussed in port meetings in Newport and Coos Bay. Coos Bay fishermen were more familiar with the south end of Heceta Bank, whereas Newport fishermen were more familiar with the north. Fishermen generally verified the understanding of substrate provided by the data layers, noting rough patches inward of 100fm on the western side of the bank, and two fingers of hard bottom extending out from the current closure on the north side. One aspect of the substrate data that fishermen indicated was inaccurate is the long “tail” extending southward

from the current EFH Conservation Area. In the experience of fishermen, hard substrate on the south side of Heceta Bank generally peters out around 85fm in depth. There may be some patches of mixed substrate further south (i.e., deeper), but most people said that outside 85fm is fishable with a bottom trawl, and any bad spots are small and can be worked around.

The northern collaborative heard that few bottom trawlers (if any) are actively fishing around the sides and base of Heceta Bank. The EFH Data Catalog effort layers generally agree, showing effort to be low or absent in these areas (though small numbers may be obscured due to confidentiality restrictions).

In terms of whether industry members would want to fish these areas in the future, however, the collaborative heard different opinions. Most of the Coos Bay fishermen said they tend to avoid the hard and mixed areas, and indicated some willingness to consider expanding the EFH Conservation Area around these areas. Conversations in Newport yielded other views, with some fishermen stating they can and do trawl in the hard/mixed substrate areas, and that if the existing EFH Conservation Area were lifted, they would go further up and trawl across the top of Heceta Bank.

In order to try to get a sense of whether an expansion to the Heceta Bank EFH Conservation Area would be workable, the northern collaborative sketched a draft shape around the hard and mixed substrate areas, and included that in the straw man package that was circulated to the fleet. Specifically, on the south end of the bank a line approximating 85fm was drawn, based on the input of Coos Bay fishermen that it was important to be able to fish 90fm and deeper on the south side. The western boundary line was drawn roughly along the 100fm contour, also based on input from industry that this was a reasonable approximation of where the rough ground starts. On the north side of the bank, the draft shape essentially outlined the hard substrate fingers. In addition to hard and mixed substrate, the draft shape included various coral and sponge records (primarily from the trawl survey), consisting of unidentified sponges, glass sponges, gorgonian corals, and soft corals.

In the fourth round of port meetings, the collaborative group heard opposition to any expansion of the existing EFH Conservation Area from some Newport fishermen and industry representatives. Coos Bay fishermen generally confirmed their earlier descriptions of what would be workable for them on the southern end of the bank. And NGOs provided feedback on the straw man package stating that the Heceta Bank area should be larger than what was sketched in the draft shape.

Given the diverging opinions, the collaborative group determined this area was likely to not achieve consensus. As a matter of due diligence, the group made a few changes to the draft shape to reflect feedback and a better understanding of the scientific data. Specifically, the

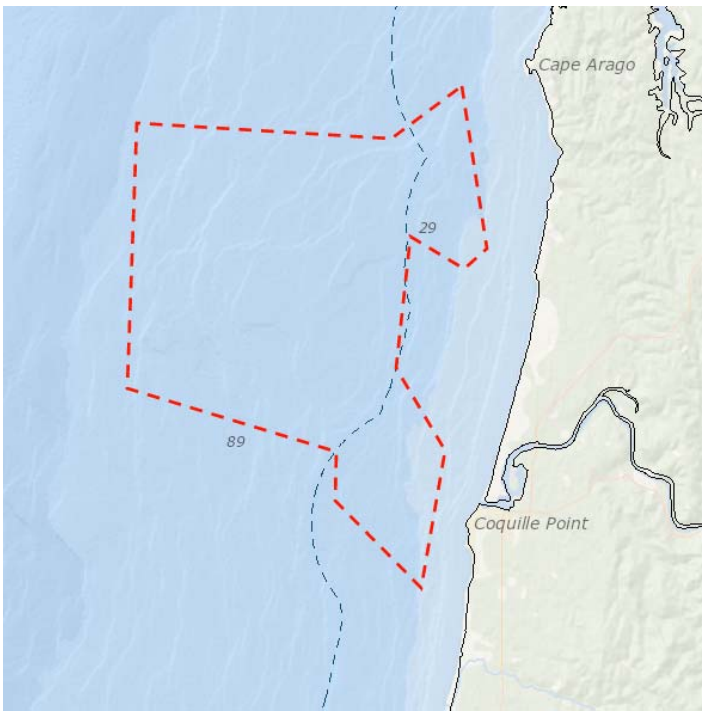
southeastern corner of the draft shape was trimmed slightly, to open up the 75fm contour per the request of a Newport fisherman. The notch between the two northern fingers also was enlarged slightly, to account for historical effort in this area as shown by the 2002-2006 data layer. And the boundary of the northwestern finger was moved out slightly to account for research dives in the vicinity.

Note that this revised shape, shown above, is classified as "No Recommendation" and should not be interpreted as being endorsed by any stakeholders. It simply represents the next steps that the collaborative would be likely to take, if we were to try to shop around a revised version for feedback. If no further discussions take place or consensus does not emerge, the Council will have to make a decision without the benefit of stakeholder alignment.

Arago Reef

Arago Reef is a well-known reef feature in shallow water just south of Coos Bay. It was identified for discussion based on the idea that bottom trawlers may already be avoiding the area, and that it contains documented sensitive habitat.

The EFH Data Catalog substrate layers show a large area of mixed substrate (mapped with low confidence) beginning in the 70fm range and extending in toward shore. Closer to shore, higher-resolution mapping has been conducted, and the substrate layers show hard bottom in the 30s around the state waters line, with two distinct lobes of hard substrate coming in toward shore, one on the north side and one on the south side. The reef is primarily in federal waters, but the two lobes are located in state waters. The area of state waters between these two lobes is soft sediment, in the 10-30fm range.



A number of ROV dives were conducted on Arago Reef in 2011. Video footage showed gorgonian-type and hard corals, as well as other invertebrates and various rockfish species including tiger and yelloweye. Site characterization ranged from mixed substrate to exposed bedrock, generally moderate to low relief. A few coral and sponge observation records exist

from the trawl survey, including stony corals. Many of the trawl survey cells on Arago Reef are designated as blocked due to obstruction from the reef, so coral and sponge observation records from the survey are sparse.

Arago Reef was discussed with Coos Bay fishermen, who indicated they generally avoid it both when shrimping and bottom trawling for groundfish. EFH Data Catalog effort layers reflect this avoidance, with no visible bottom trawl effort on Arago Reef. Shrimp effort data layers are unclear; they cover Arago Reef but because the data layers were constructed with VMS pings rather than tow tracks, this likely reflects shrimpers transiting over the area.

A draft shape was sketched for this area with coordinates provided by Coos Bay fishermen. The initial shape was a simple rectangle, running from about 65fm depth shoreward to roughly the state waters line. This shape was included in the straw man package circulated to the fleet. Feedback was received from NGOs indicating the area should be larger, as the draft shape was under-inclusive of the hard and mixed substrate.

In the fourth round of port meetings this area was revisited and discussed further, and based on conversations with Coos Bay fishermen it was extended shoreward to capture the two lobes of well-mapped hard substrate in state waters. The revised eastern (shoreward) line was tailored to leave room for shrimping or beach dragging in the shallow waters between the two hard substrate lobes, while also protecting a significant amount of the shallow reef area.

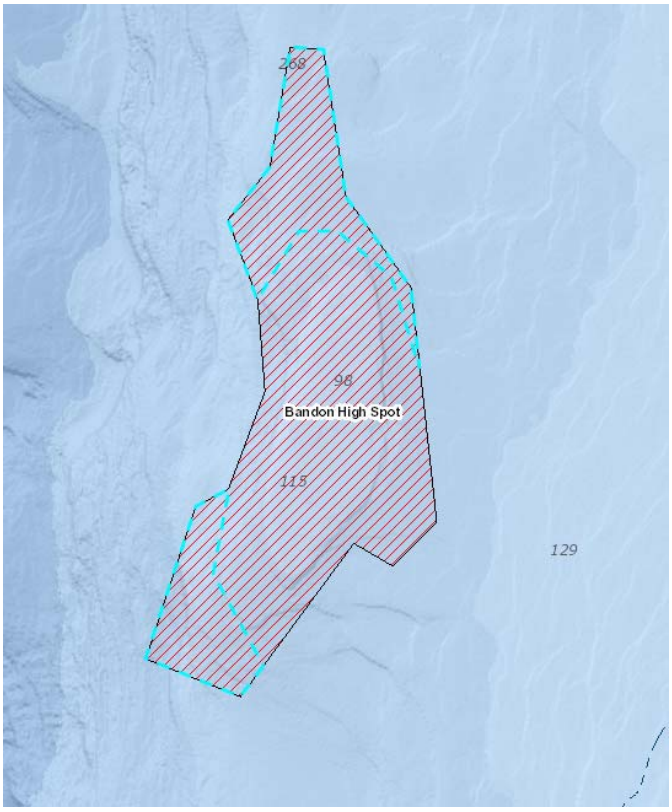
The revised shape is still under-inclusive of the hard and mixed substrate, but for specific reasons. In the shallow waters, which are well-mapped, the revised shape captures nearly all of the hard substrate. Just a few patches of hard substrate fall outside the revised shape—some extending northeast toward Cape Arago and some extending southeast toward Coquille Point. These were not included because fishermen were hesitant to extend the closure all the way to shore, in case it would create an enforcement problem for transiting or accessing the area of soft bottom in the middle.

In the deeper waters, the substrate designations have low confidence, and fishermen indicated that the data layers overstate the true extent of the reef. On the north side of the reef there is significant shrimping effort, and fishermen were concerned with drawing a boundary farther north in that it might cut off some of the shrimp grounds. One research dive was conducted in the northern part of the reef, outside the revised shape but inside the mixed substrate as indicated by the data layers (43.29483° lat., 124.52400° long.), and video from that dive showed all soft sediment and low relief, with few corals or sponges. This suggests to the collaborative that the northern line should be drawn southward of that dive site, so the current location of the line is probably about right.

The south side of the reef also is important for shrimping, and the line was designed to provide ample space for that effort. One research dive was conducted on the south side, in the area designated as mixed substrate but outside the draft shape (43.14583° lat., 124.56882° long.), and video footage showed the seafloor to be mostly soft sediment and low relief, with some gorgonian corals, some branching sponges, and a few other invertebrates. While this is slightly more interesting/sensitive habitat than the dive site on the north side, it does not appear to be part of the core reef area, so the collaborative group viewed it as indicating the southern line is probably in approximately the right place. On the western side of the reef, this type of dive site comparison is not available, so the placement of the line is relying primarily on fishermen's input and their characterization that the reef ends in the 65-70fm depth range.

Note that the revised shape includes areas in state waters, so further conversations are necessary with members of the Oregon State Legislature and the Department of Fish & Wildlife to ensure this is an acceptable change from an agency and political perspective. The area is classified as a "Full Recommendation" here, but this simply is intended to show that from the perspective of the industry and NGO stakeholders participating in the collaborative, the recommendation is solid. Conversations with legislators and agency staff are expected over the course of the fall, and any necessary adjustments to the shape can be made prior to April 2016 when the Council selects a preferred alternative.

Bandon High Spot Northern Modification



In the port meetings, Coos Bay fishermen identified the Bandon High Spot EFH Conservation Area as a currently-closed area that they were interested in regaining access to. Specifically, they pointed to the north and south ends of the ridge, and indicated the current EFH Conservation Area overstates the extent of the feature. This section discusses the northern end of Bandon High Spot, and the following section discusses the southern end.

With respect to the north end of Bandon High Spot, industry members described the area as being generally soft bottom and lacking sensitive habitat features, and noted that it was a productive area for

summertime dover tows. They requested a change to re-open the north end of Bandon High spot roughly around the 100fm contour. Based on this input, a draft shape was sketched with fishermen that essentially truncated the north end of the current closure, and this shape was circulated to the fleet and NGOs for feedback as part of the straw man package.

In the fourth round of port meetings, the collaborative gathered feedback and attempted to synthesize it with respect to this area. Fishermen indicated the reopening should be slightly larger, and should curve around and down the shoreward side of the current closure. A slightly larger version of the reopening was sketched in that meeting, for consideration. Feedback from NGOs, on the other hand, indicated the reopening should be smaller. Several research dives and EFH Data Catalog layers were cited, as showing the presence of sensitive habitat.

In terms of data, a substantial amount is known about this area. The Bandon High Spot is a distinct feature, visible in the 2012 high-resolution bathymetry as a north-south ridge along the shelf-slope break. Substrate maps show a solid area of hard substrate running north-south along the ridge; the confidence rasters give this designation a medium confidence level. Several coral and sponge observations exist in the area from the trawl survey, including some glass sponges.

Three submersible dives were conducted on the north end of Bandon High Spot by the Delta submersible in the 1990s, the results of which were reported in an OSU master's thesis in 2006. Two of these dives were located out around the base of the ridge, and found sea pens and sea urchins, with mostly soft sediment on the bottom. One dive was located at a point partway up the side of the ridge (i.e., further south and at a higher elevation), and found sponges living on a mixed cobble/boulder bottom.

More recently, several ROV dives were conducted on Bandon High Spot in 2011. One site was located in the northern area, close to the base of the ridge feature on the seaward side (43.07847° lat., 124.85647° long.). Video footage from that dive showed some gorgonian-type corals and sponges, as well as some other invertebrates. The seafloor was characterized as almost all soft sediment and low relief.

With all this information, as well as the re-sketched shape from Coos Bay meeting four and the NGO feedback, the collaborative group made a few revisions to the shape. Around the main feature, the re-opening line was moved north slightly to keep more of the sides of the ridge within the closure. In particular, the line was adjusted to keep the third Delta submersible dive site noted above within the EFH Conservation Area. This was viewed as important due to the seafloor characterization at that site being cobbles and boulders—a habitat type that is subject to more disturbance from trawl gear than sand or mud. By contrast, the two Delta submersible dive sites farther north showed soft bottom around the base of the ridge; these areas would be included in the re-opening. In terms of the ROV dive site on the seaward side of the ridge, the

collaborative group was uncertain whether or not it should be included in the re-opening. Gorgonian corals and sponges are sensitive to trawling, but on the other hand soft bottom is generally more resilient. For the time being the group left this dive site in the proposed re-opening, but further discussions may be needed to reach a final determination on how best to draw the line there.

The northern collaborative believes the research dives provide a more definitive source of information than the EFH Data Catalog substrate layer, especially given the medium confidence level attached to that data layer. As such, it seems likely that the north end of the Bandon High Spot does not in fact have hard substrate extending all the way to the edge of the existing closure, as shown by the substrate data layer, and instead becomes soft bottom at some earlier point. Fishermen's input is consistent with this; they characterized the seafloor as being a kind of "black sand" on the north end of Bandon High Spot, rather than hard substrate.

It is important to note that the revised shape shown here has not received approval from stakeholders yet. Rather, it should be viewed an attempt by the collaborative group to integrate diverging feedback, which needs to be vetted by all sides and potentially modified further. For this reason, the area is labeled as a "Recommendation in Progress." It may take a few more conversations and attempts at drawing the shape before all stakeholders are able to support it. We do believe this is possible, however, given the collaborative nature of the conversations in this region thus far.

As a final note, what happens in this area will depend on the Trawl RCA being lifted in this part of the coast, as much of the re-opening outlined here is also covered by the year-round Trawl RCA.

Bandon High Spot Southern Modification

As with the north end of Bandon High Spot, fishermen in Coos Bay indicated a desire to regain access to the south end of the area. They noted a productive dover tow around the 170fm contour, so in the second and third port meetings a small triangle was sketched on the southwest corner of the Bandon High Spot to allow access to that tow. This shape was included in the straw man package that was circulated to the fleet for feedback.

The southern end of Bandon High Spot, similar to the northern end, is indicated to be hard substrate by the EFH Data Catalog with a medium level of confidence. Fishermen stated that in their experience the hard substrate stops around 120fm, and anything outside that depth is generally fishable.

In terms of feedback, several NGOs indicated they supported the proposed re-opening as drawn in the straw man package (i.e., the small triangle on the southwest corner). Feedback from the fleet was received in the fourth port meeting in Coos Bay, where industry members indicated the re-opening should be larger. Fishermen explained that their interest in having access to the area was broader than just the 170fm tow noted above, and shallower areas offer productive groundfish fishing as well. Based on instructions from fishermen, a new version was sketched in Coos Bay meeting four, which covered the whole southern end of the current closure rather than just the southwest corner, and extended in to 100fm at its shallowest point.

In light of the diverging feedback on this area, the collaborative group revisited the data layers and available information for the southern end of Bandon High Spot. In addition to the substrate data layer, several coral and sponge observations are recorded from the trawl survey—primarily unidentified sponges, sea pens, and soft corals. A research dive was conducted by the Delta submersible in 1993 at the south end of the ridge, and video analysis from that dive was reported in a 2006 OSU master's thesis. Video from that site showed a high abundance of red whip corals, a gorgonian-type coral. More recently, a NOAA research cruise on the FSV Bell Shimada was conducted in 2010, revisiting the same area explored by the Delta crew. The site characterization report from that dive indicates the substrate was rock covered with a layer of mud. Video analysis corroborated the earlier dive findings, as dense colonies of red whip corals were observed, as well as moderate sponge coverage. Flatfishes, thornyheads, and some rockfish were also noted, as were shark egg cases.

Based on the dive site findings and the earlier description of hard substrate extending out to 120fm, the northern collaborative made a few changes to the area proposed by fishermen in the fourth Coos Bay meeting. Specifically, the waypoints were moved to push the southern boundary down and provide a larger buffer around the dive site, and to approximate the 120fm line slightly better. With these changes, the shape was included in this package and classified as a "Recommendation in Progress."

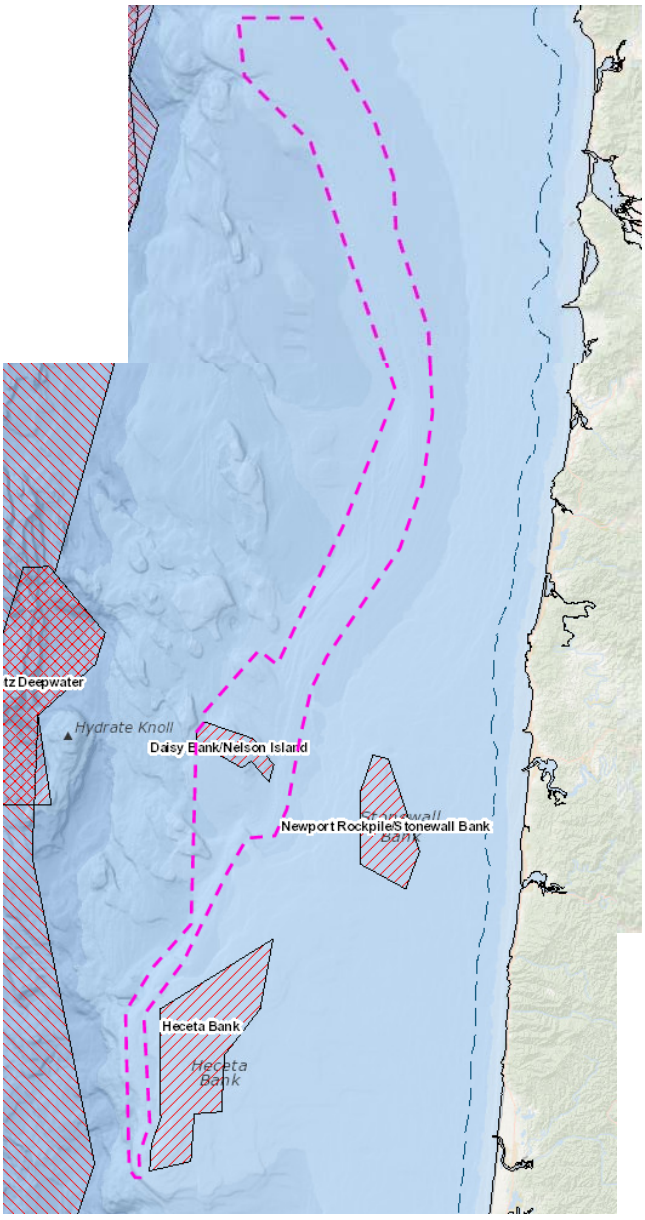
It is important to note that the revised shape shown here has not received approval from stakeholders yet. Rather, it should be viewed an attempt by the collaborative group to integrate diverging feedback, which needs to be vetted by all sides and potentially modified further. As with the north end of Bandon High Spot, it may take a few more conversations and attempts at drawing the southern shape before all stakeholders are able to support it. We do believe this is possible, however, given the collaborative nature of the conversations in this region thus far.

Also like the northern end of Bandon High Spot, what happens with the southern end will depend on the Trawl RCA being lifted in this part of the coast, as much of the re-opening outlined here is also covered by the year-round Trawl RCA.

Trawl RCA 45°46' to 43°57'

In the Cape Falcon to Cape Blanco region, the collaborative group drew a dividing line in the Trawl RCA at 43°57', to indicate the different consensus levels that emerged in different port meetings. North of 43°57' is treated as the Newport region of the coast, whereas south of 43°57' is treated as the Coos Bay region.

The northern collaborative understood its instructions from the Council to be to discuss an integrated package of changes to the RCA and EFH areas, and see if a set of changes to both types of areas could be found that all stakeholders would support, which would increase fishing opportunity and also improve the protection of sensitive habitat. As such, the potential for opening the Trawl RCA was discussed in port meetings, and feedback was requested from fishermen and other stakeholders as to how best to approach the RCA.



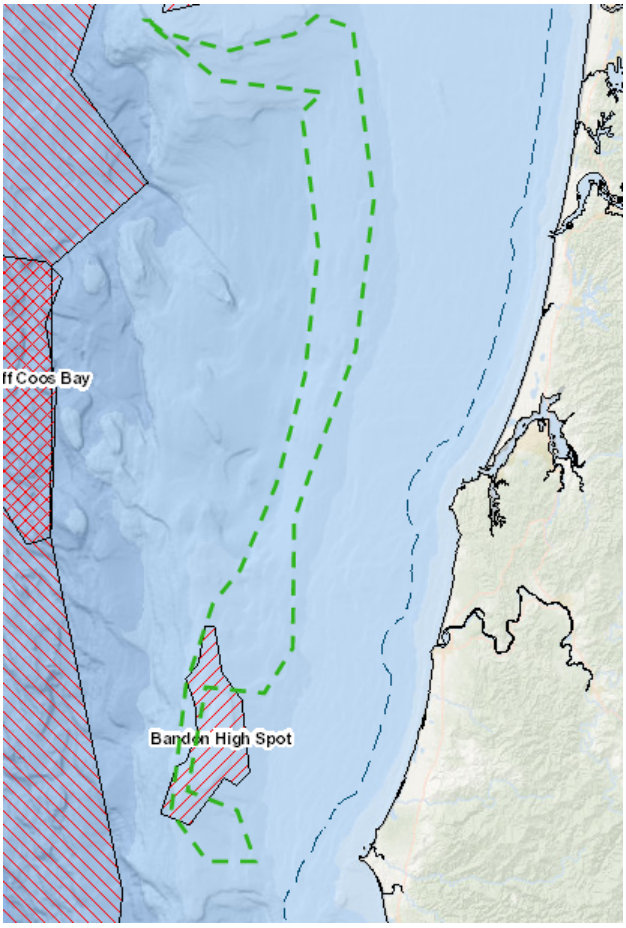
According to both the EFH Data Catalog layers and fishermen's input, the year-round Trawl RCA in the region from Cape Falcon to 43°57' is primarily soft bottom. A few areas of inferred hard substrate exist, but those areas (pink in the substrate maps) are known to be unreliable and fishermen indicated they are likely clay or other soft sediment. Around Daisy Bank and Heceta Bank some patches of regular hard and mixed substrate are found inside the Trawl RCA, mapped to varying degrees of confidence. Fishermen indicated that other than a few spots, essentially all of the Trawl RCA in this section of the coast is usable ground, and in the port meetings they identified several specific areas of the RCA where historical tows are located. In terms of bycatch risk, fishermen stated a willingness to manage the risk themselves, given the full accountability provided by the ITQ system and 100% observer coverage.

Based on the discussions in Newport port meetings, the collaborative group included a draft full reopening of the Trawl RCA for this region of the coast in the straw man package that was circulated to the fleet. Feedback from industry members and representatives was generally positive on this aspect of the straw man package. Conservation groups expressed concern about the overall package in this region, and specifically indicated that more of the RCA should remain protected via expansions to EFH Conservation Areas.

More generally, in the Newport region the goal of consensus proved elusive. Industry representatives and some fishermen expressed opposition to any new EFH closures, and a desire to see the whole Trawl RCA open. Conservation groups instead were interested in expanding some of the EFH Conservation Areas, and many could not support what industry requested. As such, potential changes to EFH Conservation Areas in this part of the coast are labeled as "No Recommendation," and re-opening of the Trawl RCA also is labeled as "No Recommendation." If no further discussions take place or consensus does not emerge over the upcoming months, the Council will have to make a decision without the benefit of stakeholder alignment.

Trawl RCA 43°57' to 42°50'

The area south of 43°57 is intended to reflect the Coos Bay region. Based on the discussions with fishermen and NGO representatives, a package of changes with support from all sides appears within reach.



The Trawl RCA in the region from 43°57' to Cape Blanco appears to be mostly soft bottom, according to both the EFH Data Catalog and fishermen's knowledge. South of Heceta Bank, a "tail" of likely hard substrate shows up in the EFH Data Catalog, but this area is mapped with a low confidence level and fishermen indicated that in their experience it does not exist. The north and south ends of Bandon High Spot EFH Conservation Area are located within the Trawl RCA, and hard substrate is indicated by the EFH Data Catalog in these spots. As discussed above, research dives suggest these patches of hard substrate are inaccurate, and fishermen's

understanding of the bottom is consistent with that.

In the Coos Bay port meetings, fishermen discussed the Trawl RCA thoroughly and indicated that it is essentially all usable ground, and specific historical tows in the RCA were identified. Fishermen also stated clearly that they are willing and ready to manage bycatch risk, if the Trawl RCA is opened up. They expressed a desire to take advantage of the full accountability provided by the ITQ system and 100% observer coverage.

Conservation groups noted that in this part of the coast, the new EFH protection under consideration is located shallow waters (Arago Reef), and that represents a different type of ecosystem from the shelf-slope break, where not only the Trawl RCA is under consideration for opening, but two additional spots of EFH closure also are under consideration for opening (Bandon High Spot north and south ends). Some NGO representatives noted that increasing protection in one biogeographic region does not necessarily offset the removal of protection in other regions. That said, the net effect of the changes to EFH and RCA regulations in this part of the coast would be to shift trawl closures from covering generally unremarkable areas to covering identified features with sensitive habitat. In that sense, most of the conservation groups acknowledged the changes for this region of the coast as representing an improvement. NGOs also supported the fact that the changes in this section of the coast also will offer a clear improvement in fishing opportunity.

Overall, stakeholders appear close to agreement on this section of the coast. A few of the shapes in this region may need further discussion and modification, but the northern collaborative believes that consensus on the changes in this region can be achieved, and the Trawl RCA opening accordingly is classified as "Full Recommendation."

3. Cape Blanco to 40°10'

This region of the coast is characterized by several small canyons, significant nearshore and offshore reefs, and productive fishing grounds. Historically the heart of the West Coast groundfish trawl fishery, today participation has declined significantly, although Eureka, Crescent City, Brookings, and Coos Bay remain major trawl ports.

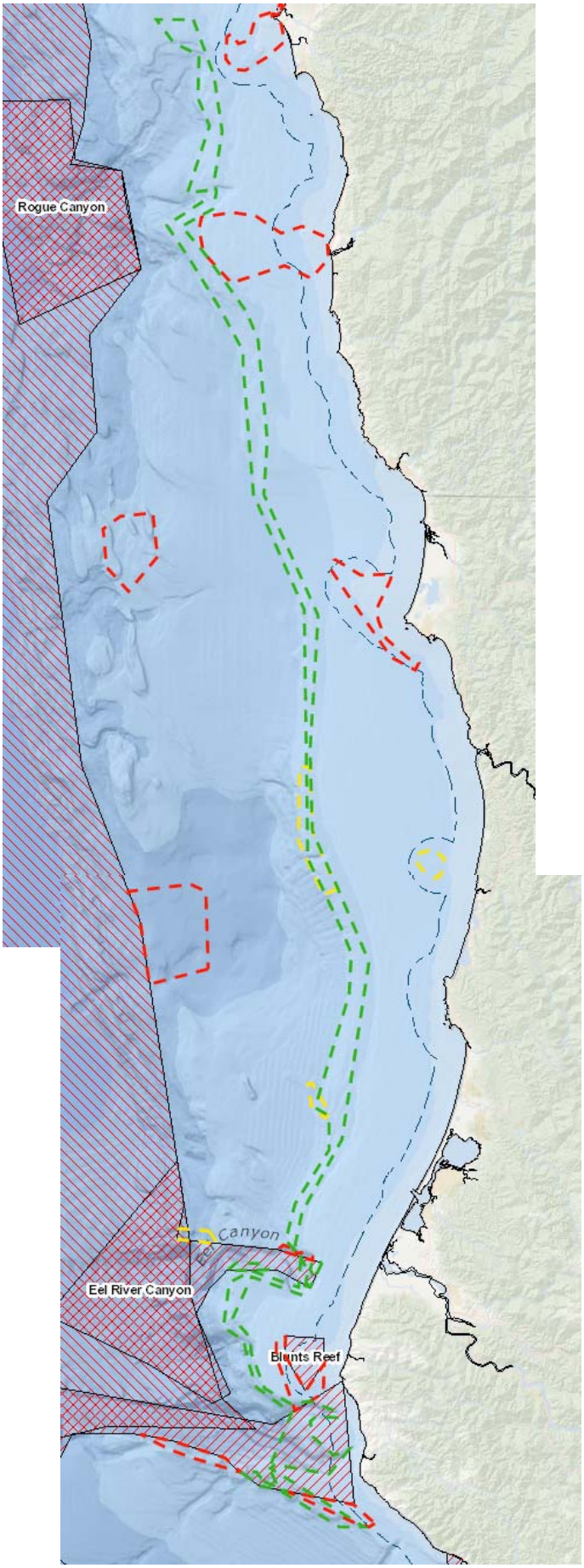
Fishermen utilizing this area typically hail from Eureka, Crescent City, or Brookings, but there is some effort in the northern part of this region (particularly around Cape Blanco) by Coos Bay fishermen. As with the other regions, a four meeting process was conducted in this area. Turnout was particularly strong in Coos Bay, as noted above. Attendance was also good in Eureka and Brookings, where most of the active trawlers were reached. Given the proximity of Crescent City and Brookings, combined meetings were held for industry participants from both

ports. Overall, there was strong support for the idea of collaborative revisions to EFH and the RCA, and many "Full Recommendations" as well as "Recommendations in Progress" emerged from the discussions.

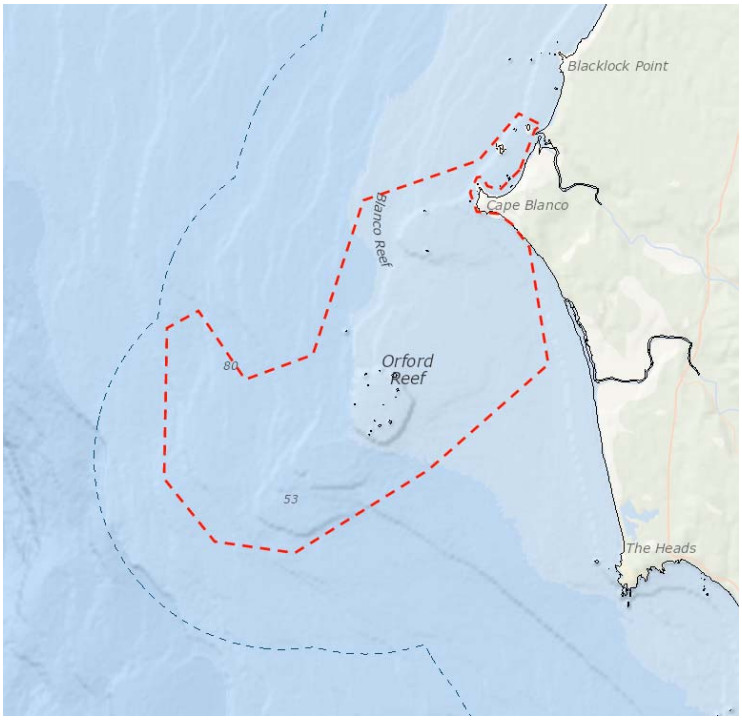
Table 3. Area Recommendations from Cape Blanco to 40°10'.

Area Name	**Type**	**Status**
Blanco Reef	EFH Closure	Full Recommendation
Rogue River Reef	EFH Closure	Full Recommendation
Brush Patch	EFH Closure	Full Recommendation
Saint George Reef	EFH Closure	Full Recommendation
Reading Rock Reef	EFH Closure	Recommendation in Progress
Reading Rock Shelf-Slope Break	EFH Closure	Recommendation in Progress
Trinidad Canyon	EFH Closure	Full Recommendation
Mad River Rough Patch	EFH Closure	Recommendation in Progress
Eel River Canyon Modification 1	EFH Opening	Full Recommendation
Eel River Canyon Modification 2	EFH Closure	Full Recommendation
Eel River Canyon Modification 3	EFH Opening	Full Recommendation
Eel River Canyon Modification 4	EFH Closure	Recommendation in Progress
Blunts Reef Modification	EFH Closure	Full Recommendation
Mendocino Ridge Modification 1	EFH Closure	Full Recommendation
Mendocino Ridge Modification 2	EFH Opening	Full Recommendation
Mendocino Ridge Modification 3	EFH Closure	Full Recommendation
Trawl RCA 42°50' to 40°10'	RCA Opening	Full Recommendation

Region 3 Overview:



Blanco Reef



This area was identified early on, as a well-known reef feature just south of Cape Blanco. In discussions with Coos Bay and Brookings fishermen, most people said it is difficult to bottom trawl there, if it is possible at all. The collaborative group consulted the EFH Data Catalog substrate layers and nautical charts and found good correspondence with fishermen's understanding of the area. High-confidence substrate mapping around the 3-mile line shows the outside boundary of the reef delineated with hard and mixed substrate, and medium-confidence mapping shoreward of there shows the body of the reef as mostly mixed substrate with some hard-bottom pockets. Easily-identified landmarks like Fox Rock and Cape Blanco helped to cross-reference fishermen's knowledge with the data layers. The effort data layers corroborated that very little (if any) bottom trawl effort takes place around Blanco Reef, and shrimpers avoid the area as well.

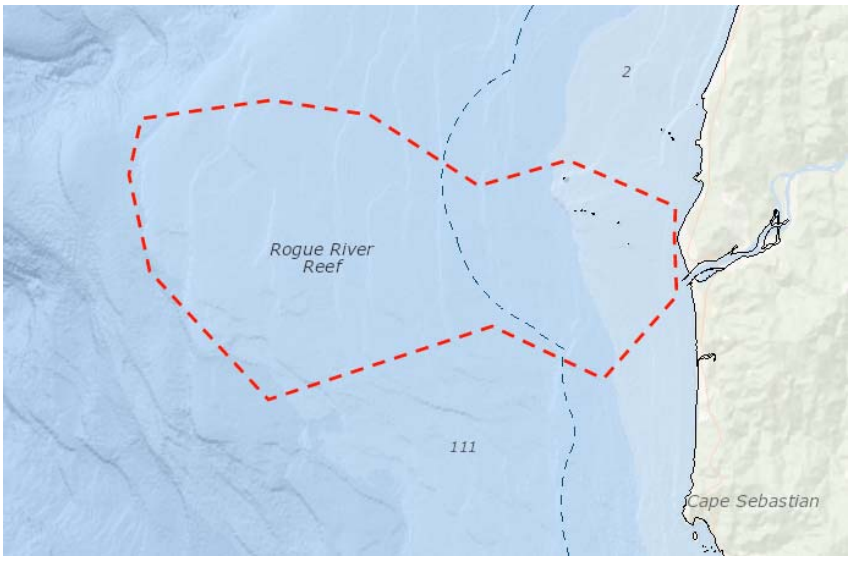
In the third round of port meetings the group drew a draft shape for the Blanco Reef area as a potential EFH closure, and that shape was circulated to the fleet as part of the straw man package for feedback. In the fourth round of port meetings the shape was refined, to ensure shrimping and flatfish dragging would not be affected by the proposed closure. This meant tightening up the boundary around the reef, and excluding a small amount of hard and mixed substrate on the southwestern corner of the reef.

After the fourth round meetings, the collaborative group did minor cleanup to remove excess waypoints and straighten lines to the extent possible. The southeastern boundary line was also moved outward slightly, relative to the revised shape from meeting four, in order to encompass an area where a ROV research dive was conducted (42.75603° lat., 124.61458° long.). Video footage from the ROV showed some hard corals and a few gorgonian corals and sponges, as well as numerous other invertebrates. Footage also showed a dense school of canary rockfish, and quillback rockfish, yellowtail/olive rockfish, and yelloweye rockfish. The site was characterized as roughly even thirds hard substrate, mixed substrate, and soft substrate. This dive site appears to represent the margin of the reef, so the boundary line was adjusted to encompass it. These

final revisions were vetted recently with a few fishermen, and will be confirmed with a wider group going forward.

Rogue River Reef

This is a significant reef feature with hard substrate starting essentially at the shoreline and extending several miles out. The hard substrate patches get more sparse through the 30-60fm range (though the confidence level in the data is low), and then in the 60-75fm range a large area of hard substrate is indicated (also with low confidence).



Coos Bay and Brookings fishermen confirmed the substrate data is essentially accurate. They noted that the nearshore reef is well-defined and not trawled, and the offshore reef also is pretty rough. The area in between has soft and mixed substrate, with some usable parts for bottom trawling, but is not fished too often. Fishermen indicated they tow for groundfish around the sides of Rogue Canyon (to the north and seaward of this area), and catch shrimp on the shelf to the north and south of this area, but generally they avoid the area in question because it is not necessarily more productive than adjacent areas and there are some rough patches.

The EFH Data Catalog effort layers in turn agree with fishermen's characterization of the area as infrequently used. Groundfish bottom trawl effort in both periods (2002-2006 and 2006-2010) shows activity outside the RCA and around the shelf-slope break, but nothing on the shelf in this area. Shrimp VMS pings show activity in the middle of the shelf (in the 40s and 50s), but it is unclear whether these pings represent vessels transiting, sleeping, or fishing. Crabbing takes place around the nearshore reef, but would not be affected by the closure under consideration.

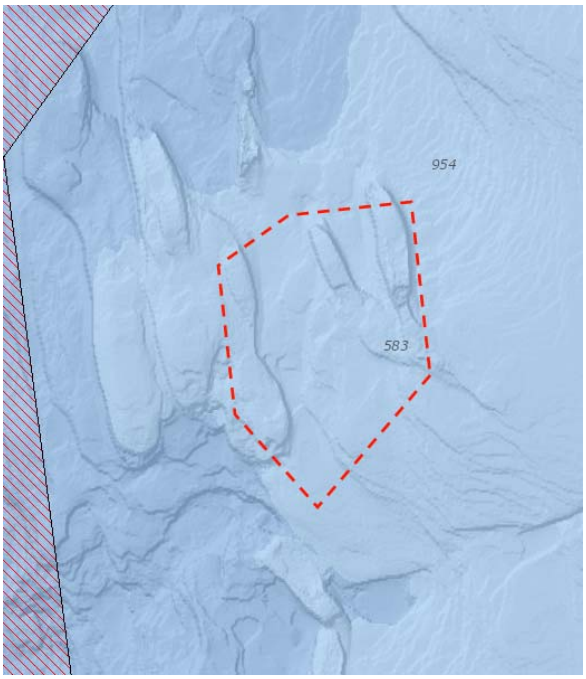
Given the two distinct reefs and the mixed area between, and the low value from a fishing perspective, conservation groups were interested in this area as a potential place to provide continuous protection from the shore all the way across the shelf. A rough shape was sketched encompassing this area, in the third round of port meetings with Coos Bay and Brookings fishermen. The northern and southern boundaries were drawn in an hourglass shape to maintain

tows on the shelf heading north from the reef and south from the reef. The outer edge of the area was drawn generally no deeper than 85fm, to allow tows on the outside if needed.

The draft shape was included in the straw man package circulated to the fleet for feedback. In the fourth round of port meetings, the shape was modified based on specific feedback from Coos Bay fishermen about the usable fishing grounds south of the reef, bringing the southern boundary up slightly to approximate the Loran 14030 line. After the port meetings concluded, the collaborative group cleaned up a few edges and removed excess waypoints, yielding the shape shown above.

As a final note, this area presents a somewhat unique opportunity to create a continuous band of habitat protection from the shoreline through a variety of depth ranges. The shape as currently drawn extends across the shelf to approximately 85fm, but the Trawl RCA lies just seaward of the proposed EFH area, raising the possibility of extending the outside edge of the shape to include this RCA ground. Including this part of the RCA would protect a portion of the shelf-slope break (almost all of which is proposed to be opened), and would extend protection further across depth contours and representative habitats. This concept arose late in the process, however, and was discussed only briefly in the fourth round of port meetings. As such, it is not included in the shape as presented. The idea will be discussed further over the next several months, and if support emerges for including the adjacent part of the RCA in the Rogue River Reef area, the collaborative group will provide updated waypoints to Council staff.

Brush Patch



This is an area that was identified initially by fishermen, who noted that high concentrations of a particular coral species come up in the net whenever this area is trawled. The area's name comes from the type of coral that grows there, which has a brush or shrub-like appearance. Fishermen familiar with the area generally agreed that they tried to avoid the area due to the high invertebrate bycatch.

The Brush Patch is located in on the continental slope in fairly deep water (400-500fm), just south of the Oregon-California border. While no hard or mixed substrate shows up in the EFH Data Catalog data layers for this area, it has not

been mapped and the associated confidence level is low. Several coral and sponge observation records are located in this area from the trawl survey, including black corals, gorgonian corals, and glass sponges.

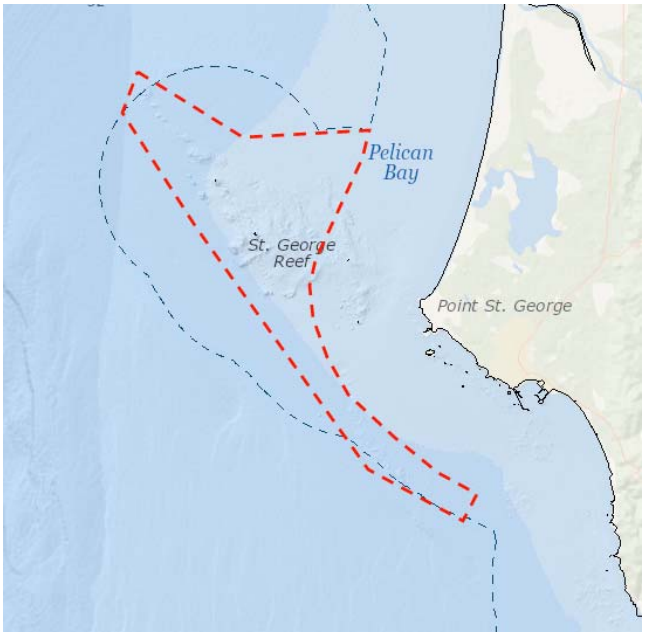
Given the sensitive biogenic habitat in this area, the collaborative discussed the possibility of an EFH closure. An initial draft shape was sketched based on waypoints provided by industry, and that shape was included in the straw man package circulated for feedback. In the fourth round of port meetings the shape was revised slightly, based on feedback from fishermen to include the high spot (above 400fm) on the northeast corner.

The purpose of this shape is to mark off the area where there is a lot of coral growth and avoid impacts to that area, while also not interfering with groundfish trawling in adjacent areas. Also, closing this area will likely resolve the coral bycatch issue from the 2006-2010 WCGOP observer data in the EFH Data Catalog, which shows a hotspot just to the south and west of the area. The collaborative understands that coral and sponge bycatch is recorded at the end of the tow, so the actual area where the invertebrates are encountered can be anywhere within the length of a trawl tow of the hotspot. Given the known coral abundance at the Brush Patch, the best interpretation the collaborative group could come to was that the bycatch hotspot was reflecting occasional tows through the Brush Patch, so closing the area should eliminate the hotspot.

Saint George Reef

Saint George Reef is a well-known rocky reef located mostly in California state waters, just offshore of Point Saint George. The reef feature runs southeast-northwest, ending just outside state waters.

While Saint George Reef is almost entirely in California state waters, most of it is farther than 3 nautical miles from shore. Several of the pinnacles of Saint George Reef protrude above the surface of the water, and these offshore rocks extend outward the boundary of state waters. The farthest offshore is Northwest Seal Rock, and California state waters form a semicircle around this rock with a radius of 3 nautical miles.



Under California state law, bottom trawling is prohibited within 3 nautical miles of shore. In state waters beyond 3 nautical miles from shore, where the state boundary line is pushed out by offshore rocks, bottom trawling is not prohibited. For this reason, most of Saint George Reef is open to bottom trawling despite being in California state waters.

In meetings with Brookings and Eureka fishermen, the northern collaborative discussed the Saint George Reef area. Bottom trawlers indicated they tended to avoid the reef, and the data layers illustrated this—bottom trawling effort heat maps are clear on Saint George Reef, and historical trawl effort shows little overlap with the reef feature. Fishermen did mention that they trawl for shrimp in the 30-50fm range to the north and south of the reef, and sometimes in the 60-90fm range outside the reef.

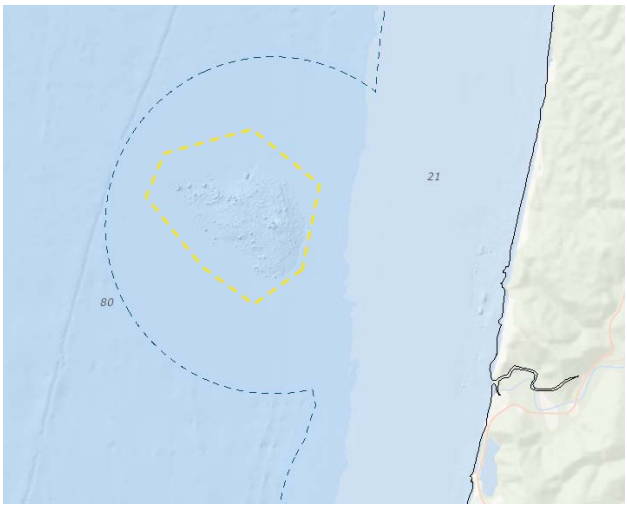
The shape shown here is intended to cover the parts of Saint George Reef that are beyond 3 miles from shore. The seaward boundary lines are drawn around the hard substrate of the reef, as verified by fishermen's understanding. The shoreward boundary line could be drawn either as a smooth curve running 3 miles offshore (flush up against the state waters closure) or in straight line segments closer to land (overlapping somewhat with the state waters closure). Most of the existing EFH Conservation Areas off California, established in Amendment 19, used the latter approach.

Note that a state marine conservation area (Point Saint George SMCA) covers part of the shape as sketched, so some of the ground is already closed. The proposed shape as drawn cuts across the SMCA diagonally, encompassing about half of it.

Further conversations are needed with the State of California in terms of implementation for this area, as it involves state waters. Those discussions will be conducted over the upcoming months.

Reading Rock Reef

Reading Rock is an exposed rock north of Trinidad Head, in northern California. The rock is part of a submerged reef in the 20-30fm range, represented in the EFH Data Catalog substrate layer as a distinct patch of hard substrate. Fishermen's understanding of the area matches the NOAA data fairly well, in terms of placement and extent of the reef.



Some groundfish bottom trawling took place historically in the area, but fishermen indicated they generally avoid the reef. Historical trawl effort patterns confirm this, as most tows run either on the shoreward or seaward sides of the reef. While a few tow lines run across the reef, these are likely curved tows that are misrepresented by the endpoint-to-endpoint method of drawing tow lines with state logbook data. Fishermen noted that in this area, shrimp effort stays offshore of the reef, generally in the 40fm range.

As discussed above with Saint George Reef, the state waters surrounding Reading Rock are open to bottom trawling because they are over 3 miles from shore. Given the rocky reef habitat, and the fact that most people avoid this area when trawling, this seemed like an appropriate area for protection.

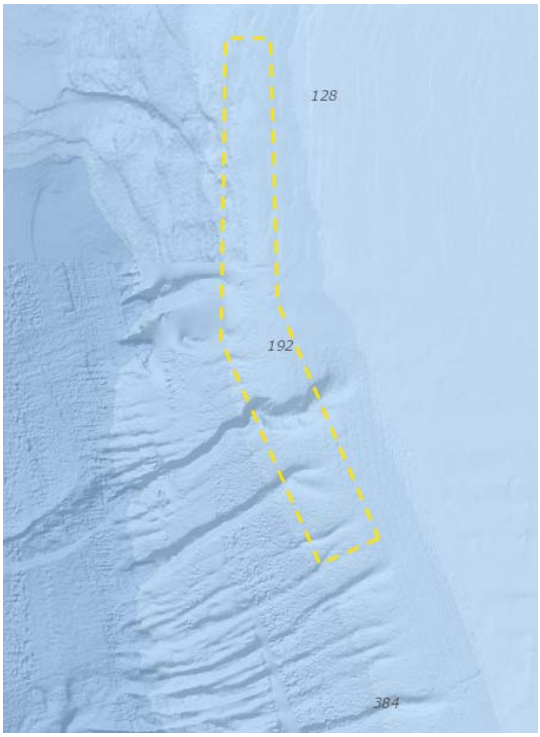
The shape shown here was drawn based on the substrate data and nautical chart, to encompass the reef and a small buffer around it. Initially there was concern with maintaining access to tows that go around the reef (both on the outside and inside), but it was pointed out that a California state marine reserve and state marine conservation area exists in this area, so those tows are not viable in any case. With the configuration shown here, and the state MPAs, it should still be possible to tow north from Reading Rock.

The collaborative group realized the distinction about state waters beyond 3 miles from shore relatively late in the port meeting process, so the Reading Rock area was not sketched and included in the straw man package circulated to the fleet for feedback. The shape was sketched only recently, and further conversations are needed to vet the area fully. The collaborative group believes it is an area that stakeholders could agree on, possibly with some modifications, but for now it remains a "Recommendation in Progress."

Reading Rock Shelf-Slope Break

This is an area on the shelf-slope break offshore from Reading Rock, which is covered largely by the year-round Trawl RCA. It was fished fairly heavily by groundfish bottom trawlers historically, and no hard or mixed substrate shows up in the EFH Data Catalog for the area. Minimal shrimp effort takes place in this area; shrimping occurs mostly in shallower depths in this region.

This area is under consideration based on concern expressed by some of the conservation NGOs about



maintaining some protection for the shelf-slope break area, in the event of lifting the RCA. Interest was also expressed in preserving some of the areas that have potentially "recovered" during the time the RCA has been in place. Because the soft substrate in this area may be returning to a relatively undisturbed state (in terms of invertebrate populations, sediment layering and internal structure, tunneling activity, etc.), NGO representatives expressed the view that it could be worth saving some of this and putting it "in the bank."

This area also was identified by fishermen in 2014 as a possible area of the RCA to retain, when the RCA was being discussed for removal separately from EFH. It is not clear whether the reason for fishermen's identification of the area was due to high bycatch risk of overfished species, but if so, it would suggest the area is habitat for some of the overfished species of rockfish. Fishermen's identification of the area also could have been because nobody was particularly interested in fishing there.

In terms of habitat characteristics, the southern part of this area has small canyonheads, making for an undulating sort of topography along the shelf-slope break. There are a few coral and sponge observation records, mostly from the trawl survey, as well as some predicted coral habitat in the area.

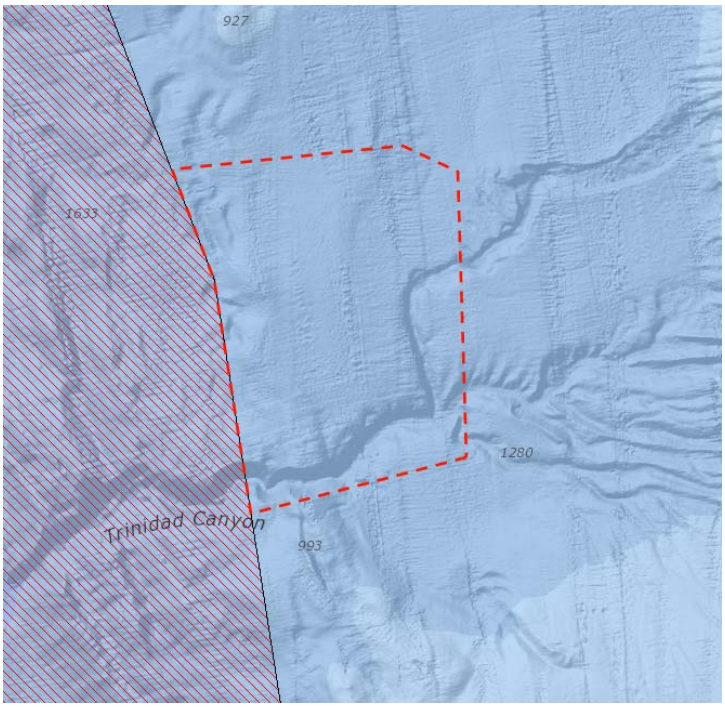
This shape was included in the straw man package circulated to the fleet, but relatively little feedback was received on it. One fisherman mentioned he used to tow for sablefish along the southern part of the area. Although the area was discussed in Eureka port meetings, the collaborative group determined it should be classified as a "Recommendation in Progress" because not enough buy-in was received to classify it as full recommendation. It may be possible to reach that point, but further discussion and more clear approval from the fleet is needed.

Trinidad Canyon

The upper portion of Trinidad Canyon is a broad basin in deep water. Tributary canyons run up to the shelf-slope break on the east side of the basin, and on the west side a single steep trench drops off to the abyssal plain. This area was identified for discussion by conservation groups based on the canyon feature, coral and sponge observations, and low trawl effort.

In port meetings, Eureka and Brookings fishermen indicated there may have been some historical effort in this area, but due to the depth (most of the area is in the 600s, and the trench drops down to over 800fm) nobody is currently fishing there. Brookings fishermen said they tow on the north side of the basin in the 600fm range, but generally do not go any further south than that. Eureka fishermen suggested parts of the basin may have been fished for black cod and hardheads

at some point in the past, and the south side of the basin (south of the trench) is actively used today. EFH Data Catalog effort layers show consistently low effort in the area, and historical trawl effort patterns show very low effort in the area. No shrimping activity takes place in the vicinity, given the depth.



Fishermen noted they occasionally found brain coral in the northeast end of the area, near the 633 reading and "h" notation on the nautical chart. Several coral and sponge observations are recorded in the basin from the trawl survey, including black coral and glass sponges.

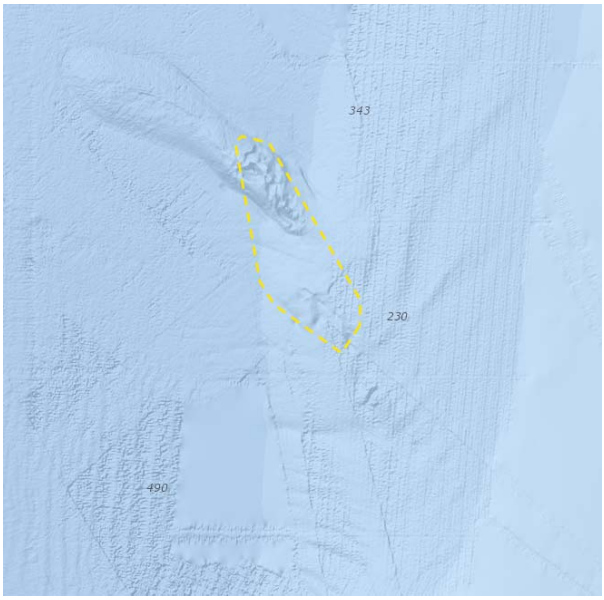
In port meetings a draft shape was sketched for this area with the intent of avoiding active fishing grounds while also encompassing some of the coral areas and part of the deep sedimentary basin. The area was included in the straw man package circulated to the fleet, and discussed in follow-up meetings. Relatively little feedback was received on the area, which the collaborative group interpreted as reflecting low interest in the area from a fishing perspective. After the final round of port meetings, a few adjustments were made to clean up the shape and remove excess waypoints.

As a final note, if this area is adopted as an EFH Conservation Area, it might make sense to draw the seaward boundary out slightly (and possibly in a straight line), to create a bit of overlap between the 700fm line and the EFH Conservation Area. This would allow for future adjustments to the 700fm line without risking opening up a gap between the two areas.

Mad River Rough Patch

This is a ridge that runs northwest-southeast at around 200 fathoms in depth, due west of the Mad River. It is visible in the bathymetry data layer, and substrate has been mapped with high confidence in some areas, indicating that the ridge is a known feature for scientists. The substrate maps show hard and mixed substrate along the ridge (in the recently mapped areas),

and some hard substrate extending to the southeast (in unmapped areas). Part of the ridge is covered by the year-round Trawl RCA.



Fishermen confirmed there is a patch of rough ground here, with a number of trawl hangs. The area in general is heavily trawled, though, so fishermen indicated that if an EFH Conservation Area were added here, it would be critical to get the design right so that the many tows running around and near the rough ground are not cut off. The EFH Data Catalog effort layers confirmed this, showing high bottom trawl effort outside the RCA around the ridge feature.

The collaborative group worked based on fishermen's plotter data showing the hang locations to draw a fairly tight shape around the known bad ground. The draft shape ended up encompassing the southeastern half of the ridge and a bit of surrounding area; the trawl hang locations did not map onto the ridge feature exactly, but rather were offset slightly to the southeast.

The draft shape was circulated for feedback in the straw man package with a specific request for input on the waypoints, given the high usage of surrounding areas. Feedback was received from NGOs recommending the area be expanded to include the full ridge feature and surrounding areas of the RCA. This area was noted as a good candidate for providing protection around the shelf-slope break, in addition to the ridge feature.

In follow-up discussions it was noted that MBARI conducted at least one research dive with an ROV in this area in 1997. Researchers found abundant mushroom coral, as well as some sea pens. The substrate and relief characterization from the dive is not known. The dive site is located outside the draft shape.

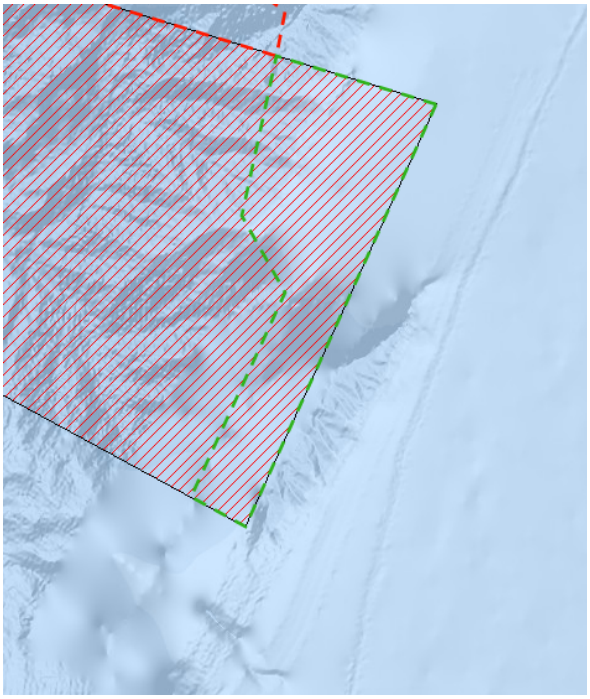
No specific concerns were voiced by Eureka fishermen about this area in response to the straw man package, but unlike the Trinidad Canyon area above, the collaborative group was reluctant to interpret this as a lack of interest given the high usage of surrounding areas.

In the course of reviewing input and cleaning up the shapes, the northern collaborative discussed whether it could make sense to expand the southern boundary of the draft shape a bit, in order to include the full extent of the mixed substrate around the 182 reading on the chart. This change

was made, and is reflected in the shape shown in the map above. The MBARI dive site remains outside the shape, as does most of the adjoining RCA.

This area is classified as a "Recommendation in Progress" due to the recent modification, which has yet to be fully vetted. Other changes to this area may need to be made as well, based on feedback from industry. The collaborative group believes a workable shape can be agreed to in this area, but a few more conversations are needed.

Eel River Canyon Modification 1



This area was requested to be opened by the EFH proposal from Fishermen's Marketing Association in 2013. It is comprised of shallow waters around the canyonhead of Eel River Canyon, on the eastern end of the existing EFH Conservation Area. Depths range from 30fm on the northeast corner to around 200fm on the southwest side of the potential reopening. The request for reopening was based on the fact that the EFH Conservation Area established in Amendment 19 extended too far onto the shelf, and cut off shallow tows that historically ran around the canyonhead. Fishermen in Eureka reiterated this, and indicated that a reopening in this area would be useful in restoring fishing opportunity.

In terms of habitat features, part of this area is shallow shelf and part of it covers the uppermost slope of Eel River Canyon. This uneven coverage is a result of the rectangular shape of the existing EFH Conservation Area mapping onto the zig-zag edge of the canyonhead. Shelf and slope areas both appear to be soft sediment according to the EFH Data Catalog; fishermen agreed with that characterization. One sea pen observation record exists in the area, from the trawl survey.

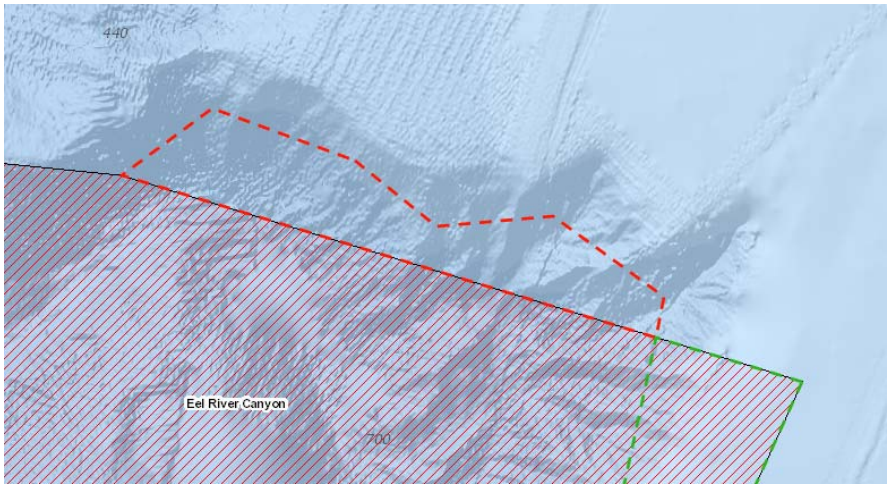
In the Eureka port meetings, this shape was initially sketched to match the 2013 Fishermen's Marketing Association proposal. That draft shape used the 75fm line as defined by NOAA waypoints, to mark the reopening boundary. The reopening idea was circulated in the straw man package to the fleet, and generally supportive feedback was received. NGO representatives

indicated this seemed to be a sensible change, especially in conjunction with the other changes to Eel River Canyon discussed in the next few sections.

In the final round of scrutiny and adjustments, the collaborative group modified the shape slightly to match up with the revised addition on the north side (see Eel River Canyon Modification 2), and to better match the actual contour. Because the main purpose of this reopening is to restore access to north-south tows along the shelf, the group attempted to reshape the area to accomplish that purpose while reopening less of the deeper waters of the canyon.

The revised shape, shown above, may need some further adjustments based on input from industry. The collaborative group is nonetheless confident that a surgical reopening in this area is acceptable to all stakeholders, and accordingly the area is classified as a "Full Recommendation."

Eel River Canyon Modification 2



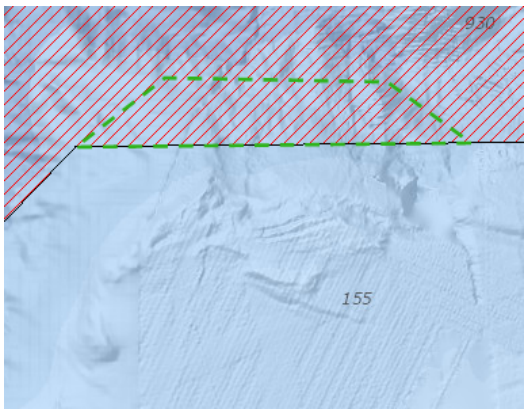
This area was identified by NGO representatives as a place where the boundary of Eel River Canyon EFH Conservation Area could be modified to better match the actual canyon feature. The bathymetry data layer and nautical charts show Eel River Canyon dropping off steeply in this area, with depths going from 100-400fm over the course of less than a mile. A research dive was conducted by MBARI in 1997, in the 200-350fm range. Scientists found mostly mushroom corals and sea pens along the canyon wall. Substrate characterization from the ROV dive is unavailable but the EFH Data Catalog layers suggest it is soft sediment.

A draft version of this shape was circulated to the fleet in the straw man package, and no concerns were raised. After the final port meetings, the collaborative group went back and scrutinized the effort data layers to double-check that the new boundary line would not affect any fishing on the north side of the canyon. Given the current configuration of the RCA (which cuts across this area), no real effort seaward of the RCA passes through this area. On the shoreward side of the RCA, a handful of shelf tows either begin or end around the canyon edge, so the draft shape was reduced in size in order to avoid creating an enforcement risk there.

This area will continue to be discussed, but any further modifications should be nominal. As such, it is classified here as a "Full Recommendation."

Eel River Canyon Modification 3

This proposed re-opening, located on the south side of the existing Eel River Canyon EFH Conservation Area, is based on feedback from fishermen in Eureka. Trawlers in that port indicated that they used to tow around the 350fm contour on the south side of the canyon, and the EFH Conservation Area established in Amendment 19 cut off those tows. They described the area as productive dover sole fishing grounds, with soft muddy bottom.



Substrate records in the EFH Data Catalog agree with the characterization as soft substrate, though the confidence level is low. No coral or sponge records exist in the area from the trawl survey, and no research dives have been done to the best knowledge of the collaborative. Effort maps from the EFH Data Catalog show some effort in the earlier (2002-2006) period, with less in the recent (2006-2010) period.

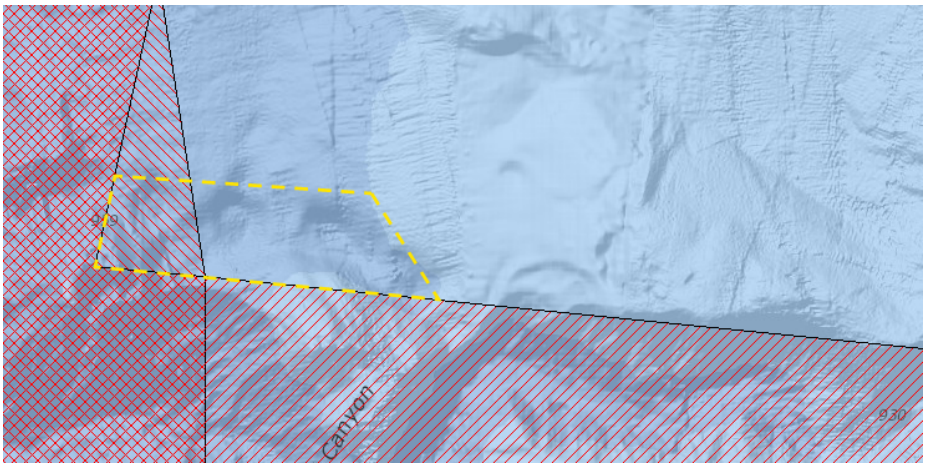
The shape shown here was initially drawn in a Eureka port meeting, and was intended to more or less trace the 400fm contour line on the nautical chart. Fishermen indicated this would provide them with sufficient room to tow along the side of the canyon and then turn southward to continue to tow.

The draft shape was included in the straw man package circulated in June, and got generally positive feedback. Because the draft shape directly addressed fishermen's request, and conservation groups had no concerns, no further modifications were made and the shape is included here as a "Full Recommendation."

Eel River Canyon Modification 4

This area came up as an attempt to get at the sponge bycatch hotspot that exists on the north side of Eel River Canyon. The WCGOP sponge bycatch data layer for 2002-2006 shows a distinct hotspot on the north side of Eel River Canyon, and to a lesser degree the 2006-2010 data layer

does as well. These areas were discussed in the Eureka port meetings, in an attempt to pinpoint the source of the invertebrate bycatch. Several fishermen noted a commonly-used tow that comes down from the north in the 200-300fm range and bends west along the north flank of the canyon, ending somewhere around the 356 reading on the nautical chart. Other fishermen mentioned deep-water tows on the north side of the canyon. No clear consensus emerged, however, on where the sponge bycatch was coming from.



A few people mentioned that the ridge or hill under the 384 reading on the nautical chart was known to have high concentrations of invertebrates. The ridge is mostly underneath the existing Eel River Canyon EFH Conservation Area, but the north side of it is currently exposed. This area was discussed several times, and finally in the last Eureka port meeting a small triangle was drawn for a potential extension of the Eel River Canyon EFH Conservation Area to cover the north side of the ridge. By drawing a box around this area, the hope was to close off the source of sponge bycatch and get rid of the hotspot on the north side of the canyon.

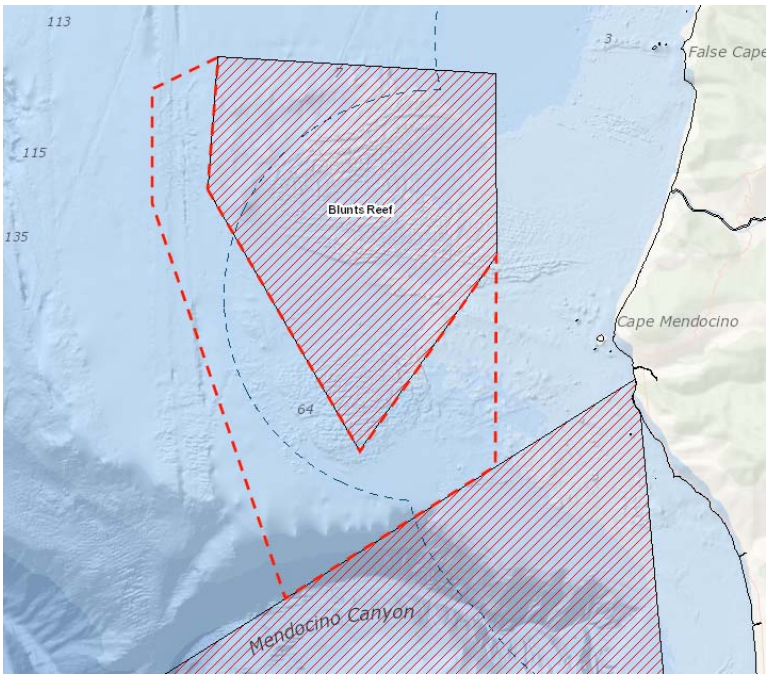
In terms of the habitat data layers in the EFH Data Catalog, one black coral observation record exists in the area from the trawl survey, and the substrate maps show the area to be soft sediment (though with a low confidence level). In terms of bottom trawl effort, the data layers from both time periods (2002-2006 and 2006-2010) are similar, showing a low level of effort on the east side of the area (possibly an artifact of spatial aggregation techniques) and no effort on the west side. Historical trawl patterns show very low levels of effort on the east side, and almost no effort out in the 600fm range.

In the process of cleaning up shapes and cross-referencing the data layers, the collaborative group noticed the triangle shape created an awkward point for fishermen to navigate around, and given the nonexistent effort on the western side, decided to extend the shape westward out to the existing deepwater line. This expanded the shape somewhat (though in an area with no effort), and made a less jagged boundary.

Because this shape emerged late in the discussions and has been recently modified, it is classified as a "Recommendation in Progress." Input and vetting from fishermen are necessary, and further modifications may need to be made to the shape. That said, given the track record of the Eureka port meetings and the collaborative nature of discussions between stakeholders, the group believes consensus will be reached.

Blunts Reef Modification

This shape is designed to incorporate the full extent of the rocky reef areas around Blunts Reef, and to connect up with the existing Mendocino Ridge EFH Conservation Area to the south as well as a state marine reserve.



The EFH Data Catalog substrate layers show hard bottom (assessed with medium confidence) extending to the west and south beyond the existing EFH Conservation Area. The reef is generally shallow, occupying the 30-45fm range off Cape Mendocino. Eureka fishermen confirmed that this area is generally rocky.

In terms of usage, Eureka fishermen indicated they do not trawl this far inshore; in the region around Cape Mendocino most bottom trawling takes place either shoreward of the RCA in the 80-100fm range, or outside the RCA in deeper water. Effort data layers more or less match this description, with little effort over Blunts Reef in the earlier time period (2002-2006) and almost none in the later time period (2006-2010). Historical trawl information confirms that little if any effort crossed the reef. There is crabbing in the area and there may be fixed gear fishing as well, but those activities would not be affected by the expansion described here. Also there is a state marine reserve in this area—South Cape Mendocino SMR—running from shore out to the edge of state waters, so some of this area is already closed.

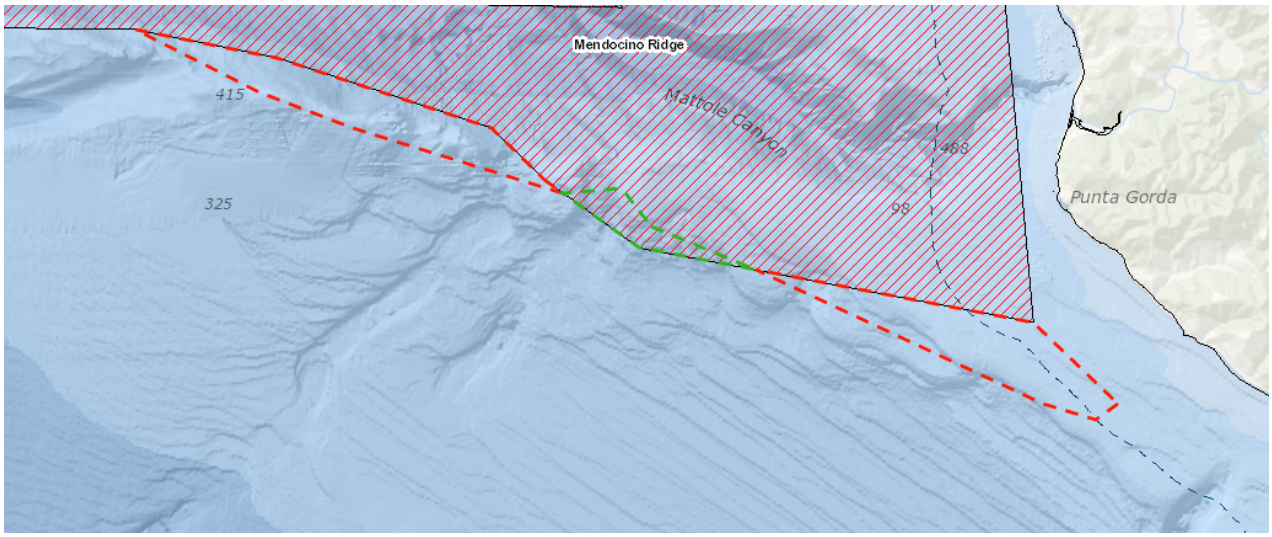
A draft shape was drawn around the hard substrate areas, and circulated for feedback in the straw man package. Generally positive feedback was received from NGOs, and industry members indicated it would not affect them.

In the final round of port meetings, the collaborative group made a few adjustments to the Blunts Reef area, primarily to straighten out lines and include more of California state waters. This was necessary because the state waters are more than 3 miles offshore.

Overall, this area is fairly straightforward, and is classified as a "Full Recommendation."

Mendocino Ridge Modification 1
Mendocino Ridge Modification 2
Mendocino Ridge Modification 3

These modifications to the existing Mendocino Ridge EFHCA are intended to adjust the southern boundary to better match the usable and non-usable areas.



Fishermen indicated they trawl along the south side of the escarpment, but rarely if ever use the north side. There was pretty good consensus that anything northward of the 200fm line is rough bottom and difficult to trawl. This includes the area called "the peanut" (because the 200fm line makes a peanut shape on the chart). A draft shape was drawn to encompass this area, which would add to the existing EFH Conservation Area. Specifically, a line was traced that started at the peanut and ran northwest along the ridge, and southeast until the line hit the current EFH Conservation Area. This area, labeled "Mendocino Ridge Modification 1," shows up in the EFH Data Catalog as hard substrate, but with a low confidence level. No coral or sponge observation records are located in the area. There is a small amount of historical trawl activity in this area, but most tows end before they reach this point.

Fishermen also noted there is a corner of the existing EFH Conservation Area that is soft bottom and fishable, which would be helpful to restore access to. The area is located on the southwest side of the current closure, near the 234 reading on the chart. EFH Data Catalog substrate layers confirm fishermen's understanding that this is a soft sediment area (though confidence is low), and no coral or sponge observations are recorded in the area. A draft shape was sketched to re-open this area, essentially continuing the line that had been drawn in deeper waters around the 200fm contour. The area clipped off by the line was designated as a draft shape for reopening, and labeled "Mendocino Ridge Modification 2." After this draft shape was circulated for feedback, it was modified in the fourth round of port meetings at the request of Eureka fishermen who provided specific feedback indicating a cut inward, near the 120 reading on the chart, would be helpful.

Closer in to shore, fishermen characterized the area as having some rough patches located off the south side of the existing EFH Conservation Area, in the 50-140fm depth range. They indicated these areas are generally avoided when bottom trawling. To sketch a draft shape for adding this area to the Mendocino Ridge EFH Conservation Area, the same line (which had started out as the 200fm line out by the peanut) was continued further shoreward. By drawing the line all the way to state waters a wedge was created, and the wedge was named "Mendocino Ridge Modification 3." This shape would protect the eastern end of the escarpment and any rocky patches, and would maintain protection for part of the area currently covered by the year-round Trawl RCA. The EFH Data Catalog layers show a bit of hard substrate on the shallow end of the wedge (around 50fm), and no coral or sponge observation records. Historical trawl data shows little relevant effort in the area.

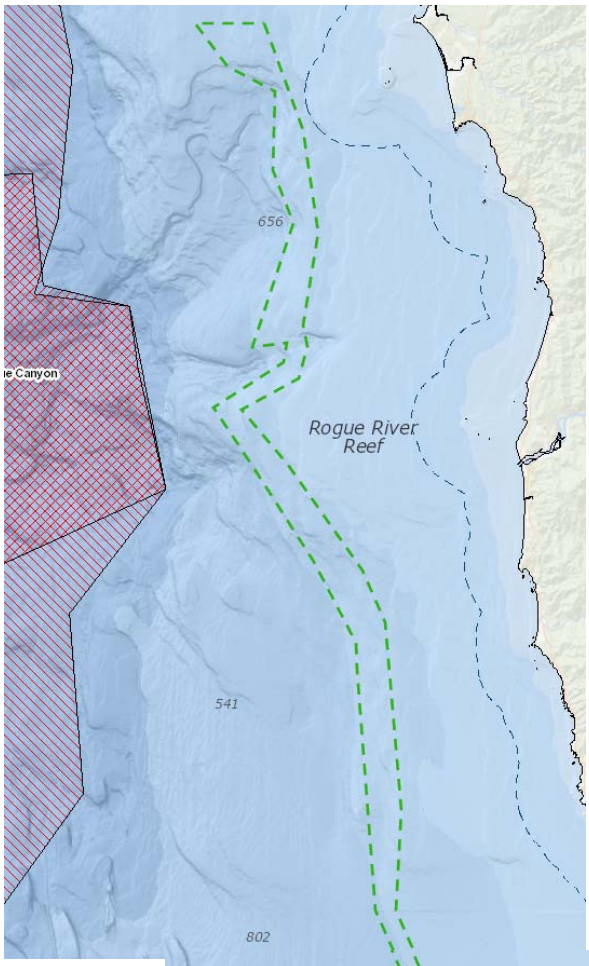
The net effect of these three changes is to straighten out the southern boundary line of the Mendocino Ridge EFH Conservation Area, while opening up some soft bottom areas and protecting some areas of more sensitive habitat. These shapes were included in the package circulated to the fleet, and received generally positive feedback. Accordingly, they are classified as "Full Recommendations."

Trawl RCA 42°50' to 40°10'

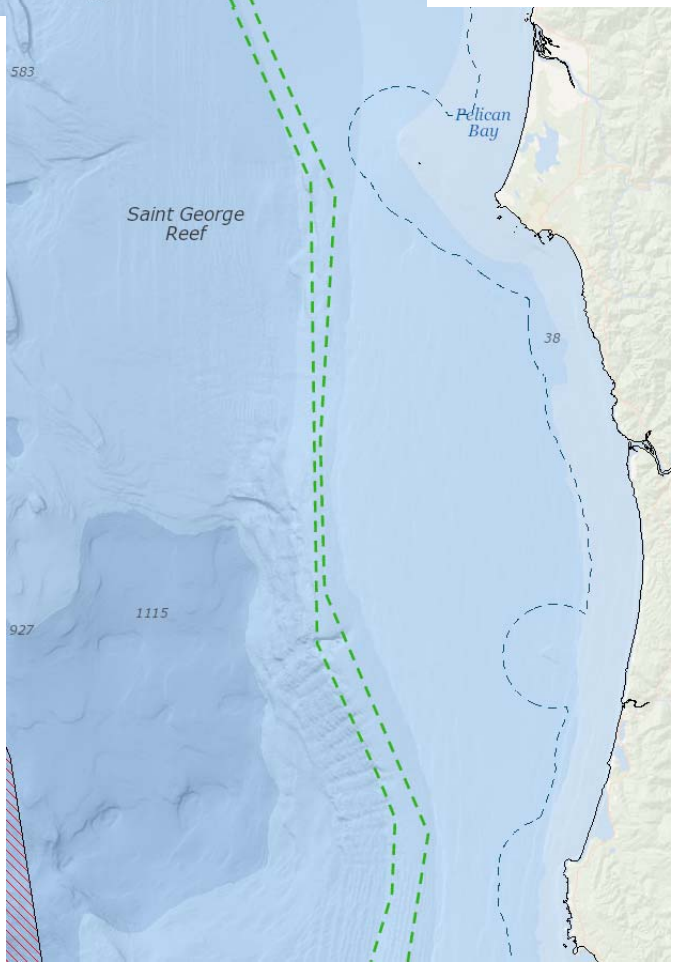
In the region from Cape Blanco to 40°10', the year-round Trawl RCA is comprised of the area between the 100fm line and the modified 200fm line. Substrate data layers indicate the Trawl RCA in this region is primarily comprised of soft sediment. Small patches of inferred hard substrate exist off Oregon, but as noted above, the accuracy of these areas is unclear.

In terms of regular (not inferred) hard substrate and mixed substrate, a small part of the outer reef at Rogue River Reef appears to extend into the RCA, the Mad River Rough Patch overlaps in

part with the RCA, and hard substrate at Mendocino Ridge is located in the RCA. Of these areas, the Mad River Rough Patch is under consideration for adding as an EFH Conservation Area, and the area at Mendocino Ridge already is located in an EFH Conservation Area. The Trawl RCA outside Rogue River Reef currently is not included in this package as part of an EFH Conservation Area, but that part of the RCA was discussed in port meetings with the question of whether it could be added to the Rogue River Reef EFH area. No conclusion was reached, but discussions may continue in the upcoming months regarding that area.



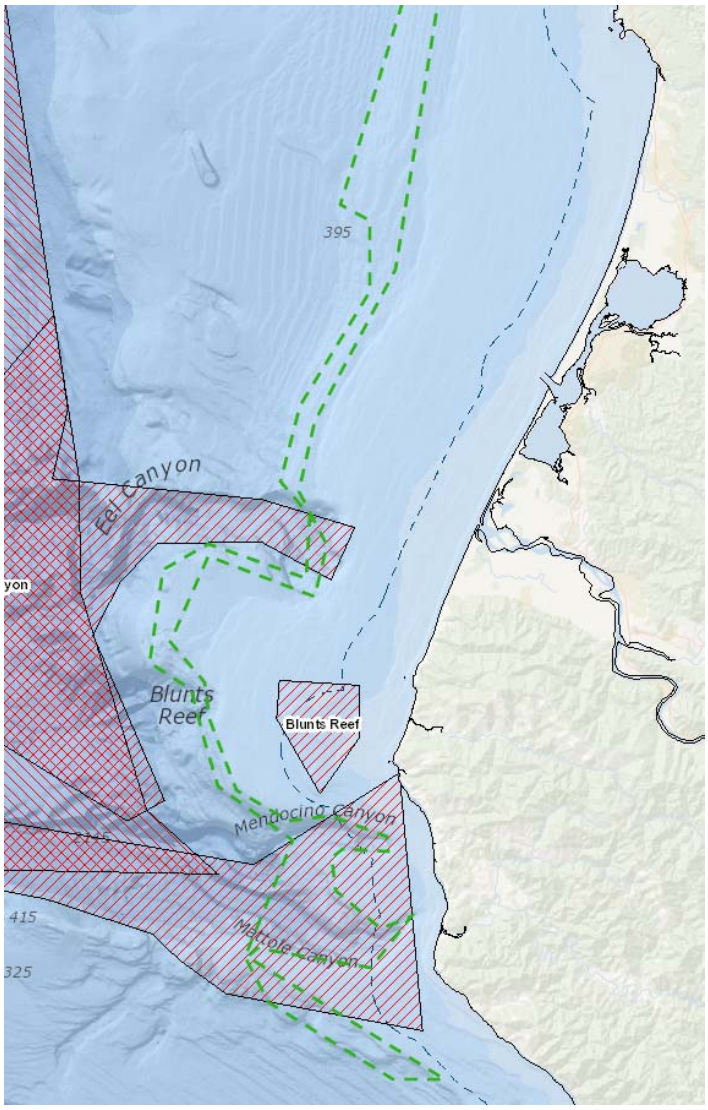
The proposed Reading Rock Shelf-Slope Break area covers a significant amount of area currently within the Trawl RCA. Other proposed EFH areas cover portions of the Trawl RCA in this region, including Mad River Rough Patch, Eel River Canyon Modification 2, Blunts Reef, and Mendocino Ridge Modification 3.



The Trawl RCA was discussed in port meetings and fishermen indicated that the RCA is generally soft muddy bottom, other than the areas noted above. They described the RCA as an unremarkable area, in terms of substrate, structure-forming invertebrates, and topographic relief. The coral and sponge observation data layer more or less agrees, showing an amount of coral and sponge records in the Trawl RCA that is roughly similar to that found in other areas on the slope.

In port meetings and with the straw man package fishermen were asked explicitly whether they were

comfortable with the Trawl RCA being opened, and whether there were any areas they would like to stay closed. Essentially all the feedback received by the northern collaborative indicated that fishermen favored opening the RCA fully, and were willing to assume the bycatch risk. Several industry members specifically mentioned the full accountability provided by the ITQ system and 100% observer coverage, and voiced a desire to take advantage of that accountability and deal with their own bycatch.



Feedback received from conservation groups indicated that further protection of the shelf-slope break in this region of the coast would be preferable. Several NGOs explicitly supported the Reading Rock Shelf-Slope Break area for this reason, and asked that the Mad River Rough Patch be enlarged to cover more of the potentially recovered RCA areas. Overall, though, most conservation groups acknowledged the changes for this region of the coast were positive, and the package as a whole could be supported, especially given the improvements in fishing opportunity that will be created.

Because industry members appear ready to account for their own bycatch, and the package of changes in this region of the coast has wide support, the Trawl RCA reopening from Cape Blanco to 40°10’ is classified as a “Full Recommendation.”

Central Regions

These regions were labeled "southern" regions in the advance briefing book submission (Agenda Item H.8.b, Public Comment 1). Here they are labeled "central" regions, in order to differentiate them from Region 6 (Point Conception to Mexico).

The collaborative group working on the central region built on established working relationships between some NGOs and industry members in a number of California ports, including Fort Bragg, Half Moon Bay, Moss Landing, Monterey, and Morro Bay. Participants were able to identify common goals and initiate a collaborative approach that used fishermen's knowledge of the local areas and scientific data from a variety of collaborative research projects in the region.

The central region collaborative developed a conceptual framework for how to approach reconfiguration of EFH and RCAs. The framework lays out the goal of the central collaborative, which is to protect sensitive habitats and reduce bycatch of overfished species, while improving fishing opportunities for the bottom trawl fleet relative to the current array of EFH Conservation Areas and trawl RCA. To achieve this, the collaborative sought to:

- Represent and protect essential fish habitat, with a focus on high relief and hard-bottom areas on shelf and slope, biogenic (corals, sponges, anemones) and other sensitive habitat, and areas with overfished species.
- Improve access to fishing grounds and healthy stocks of target species.
- Reduce bycatch risk and support continued rebuilding of overfished populations.
- Develop a scientifically-based design that incorporates local knowledge and the best available data in the design of effective habitat protection areas that can be monitored and evaluated.

In the central region, the collaborative used locational information on overfished species catch compiled from electronic logbook ("eCatch" application) data from the California Groundfish Collective. eCatch is an online database developed by The Nature Conservancy that provides a simple way for fishermen to collect, map and share their fishing information. Fishermen from the ports between Morro Bay and Fort Bragg contribute data to eCatch on a voluntary basis, recording spatial catch information in order to assist in future bycatch avoidance and risk pool operations. The catch information collected through eCatch is protected with confidentiality agreements, but fishermen in the central region allowed aggregate catch information stored within eCatch to be used during closed sessions to view the distribution of overfished species encounters in areas proposed for EFH and RCA modification.

In addition, for the area between Bodega Bay and Cambria, The Nature Conservancy of California has compiled a geodatabase of overfished species observational data from a variety of scientific and research-based data sources. Over 30 datasets from a variety of federal, academic, and non-profit organizations were compiled and include thousands of spatially-explicit observations of overfished species. One example dataset is from the recently completed study of the RCA using visual and fishing surveys conducted as part of an Exempted Fishing Permit in a collaborative effort by The Nature Conservancy of California, Environmental Defense Fund, Moss Landing Marine Laboratories, NMFS, and local fishermen.

In the course of nine port meetings and additional discussions, the central collaborative working group used the framework and its goal statement as a guide to develop proposed modifications. Over 69 distinct areas were discussed and annotated in SeaSketch. A subset of those areas were converted to sketches of potential boundary modifications, which were in turn vetted with stakeholders, yielding the specific recommendations described below.

4. 40°10’ to Ano Nuevo

This region of the coast is characterized by a narrow shelf around Shelter Cove and Fort Bragg, which broadens out as it heads south. Off Point Reyes and San Francisco, the shelf is wide enough to rival the Oregon or Washington coast. Carved into the slope in this region are several significant canyon complexes, and a handful of seamounts mark the offshore waters. Structural complexity is found on the shelf in the form of Cordell Bank and the Farallon Islands, as well as several smaller features.

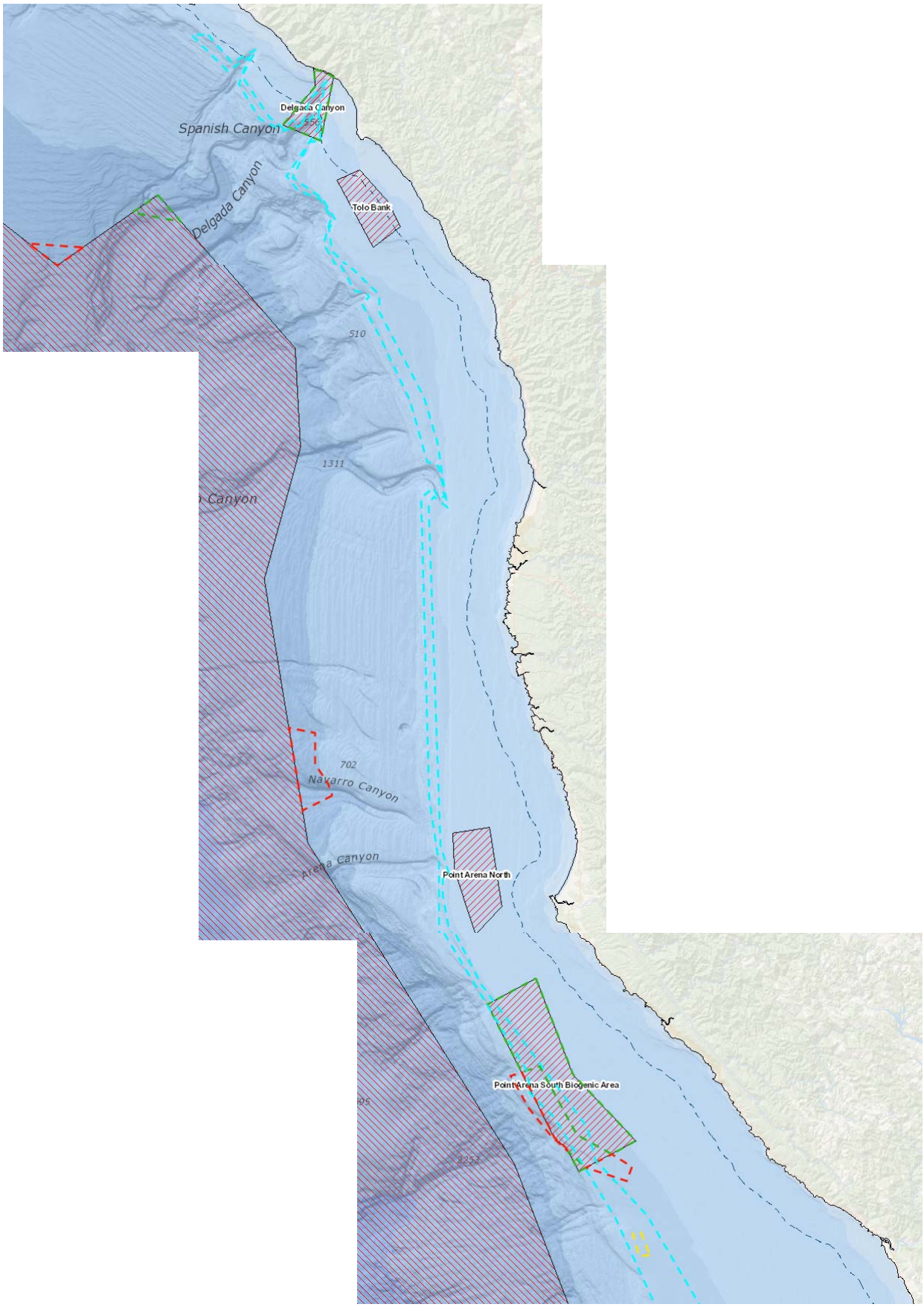
The largest trawl fishing port in the region is Fort Bragg, but there are groundfish fishermen based out of Half Moon Bay as well. A small number of fishermen from Moss Landing and Monterey also fish in the area, as do a handful of San Francisco fishermen. Significant bottom trawl effort occurred in this region in the 1970s-1990s, focused primarily on the outer shelf and upper slope.

Port meetings were conducted with fishermen in Fort Bragg, Half Moon Bay, and Monterey, as well as numerous follow-up discussions and individual conversations. Representatives of the Cordell Bank National Marine Sanctuary (CBNMS), Greater Farallones National Marine Sanctuary (GFNMS), and Monterey Bay National Marine Sanctuary (MBNMS) also provided input on concepts in this region. Overall there was strong support for the concept of collaborative revisions to EFH and the RCA, and many “Full Recommendations” as well as “Recommendations in Progress” emerged from the discussions.

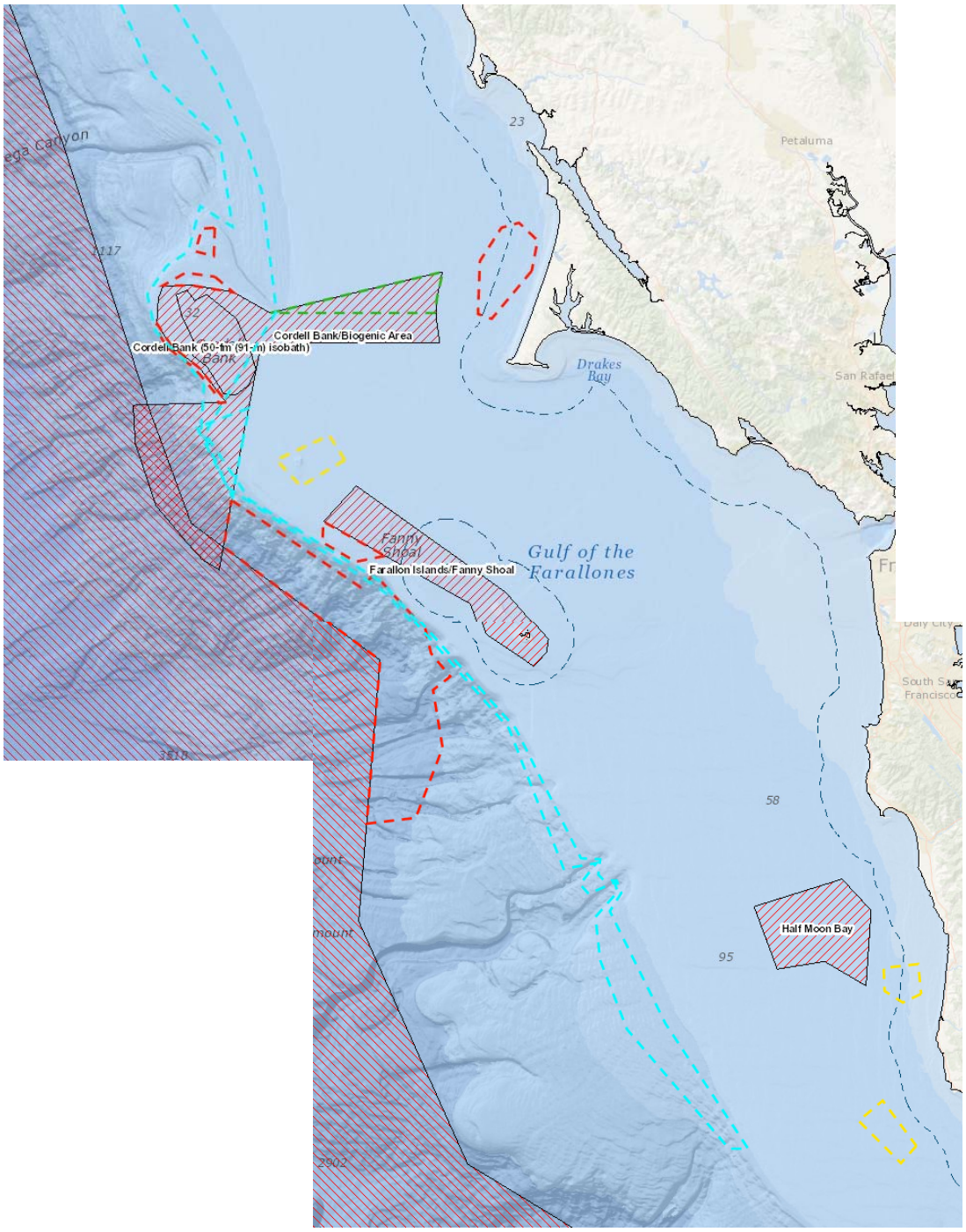
Table 4. Area Recommendations from 40°10’ to Ano Nuevo.

Area Name	Type	Status
Delgada Canyon	EFH Opening	Full Recommendation
Spanish Canyon Line Adjustment 1	EFH Opening	Full Recommendation
Spanish Canyon Line Adjustment 2	EFH Closure	Full Recommendation
Navarro Canon	EFH Closure	Full Recommendation
The Football	EFH Closure	Recommendation in Progress
Point Arena South Modification 1	EFH Opening	Full Recommendation
Point Arena South Modification 2	EFH Closure	Full Recommendation
Point Arena South Modification 3	EFH Closure	Full Recommendation
Point Arena South Modification 4	EFH Opening	Full Recommendation
Gobbler’s Knob	EFH Closure	Full Recommendation
Cordell Bank Modification 1	EFH Closure	Full Recommendation
Cordell Bank Modification 2	EFH Closure	Full Recommendation
Cordell Bank Modification 3	EFH Opening	Full Recommendation
Cordell Bank Modification 4	EFH Opening	Recommendation in Progress
Point Reyes Reef	EFH Closure	Full Recommendation
Rittenburg Bank	EFH Closure	Recommendation in Progress
Farallon Islands Modification	EFH Closure	Full Recommendation
Farallon Escarpment	EFH Closure	Full Recommendation
Pescadero Reef	EFH Closure	Recommendation in Progress
Pigeon Point Reef	EFH Closure	Recommendation in Progress
Trawl RCA 40°10’ to 37°07’	RCA Opening	Recommendation in Progress

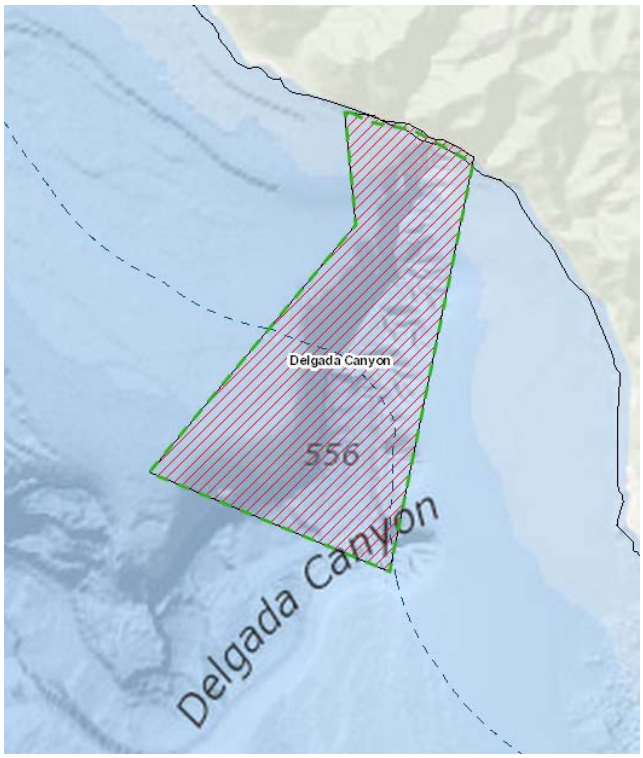
Region 4 Overview:



Region 4 Overview continued:



Delgada Canyon



During port meetings, fishermen described this area as soft, muddy bottom, with minimal rocky habitat or structure-forming invertebrates. EFH Data Catalog layers show no coral or sponge observation records in the area, and only a few small patches of hard substrate. Fishermen also noted the shelf areas nearby are valuable shrimping grounds.

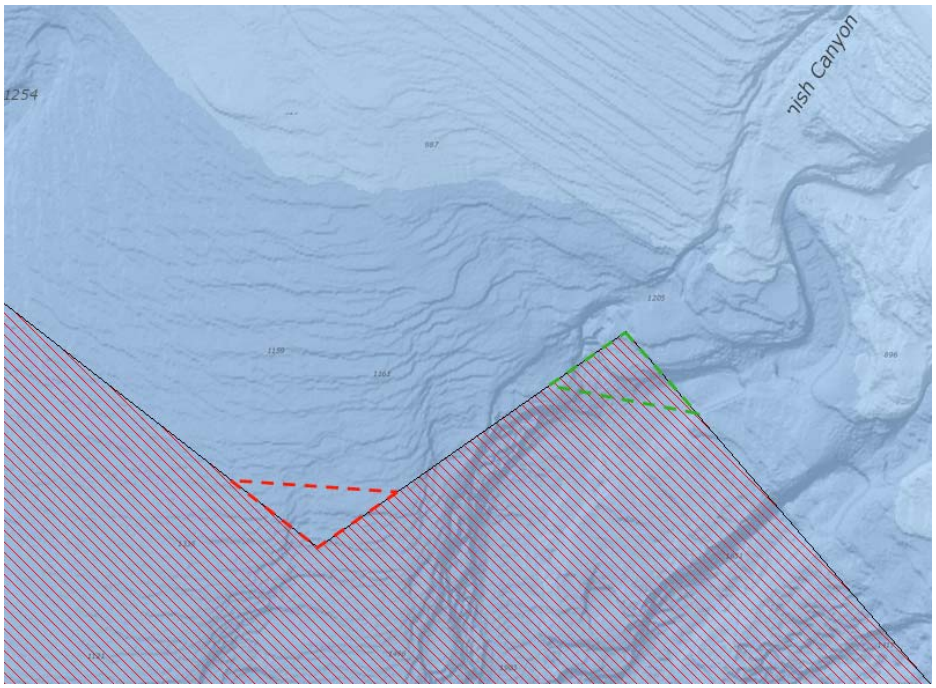
Fishermen indicated that they thought this EFH closure had been made in error during the original Amendment 19 process. Their understanding of the agreement made in 2006 was that Delgada Canyon would not be included as an EFH Conservation Area, whereas Tolo Bank would be included. In the final rule, however, both areas were included as EFH closures. Fishermen said that removing the Delgada Canyon EFH closure was a mandatory starting point for discussions along the rest of the coast in this region. This proposed opening is categorized as "Full Recommendation."

Spanish Canyon Line Adjustment 1
Spanish Canyon Line Adjustment 2

This is a small adjustment requested by a Eureka fishermen who participated in the northern collaborative process. The areas are listed here as part of the Central Region because they are south of 40°10', but the recommendation was a product of the northern collaborative.

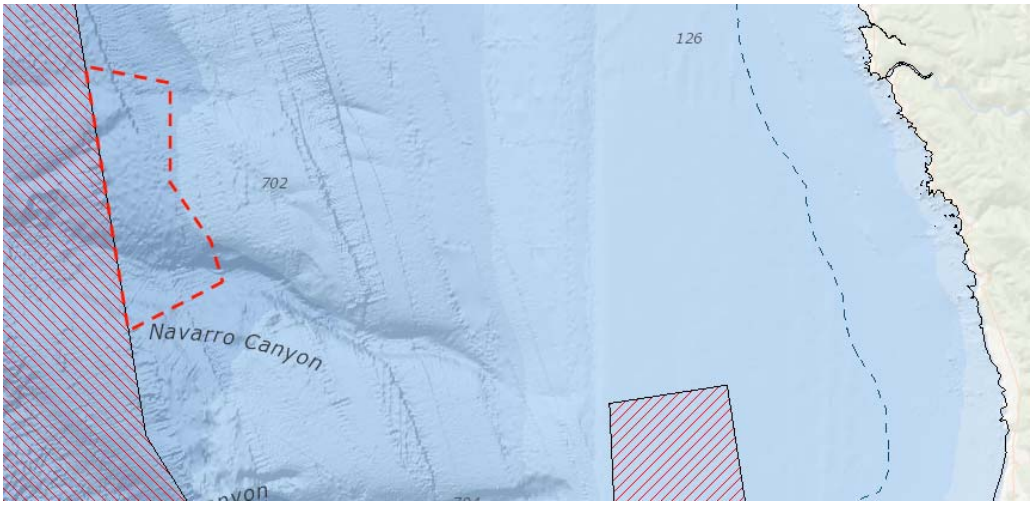
In the Eureka port meetings, fishermen indicated there are DTS tows that begin in the 500s and 600s on the western end of the Mendocino escarpment and head south from there, curving eastward as they go. These tows finish just short of the protruding tip of the 700fm line at the base of Spanish Canyon. One fisherman described difficulty avoiding the 700fm line at the end of the tow, and mentioned that currents and wind can easily push a boat into the closed area when gear is being hauled back.

To remedy this issue, the fisherman proposed re-opening the tip of the 700fm line that sticks out to the north. The change would allow boats to drift into that area while hauling back gear. No concerns were voiced about this request, and the area for re-opening appears fairly unremarkable based on the EFH Data Catalog layers. In order to offset the opening, a small matching triangle was drawn to move the 700fm line out, southwest of the opening. The net effect of these two changes is to smooth out the 700fm line as it curves around to the east. These changes are understood to be non-controversial and are classified as "Full Recommendations."



Navarro Canyon

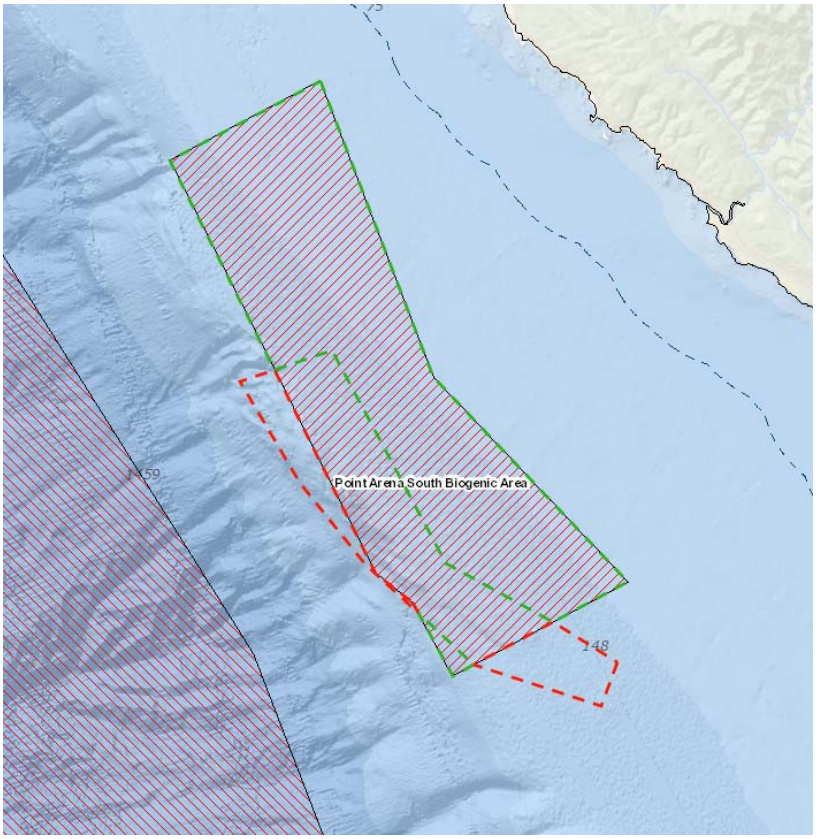
This is new shape that would cover the midsection of Navarro Canyon, as it runs down the continental slope. The area has little to no bottom trawl effort based on the EFH Data Catalog effort layers, as well as on historical trawl fishing patterns. The area ranges from 550fm to over 800fm.



Discussions during port meetings focused on attempting to protect the canyon feature while avoiding historical trawl areas and maintaining

fishing opportunity in the region. This closure is categorized as a "Full Recommendation." It likely could be implemented as either a 700fm line adjustment or as a distinct EFH Conservation Area.

Point Arena South Modification 1
Point Arena South Modification 2
Point Arena South Modification 3
Point Arena South Modification 4



These changes would reconfigure the existing Point Arena South Biogenic Area EFH Conservation Area, replacing the existing hourglass shape with an oblong shape curving across the shelf-slope break. The changes were discussed primarily during port meetings in Fort Bragg.

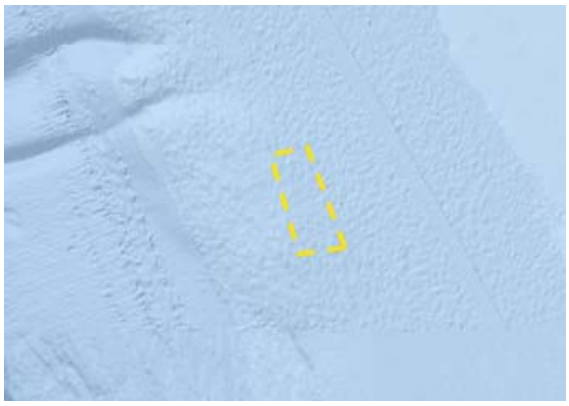
Fishermen in characterized the existing Point Arena South area as largely soft muddy bottom, except for the southwestern corner of the area. The EFH Data Catalog substrate layers agree, showing the area as likely soft bottom, with a patch of hard substrate on the southwestern corner. The soft bottom areas are proposed to be re-opened, while the hard substrate areas would be retained. Fishermen also identified some areas of mixed substrate outside the current EFH area, and these areas are proposed to be added to the EFH area.

In the part of the current EFH Conservation Area proposed to be re-opened, coral and sponge observation records are limited to two sea pens and one unidentified sponge from the trawl survey. The southwestern corner—which would be retained—shows a number of coral and sponge observation records, including glass sponges and soft corals.

Historical trawl effort is located throughout the Point Arena South Area, with the heaviest fishing along the shelf-slope break. Re-opening the soft sediment portions of this EFH Conservation Area would increase fishing opportunity in the region.

This area is categorized as a "Full Recommendation." Note that the Trawl RCA covers some of this area, so whether the area is open or closed to trawling will depend on the disposition of the RCA as well.

The Football

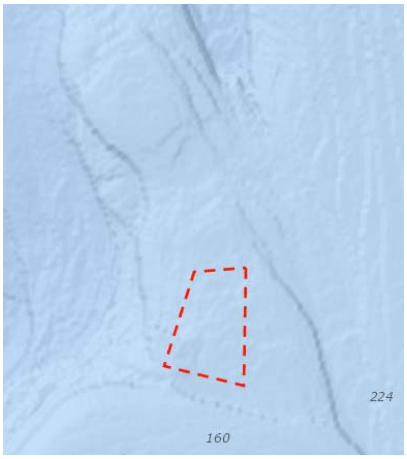


The Football is a known hard bottom feature north of Bodega Canyon, which was discussed during Fort Bragg port meetings. Fishermen identified the area as historically important fishing grounds.

Several research dives were completed at this site in September 2014, which documented a high diversity of fish species in the area. A new species of coral was discovered at this site, and several nests and hundreds of catshark eggs were observed on the seafloor. Four years earlier, another NOAA dive team surveyed the seafloor at this site and documented a moderate to steep incline covered with fine sediment and intermittent large boulders. No large habitat-forming corals were observed in those dives and the overall density of corals and anemones was found to be fairly low. Several cup corals (*desmophyllum sp.*) were observed hanging down from a sedimentary scarp and several unidentified anemones (*urticina sp.*) were found on hard substrate. This site also has a few glass sponge and sea pen observation records from trawl surveys.

During port meetings it was discussed whether a potential closure in this area could be connected to the Point Arena South area. Fishermen were skeptical of this idea, and reiterated the importance of the area for fishing. The proposed closure in this area is categorized as a "Recommendation in Progress," given the lack of consensus on its size and location.

Gobbler's Knob



This is an area of low relief mixed substrate (mapped with high-resolution sonar) that fishermen indicated includes known trawl hangs. There is limited historic fishing effort in the shape as sketched above, but more extensive historic fishing effort exists on the north, east and west sides of the shape. During port meetings fishermen identified the areas between Gobbler's Knob and Cordell Bank as important fishing grounds, and indicated

they did not want an EFH area at Gobbler's Knob to connect up with the existing Cordell Bank EFH closure.

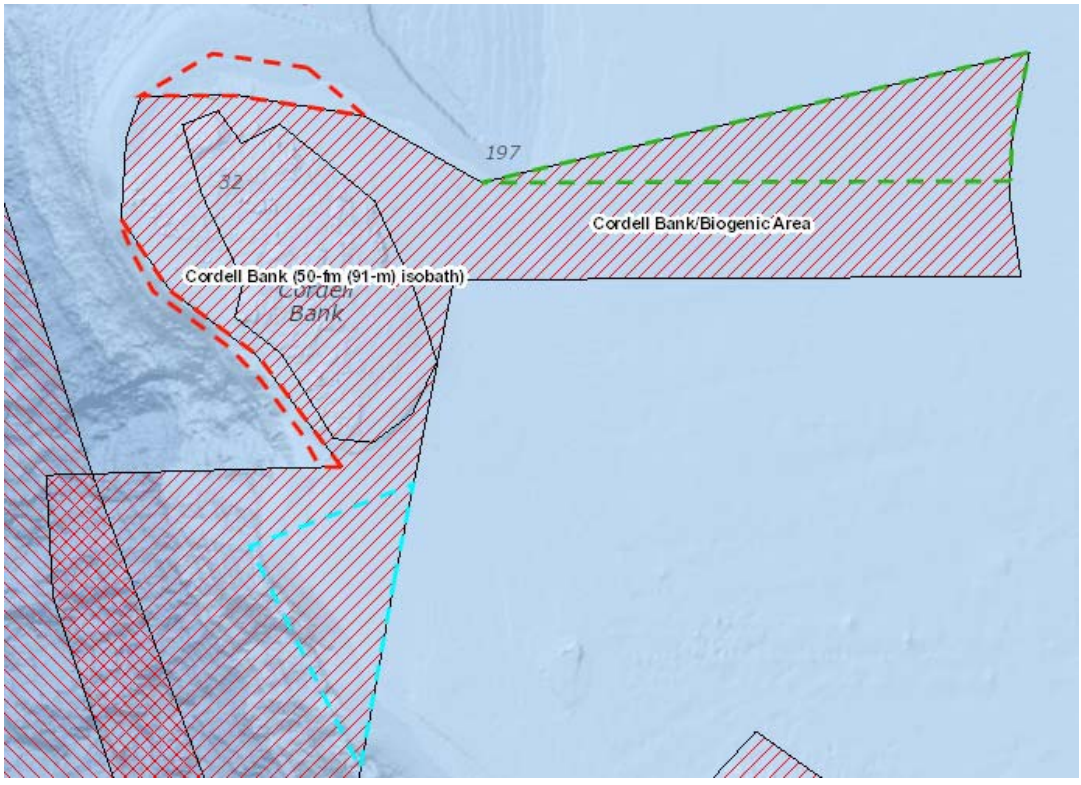
There has been limited sampling in this area, but the seafloor is understood to be a mix of boulder/cobble and flat layered sedimentary rock on the shelf. Based on NOAA ROV surveys from 2007, the biological community includes a mix of rockfish species, lingcod and rays. One in situ coral observation from a 2012 dive is recorded close to, but not within, the shape sketched above.

While this area may be discussed further in the upcoming months, it is classified here as a "Full Recommendation."

Cordell Bank Modification 1

This is a proposed extension of the existing Cordell Bank EFH Conservation Area to cover hard and mixed substrate on the north side of the bank. Part of the area has been mapped with high-resolution sonar; the remaining parts have only medium and low confidence substrate information. There is very limited historic fishing effort documented in this area. A NOAA submersible dive conducted by the Cordell Bank National Marine Sanctuary observed gorgonian-type corals (*swiftia sp.*) in this area. This area is categorized as a "Full Recommendation."

Cordell Bank Modifications 1, 2, 3, and 4 are shown in the map to the right.



Cordell Bank Modification 2

This is a second proposed extension of the existing Cordell Bank EFH Conservation Area to cover patchy hard substrate (mapped with medium confidence) around the base of Cordell Bank, as well as part of a larger area of likely hard substrate (mapped with low confidence) that drops off the escarpment on the west side of the bank. There is historic fishing effort in the northwest half of this area and fishermen indicated that fishing takes place in the 72-120fm range. Fishermen also indicated that in their experience the large patch of likely hard substrate on the west side of the bank is less extensive than the EFH Data Catalog layer indicates, and may only extend to around 100fm. One sea pen-type observation record exists in this area from a Delta submersible dive; it is not clear whether other invertebrates were observed on the dive. A significant number of gorgonian-type (*plumarella spp.*) coral observations from a submersible dive lie outside the shape as sketched, slightly to the northwest. This area is categorized as a "Full Recommendation."

Cordell Bank Modification 3

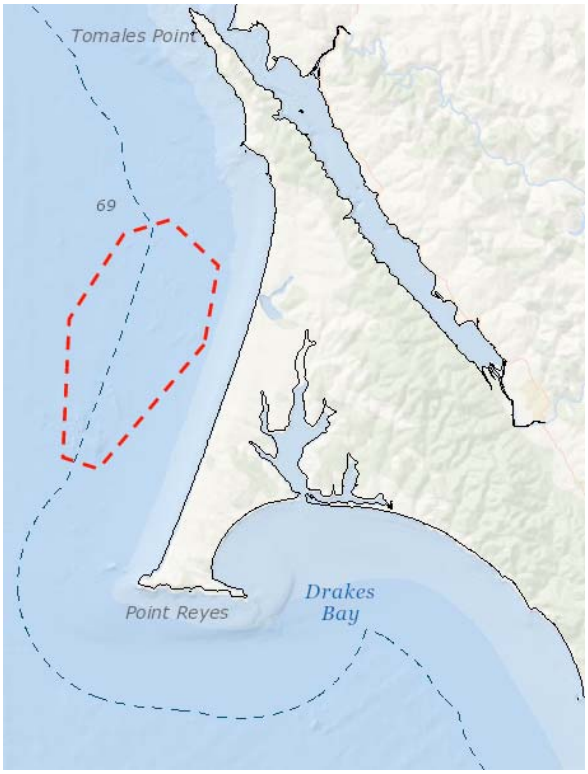
This proposed opening of a portion of an existing EFH area was discussed in port meetings and fishermen noted it would be helpful to operations to be able to go farther south on shelf tows in this region without risking violation of drifting into the existing EFH area. Fishermen described the area as soft bottom habitat, with some historical trawl effort. There are numerous sea pen observation records in this area from the coral-sponge observation database. Experts at CBNMS indicate this area is rich with invertebrate infauna and epifauna such as sea pens, sea whips, brittle stars, and octopus. This proposed opening is categorized as a "Full Recommendation."

Cordell Bank Modification 4

This shape would opening a portion of the existing Cordell Bank EFH Conservation Area. It was discussed in port meetings, and fishermen indicated the area may have been important as a historic fishing ground for petrale sole. The area is generally understood to be soft sediment, and occupies the outer shelf and shelf-slope break. CBNMS staff expressed significant concerns regarding this area, based on ongoing research and a desire of the Sanctuary to maintain protection of shelf-slope break habitat. CBNMS staff also indicated the Sanctuary may expand the existing instrument array near here, making it important to ensure the instruments and cables do not interact with trawl gear. Given the diverging views from various stakeholders and the need to continue discussions about this area, the shape above is categorized as a "Recommendation in Progress."

Point Reyes Reef

This proposed EFH Conservation Area would cover a shallow rocky reef area that straddles the California state waters line. During port meetings, fishermen generally confirmed the substrate data layers, noting the area was in fact hard bottom. There are no historical records of trawl fishing effort in this area.

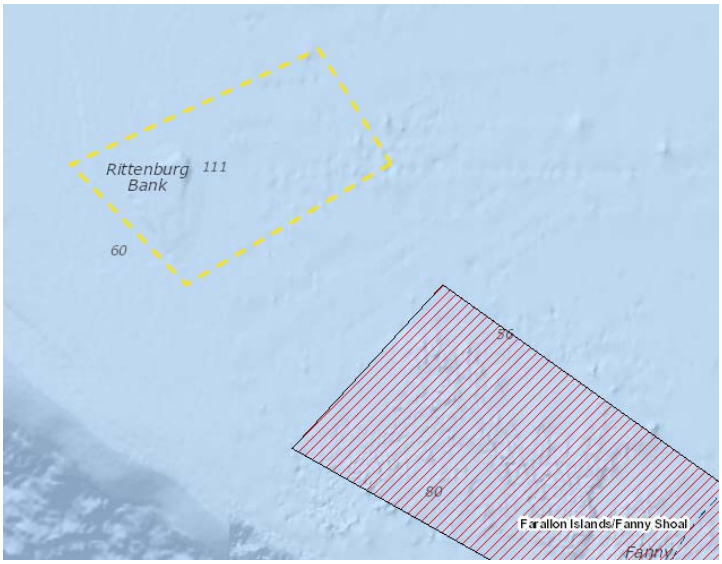


The portion of the reef within 3 miles of shore is currently closed to bottom trawling under California state law, but the portion of the reef extending into federal waters is unprotected. The proposed shape above would cover an area on both sides of the state waters line, from around 21fm to 36fm in depth. While no coral or sponge observation records exist in the area, there have been ROV observations of both canary and yelloweye rockfish.

This area is categorized as a "Full Recommendation," though further discussions are needed with the State of California to determine how to approach the state waters portion of the reef.

Rittenburg Bank

Rittenburg Bank is a reef area between Fanny Shoal and Cordell Bank. It was mapped with high-resolution sonar in a USGS expedition in 2011, which resulted in a published report documenting the bathymetry and substrate. GFNMS has done a number of research dives on Rittenburg Bank and observed rocky habitat with abundant corals and sponges; many of these observations are recorded in the EFH Data Catalog.



During port meetings, fishermen identified this area as hard bottom with known hangs. Fishermen also noted that rough bottom extends eastward from the mapped bank.

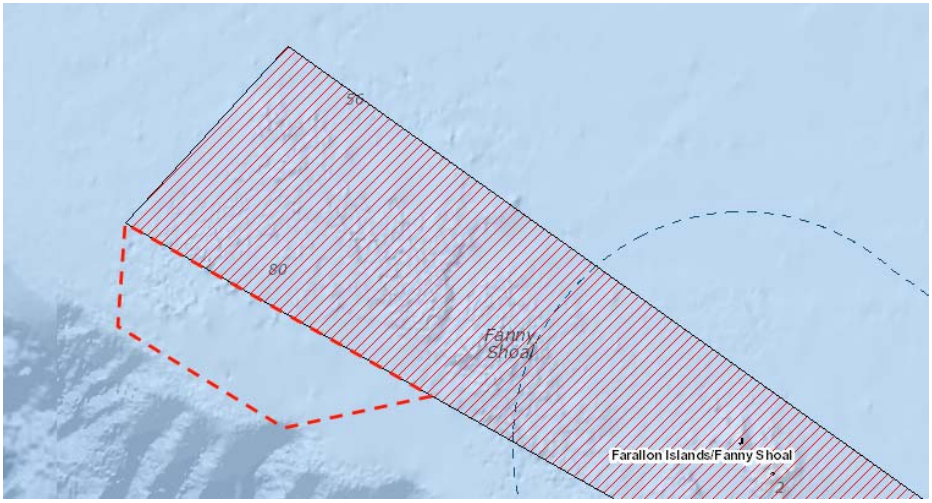
The 2013 GFNMS EFH proposal included a shape that would have connected the Farallon Islands/Fanny Shoal EFH Conservation Area to Rittenburg Bank. The area between Rittenburg Bank and the existing EFH Conservation Area is known by fishermen as soft sandy bottom and important fishing grounds. For this reason, the original concept proposed by GFNMS was modified into a stand-alone EFH Conservation Area over Rittenburg Bank.

GFNMS has noted that an extension of the northwestern corner of this shape would cover additional hard bottom. This area is classified as a "Recommendation in Progress" because further conversations may be needed to finalize the coordinates.

Farallon Islands Modification

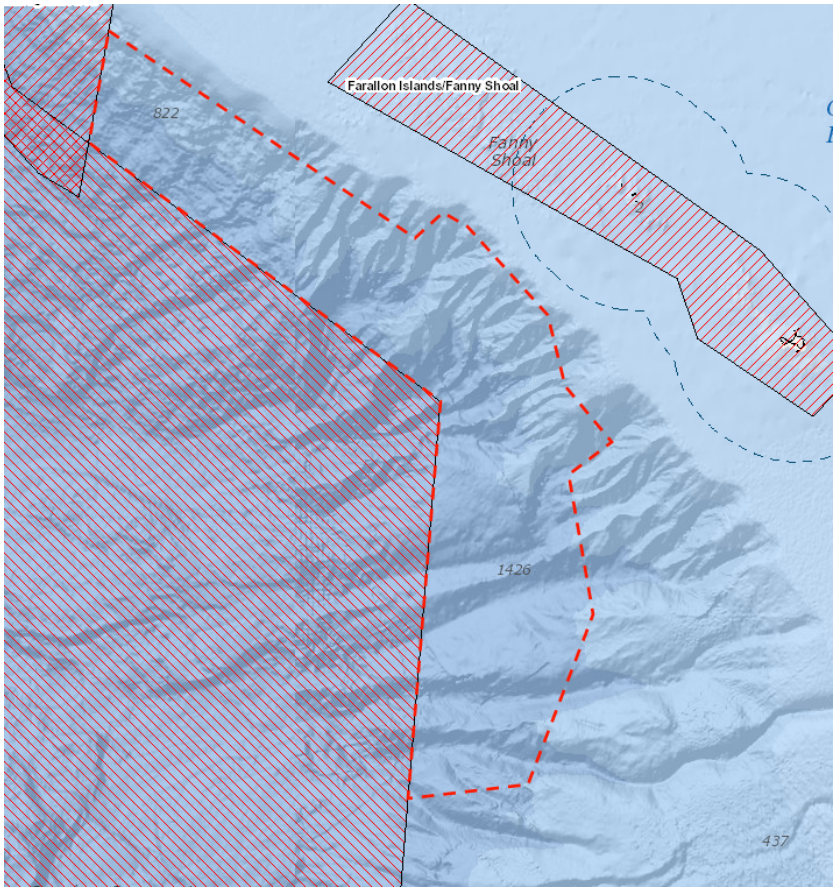
This is a proposed expansion of the existing Farallon Islands/Fanny Shoal EFH Conservation Area, designed to cover a rocky reef on the western side of the existing closure. The reef is sometimes referred to as "Cochrane Bank," and has been mapped with high-resolution sonar. GFNMS conducted research dives on the bank and found a vibrant reef ecosystem with numerous corals and sponges, including a range-extending observation of a Christmas tree coral.

The polygon proposed here matches the area proposed by GFNMS in 2013. The shape excludes a small amount of hard substrate and a few coral and sponge observations from the ROV dives, but the observations are primarily sea pens, and the Sanctuary tailored the boundary line to match its best understanding of the extent of the bank.



During port meetings, fishermen identified this area as rough bottom that is not conducive to trawling. Fishermen did indicate, however, that important tows for chilipepper rockfish exist in the 80 and 90fm depth zones along the outer edge of the shelf in this area and sufficient buffer is needed to prevent the possibility of drifting into the EFH area. The proposed boundary line approximates the 70fm line. This area is categorized as a "Full Recommendation."

Farallon Escarpment



This is a distinctive area of the upper slope, with an exceptionally steep drop-off, numerous crevasses (so-called "headless canyons"), and exposed bedrock along fault scarps. GFNMS conducted research dives on the Farallon Escarpment 2012, and mapped the area with multibeam sonar in 2011. The area is known habitat for several rockfish species; during port meetings fishermen mentioned schools of bank rockfish in the area, and ROV dives observed blackgill, aurora, and other rockfish. Several coral and sponge observation records are located in this area, including bubblegum coral and finger sponge observations from the ROV dives. More generally, the slope and circulation patterns of this area, combined with exposed bedrock in places, are believed to create high-value habitat for structure-forming invertebrates.

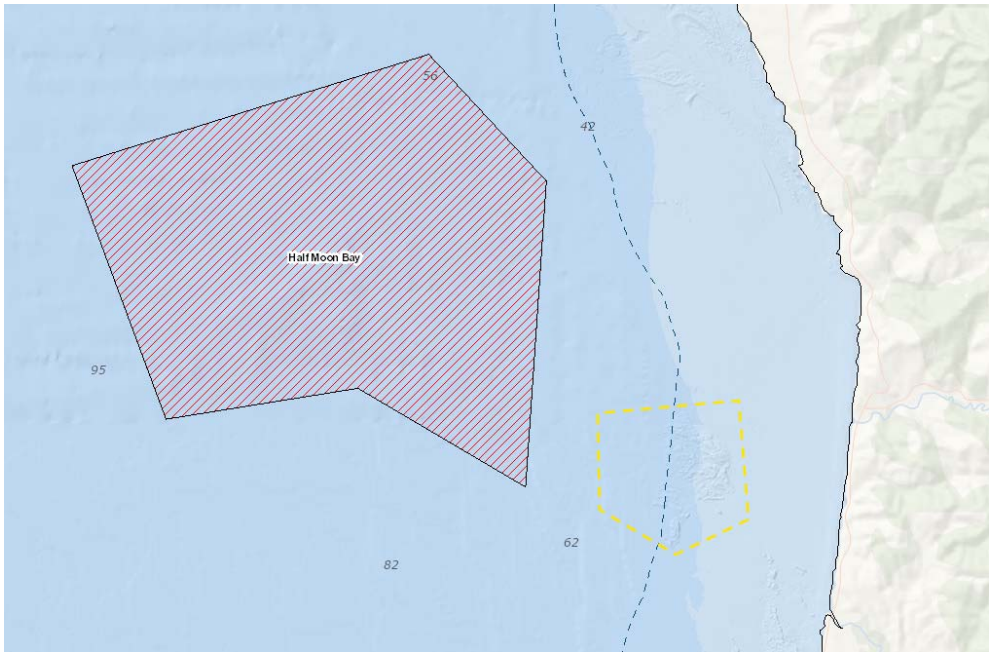
Minimal historical and current trawl effort exists within the boundary of the proposed shape. The north boundary adjoins Cordell Bank EFH Conservation Area. The northern shoreward section of the proposed closure is drawn deeper than the 200fm contour to allow for fishing along the shelf-slope break. The shoreward boundary line adjacent to the Farallon Islands rises up to the 100fm contour and continues south along the edge of the Trawl RCA. This boundary line was designed to protect the fault scarps and crevasses that GFNMS has explored, as well as to establish durable protection for a portion of the Trawl RCA. The shoreward boundary on the southern end of the shape runs out to the 500-600fm depth range, avoiding historical fishing activity, and stops just short of the base of Pioneer Canyon.

This area was discussed with fishermen 2013, and conversations were continued in recent port meetings. There was a general sense that this area could be protected, as part of a package that

also increases fishing opportunity. Note that the exact waypoints of this shape may need to be straightened out to improve navigability. This area is categorized as a "Full Recommendation."

Pescadero Reef

This is an area of known hard substrate that straddles the California state waters line. There are multiple observations of canary and bocaccio rockfish in this area from the compiled geodatabase of overfished species observational data. During port meetings, fishermen identified this area as rough bottom that may not be conducive to bottom trawling; there is very limited historic fishing effort in this area.



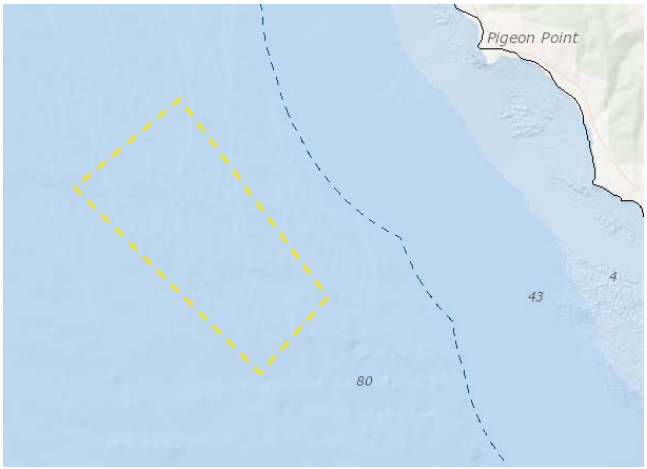
The size and location of this area was discussed in detail, including the idea of joining it with the existing Half Moon Bay EFH Conservation Area. Fishermen indicated important fishing grounds exist in the area between Pescadero Reef and the existing EFH area, and thus the boundaries of this shape were drawn to allow for fishing between the two areas.

This area is classified as a "Recommendation in Progress" because conversations are ongoing to ensure the boundaries are drawn correctly. Consultation with the State of California also will be necessary to determine how to handle the part of the reef located in state waters.

Pigeon Point Reef

This rocky reef lies in the 40-50fm depth range, off Pigeon Point. The Nature Conservancy surveyed this area with a video lander during the Exempted Fishing Permit Rockfish Conservation Area study; canary and yelloweye rockfish were observed there, among other fish

species. During port meetings, fishermen confirmed there is rough substrate in this area and noted that the reef is not conducive to trawling, though they do tow around the reef for flatfish.



This area is categorized as a "Recommendation in Progress" because it emerged relatively recently and still needs vetting to ensure the boundaries are drawn correctly. Note the shoreward boundary may need to move west, to provide sufficient space for trawlers to pass between this area and state waters.

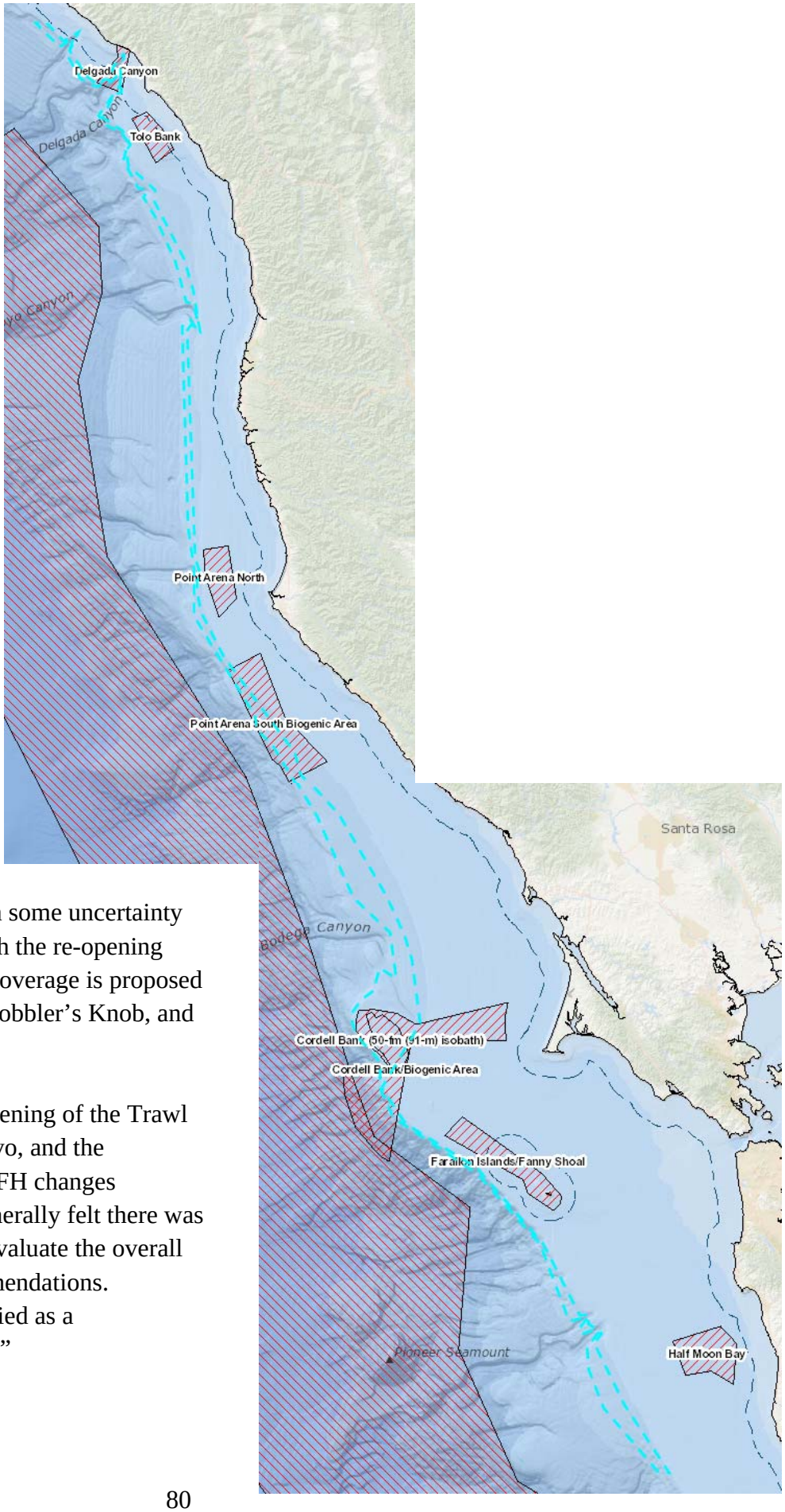
Trawl RCA 40°10' to 37°07'

In the region between 40°10' and Ano Nuevo, the year-round Trawl RCA is comprised of the area between the 100fm and 150fm Federal Register lines. The RCA was discussed at some length during port meetings, and fishermen indicated that other than a few hard patches, the RCA is generally soft muddy bottom in this region of the coast. The general sense of fishermen was that a full opening of the RCA was appropriate, and with the current bycatch reduction incentives and accountability measures in place they would be able to mitigate bycatch risk and ensure rebuilding of overfished species.

Substrate data layers confirm that the Trawl RCA in this region primarily is comprised of soft sediment, with patches of likely hard and mixed substrate. Hard substrate occurs in the RCA at Point Arena South Biogenic Area, Gobbler's Knob, and Cordell Bank. The hard substrate areas in Point Arena South Biogenic Area and Cordell Bank are covered by EFH Conservation Areas, and would not be opened to bottom trawling upon removal of the RCA. Mixed substrate at Gobbler's Knob would be partially encompassed by a proposed new EFH Conservation Area.

The EFH Data Catalog shows relatively few coral and sponge observation records within the Trawl RCA, in this region of the coast. Exceptions are found at The Football, Point Arena South Biogenic Area, Cordell Bank, Cochrane Bank, and the Pioneer Canyon area. Point Arena South Biogenic Area and Cordell Bank are already covered by EFH Conservation Areas and the relevant coverage would not be removed by the changes proposed here. The Football would receive partial coverage by the new EFH Conservation Area recommended above. Cochrane Bank similarly would be fully covered, except for the handful of sea pen-type observation records that overlap with the Trawl RCA. And Pioneer Canyon would not receive any new EFH protection under the changes described above.

The Trawl RCA runs through a number of existing EFH Conservation Areas in this region, including Delgada Canyon, Point Arena South Biogenic Area, and Cordell Bank—each of which is proposed to be modified. Delgada Canyon EFH Conservation Area is proposed to be re-opened based on a request from fishermen. Point Arena South Biogenic Area EFH Conservation Area is proposed to be modified, with a net decrease in shelf-slope coverage. Cordell Bank EFH Conservation Area is proposed to be expanded in two locations that overlap with the Trawl RCA, and reduced in size in another location that overlaps with the RCA (though some uncertainty exists as to how to proceed with the re-opening area). New shelf-slope break coverage is proposed for the Farallon Escarpment, Gobbler's Knob, and The Football.



Given the significance of re-opening of the Trawl RCA from 40°10' to Ano Nuevo, and the complexity of the associated EFH changes contemplated, stakeholders generally felt there was a further need to analyze and evaluate the overall effects of the proposed recommendations. Accordingly, the area is classified as a "Recommendation in Progress."

5. Ano Nuevo to Point Conception

This region of the coast is characterized by a comparatively narrow shelf, perforated by a major canyon complex at Monterey Bay, and a smaller set of canyons south of Point Sur. Trawl effort is limited in this region of the coast, with only a few groundfish trawl fishermen currently fishing out of the ports of Moss Landing, Monterey, and Morro Bay. While the region extends to Point Conception, little groundfish bottom trawling occurs south of Avila.

The area between Point Ano Nuevo and Cambria was the focus of a dedicated stakeholder process led by the Monterey Bay National Marine Sanctuary, which yielded the 2013 MBNMS EFH proposal. The package presented here supports and incorporates by reference all of the areas of the MBNMS proposal, with a few clarifications and additions.

Given the progress made in 2013, and the high level of consensus behind the MBNMS proposal, the collaborative group focused on the southern end of this region to clarify support for changes that had been proposed off Cambria. The Monterey region also was revisited, to consider the implications of potential Trawl RCA changes. MBNMS staff attended collaborative meetings with fishermen and participated in discussions, helping to ensure thorough integration of the 2013 proposal into the package presented here.

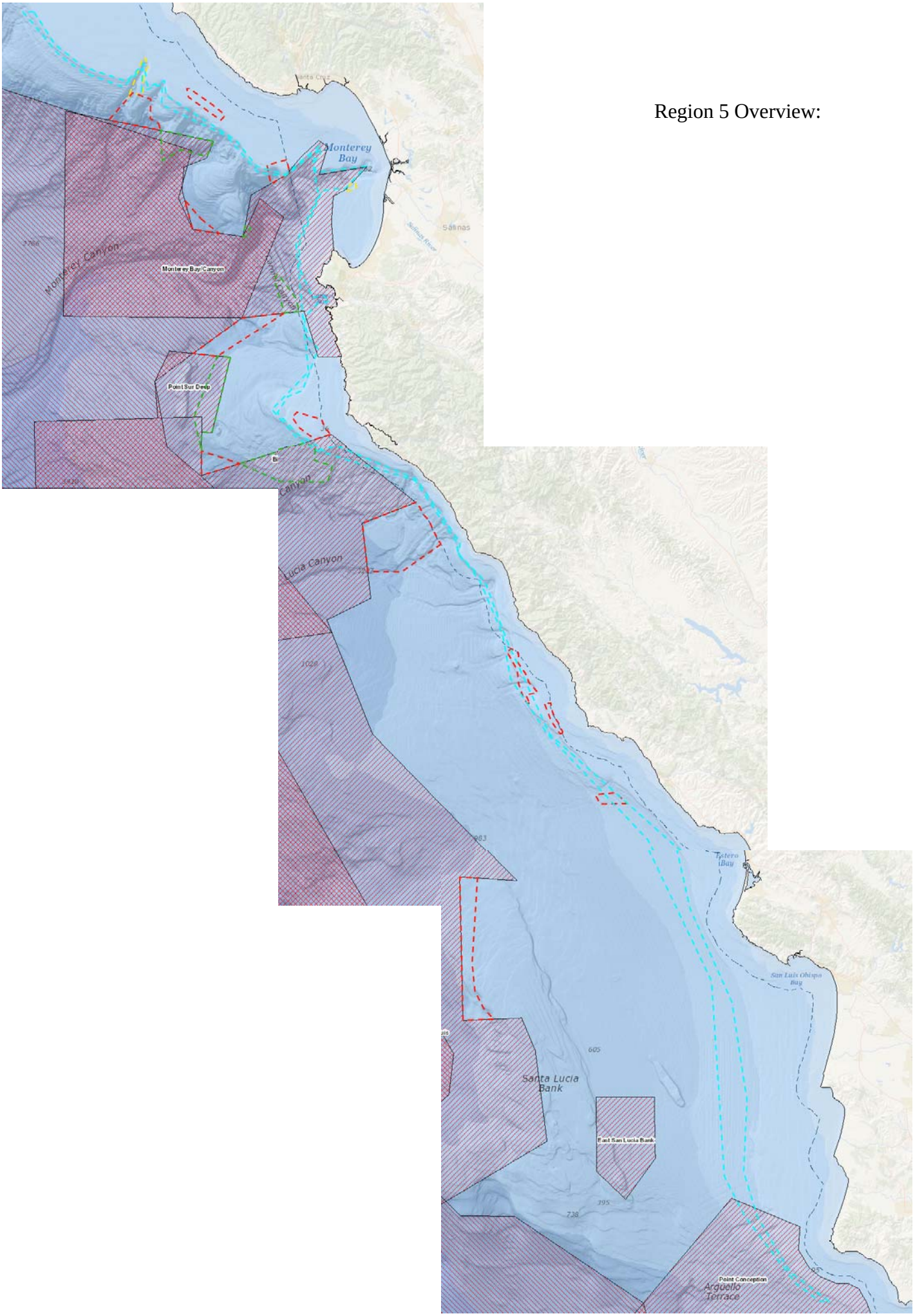
Overall, there continues to be strong support for the areas proposed in the MBNMS proposal as well as the additional modifications described below. Many "Full Recommendations" as well as "Recommendations in Progress" emerged from the discussions in this region.

Table 5. Area Recommendations from Ano Nuevo to Point Conception.

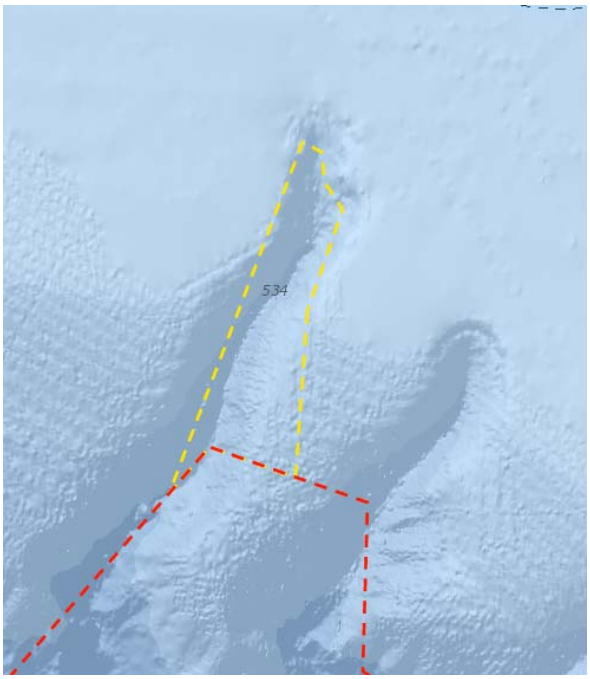
Area Name	Type	Status
Ascension Canyonhead	EFH Closure	Recommendation in Progress
MBNMS Ascension and Ano Nuevo Canyon Complex	EFH Closure	Full Recommendation
MBNMS Lower Portion of Cabrillo Canyon	EFH Opening	Full Recommendation
MBNMS South of Davenport	EFH Closure	Full Recommendation
MBNMS Outer Soquel Canyon	EFH Closure	Full Recommendation
Monterey Bay Modification	EFH Closure	Recommendation in Progress
MBNMS Southwest of Smooth Ridge	EFH Closure	Full Recommendation
MBNMS South of Mars Cable	EFH Opening	Full Recommendation
MBNMS West of Carmel Canyon	EFH Opening	Full Recommendation
MBNMS West of Sobranes Point	EFH Closure	Full Recommendation

MBNMS East of Sur Ridge	EFH Opening	Full Recommendation
MBNMS Triangle South of Surveyors Knoll	EFH Closure	Full Recommendation
MBNMS Sur Canyon Slot Canyons	EFH Opening	Full Recommendation
MBNMS Point Sur Platform	EFH Closure	Full Recommendation
MBNMS Between Partington Point and Lopez point	EFH Closure	Full Recommendation
MBNMS La Cruz Canyon	EFH Closure	Full Recommendation
MBNMS West of Piedras Blancas SCMA	EFH Closure	Full Recommendation
Cambria Rough Patch	EFH Closure	Full Recommendation
Big Sur Coast Modification	EFH Closure	Full Recommendation
Trawl RCA 37°07’ to 34°27’	RCA Opening	Recommendation in Progress

Region 5 Overview:



Ascension Canyonhead



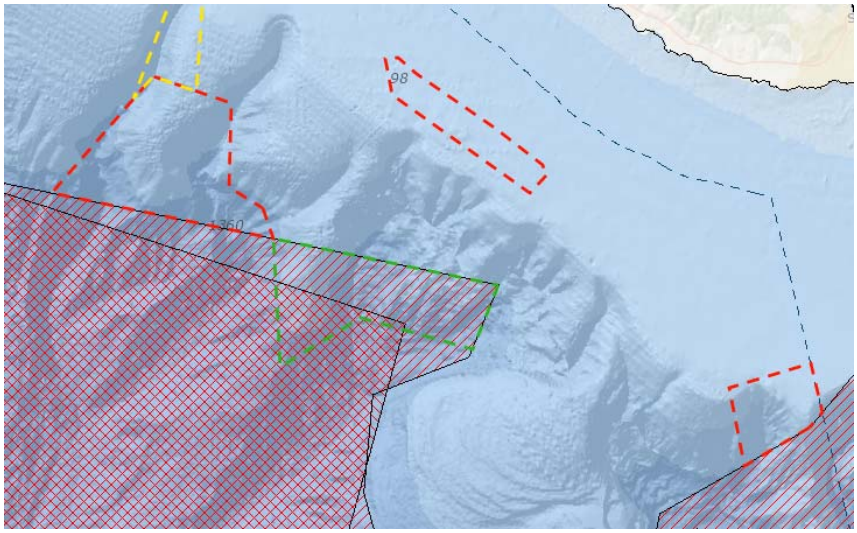
Ascension Canyon is a distinct feature cutting into the shelf just south of Point Ano Nuevo. Researchers describe Ascension Canyon as largely comprised of deep fine-sediment habitats with rocky outcrops. The canyonhead starts at around 70fm on the shelf, dropping quickly into a straight, steep, and narrow canyon body. Scientists have studied this area with submersible dives and observed brittle stars, hermit crabs, sea cucumbers, pink urchins, and crinoids, as well as several species of rockfish. Corals and sponges also were observed, including fan-type and stony corals. While the majority of the canyon is soft bottom, there are understood to be patches of hard substrate at the steepest parts of the canyon.

During port meetings with Monterey fishermen, industry members generally agreed with this site characterization. In terms of fishing activity, the head of Ascension Canyon has relatively low historic and current bottom trawl effort. Monterey fishermen described setting their trawls at the shoreward curve of the 100 fathom line at the very top of the canyon, and dropping down on the shoreward side of the RCA. Alternatively, they set on the north shoreward side of the RCA and tow north away from the canyon.

The shape shown above was drawn carefully with fishermen to ensure trawl tows around Ascension Canyonhead remain open. Having done so, the proposed EFH Conservation Area also protects around six square miles of canyon, and connects to the "Ascension and Ano Nuevo Canyon Complex" area from the 2013 MBNMS proposal.

Because the Ascension Canyonhead area emerged from relatively recent discussions, it is classified as a "Recommendation in Progress." The area is not expected to change significantly; the provisional designation simply is intended to provide further time to confirm and vet the area with all stakeholders.

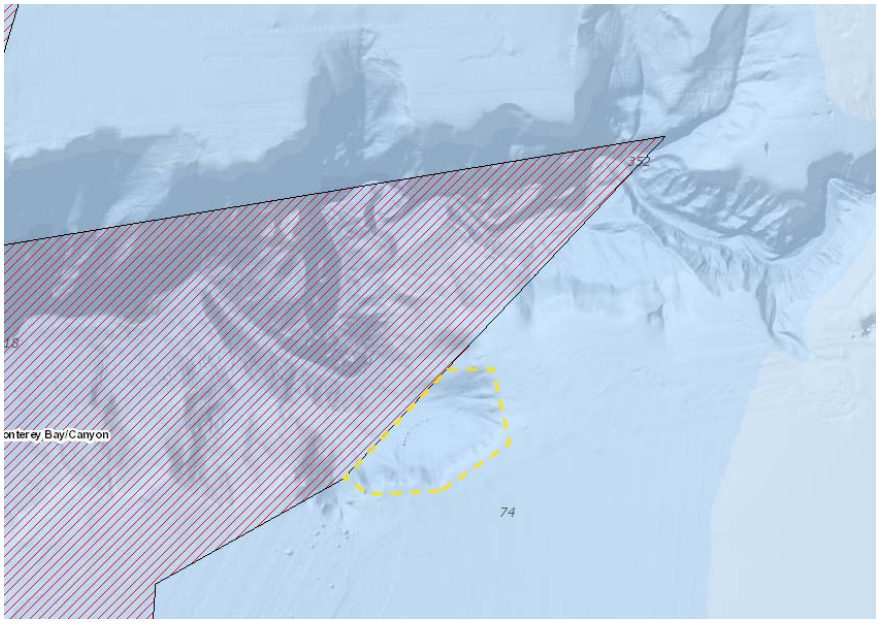
MBNMS Ascension and Ano Nuevo Canyon Complex
MBNMS Lower Portion of Cabrillo Canyon
MBNMS South of Davenport
MBNMS Outer Soquel Canyon



These areas are incorporated without changes from the 2013 MBNMS proposal. Descriptions, rationales, and supporting analysis can be found in the MBNMS proposal (available in the November 2013 Briefing Book, Agenda Item H.7.a Attachment 5).

Monterey Bay Modification

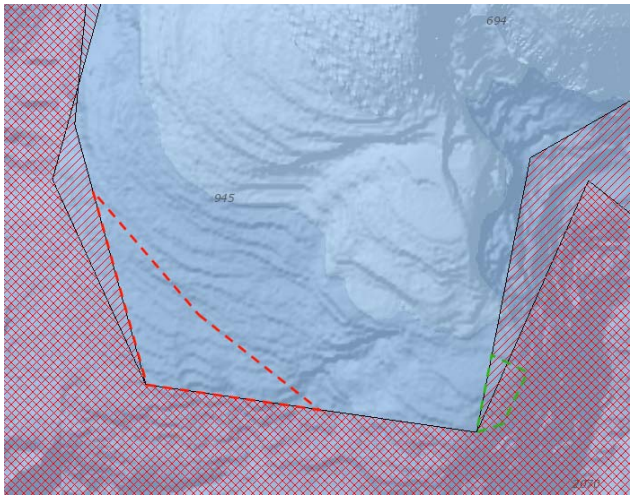
This proposed area would modify the existing Monterey Bay/Canyon EFH Conservation Area to better trace the south side of Monterey canyon in shallow waters. The area has been recently surveyed using a video lander and has visible benthic structure as well as high numbers of observed yelloweye rockfish. A high density of sponges and sea pens were observed in the area during ROV and submersible assessments.



This area is within California state waters and therefore is closed to trawling. There is very limited historical trawl effort in this area. This area is categorized as a "Recommendation in Progress" because this was a relatively late addition to the package and further discussions may be needed. Additionally, the central collaborative group needs to confer with California state officials regarding proposed EFH changes within state waters.

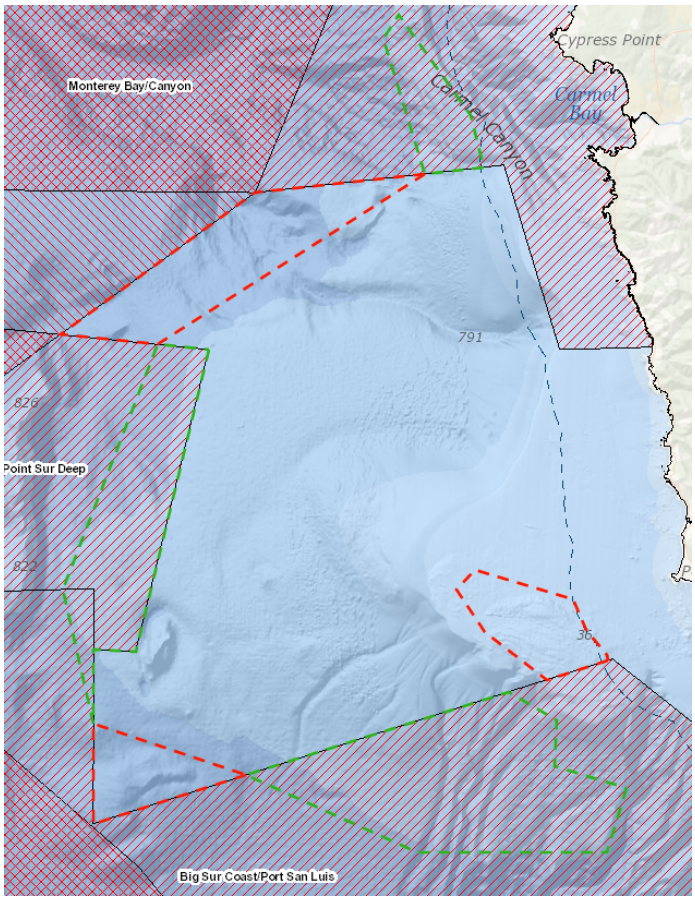
MBNMS Southwest of Smooth Ridge
MBNMS South of Mars Cable

These areas are incorporated without changes from the 2013 MBNMS proposal. Descriptions, rationales, and supporting analysis can be found in the MBNMS proposal (available in the November 2013 Briefing Book, Agenda Item H.7.a Attachment 5).



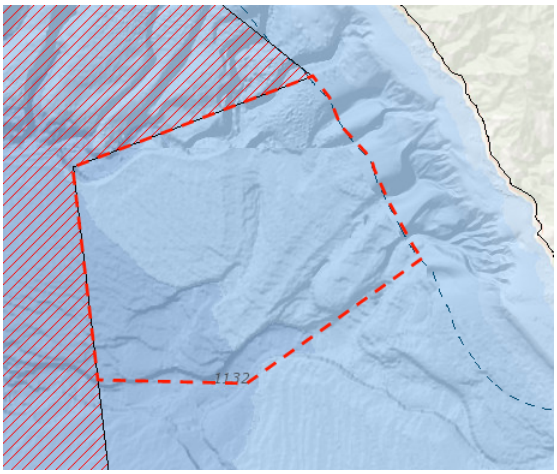
MBNMS West of Carmel Canyon
MBNMS West of Sobranes Point
MBNMS East of Sur Ridge
MBNMS Triangle South of Surveyors Knoll
MBNMS Sur Canyon Slot Canyons
MBNMS Point Sur Platform

These areas are incorporated without changes from the 2013 MBNMS proposal. Descriptions, rationales, and supporting analysis can be found in the MBNMS proposal (available in the November 2013 Briefing Book, Agenda Item H.7.a Attachment 5).



MBNMS Between Partington Point and Lopez Point

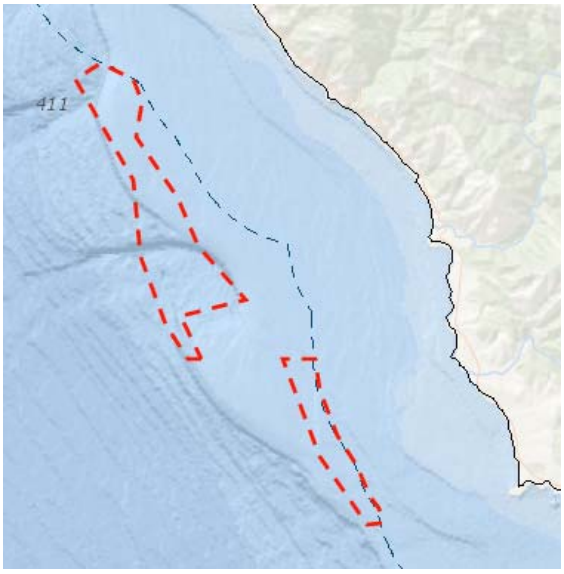
This area is incorporated without changes from the 2013 MBNMS proposal. Descriptions, rationales, and supporting analysis can be found in the MBNMS proposal (available in the November 2013 Briefing Book, Agenda Item H.7.a Attachment 5).



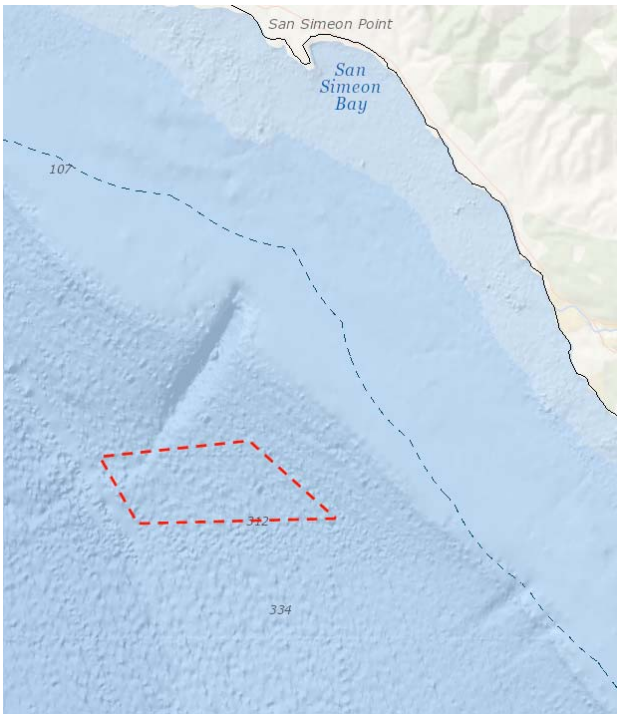
MBNMS La Cruz Canyon
MBNMS West of Piedras Blancas SMCA

These areas are incorporated without changes from the 2013 MBNMS proposal. Descriptions, rationales, and supporting analysis can be found in the MBNMS proposal (available in the November 2013 Briefing Book, Agenda Item H.7.a Attachment 5).

One update regarding these areas is that further discussions with industry and NGOs have led to more solid support for the shapes than may have initially existed in 2013.



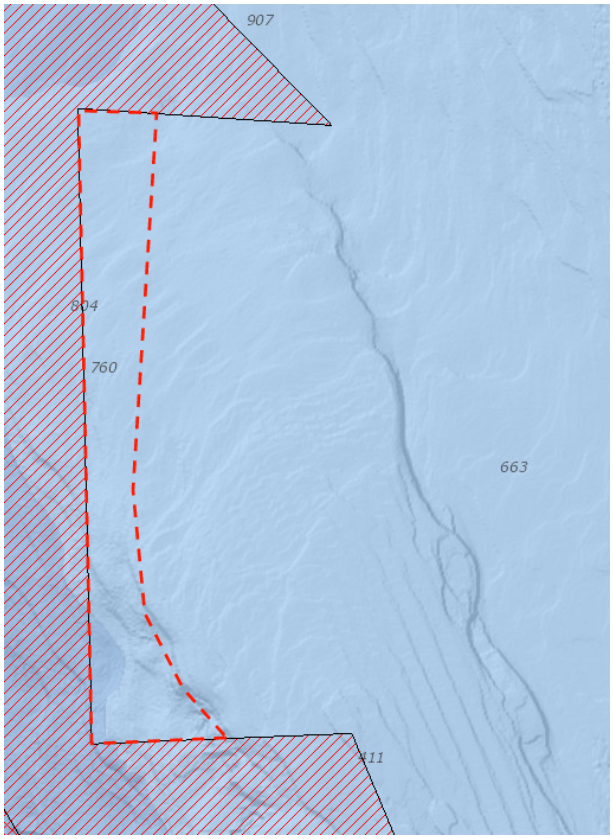
Cambria Rough Patch



This rocky, high relief spot is known colloquially by fishermen as "the pimple." While no coral or sponge observation records are located within the proposed closed area, bottom trawl survey tows in the region have documented assorted sponges and sea pens in close proximity. There are documented observations of darkblotched rockfish in this area.

This area overlaps with the Trawl RCA and has very little historical fishing effort prior to the implementation of the Trawl RCA. The area was drawn in collaboration with fishermen during port meetings to ensure the rough patch is protected while maintaining access to nearby fishing grounds. This area is categorized as a "Full Recommendation."

Big Sur Coast Modification

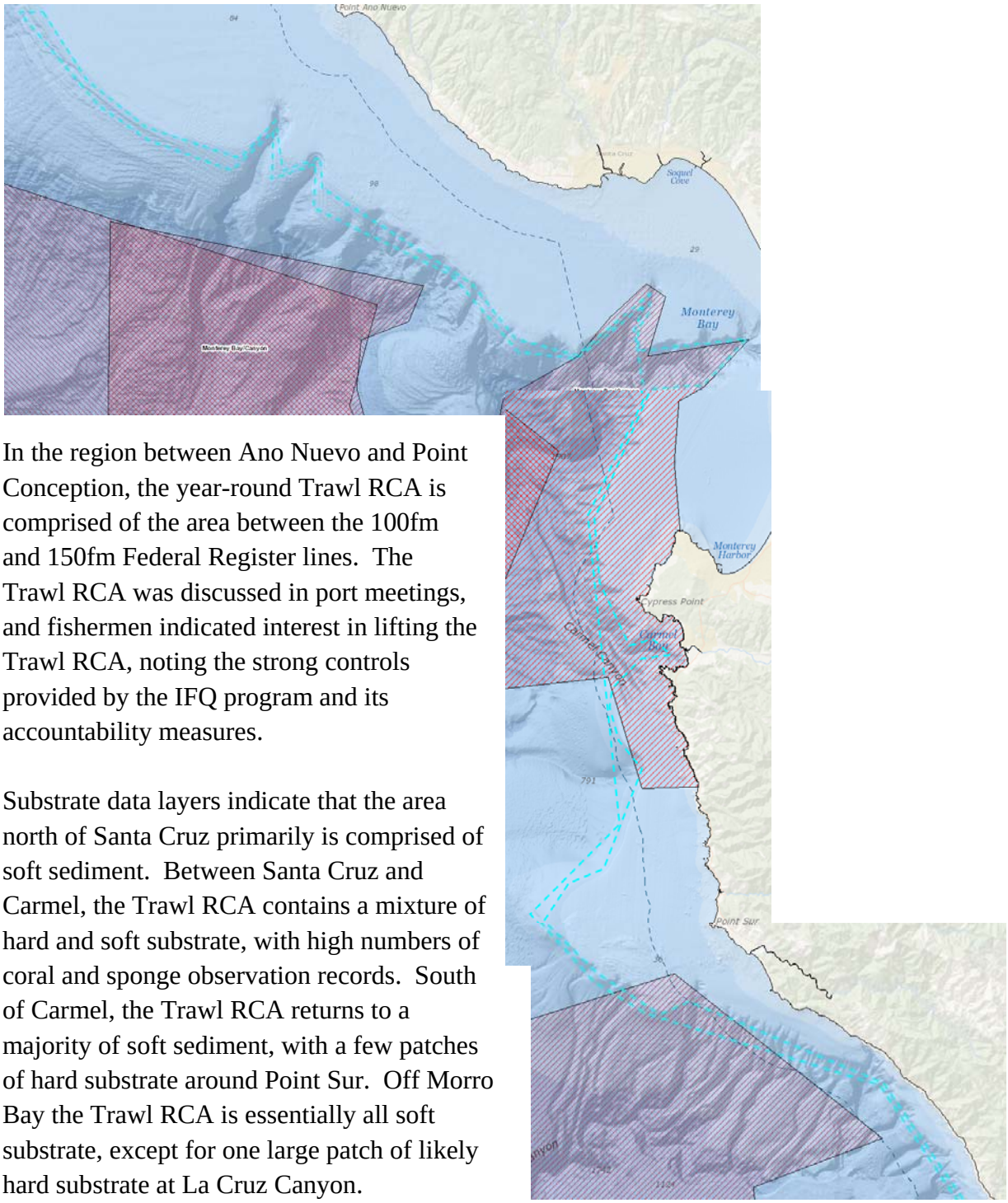


This proposed area would enlarge the existing Big Sur Coast/Port San Luis EFH Conservation Area by including additional ground on the northwest flank of Santa Lucia Bank. The EFH Data Catalog indicates that the majority of the area is hard substrate, however, the associated confidence is low and actual hard substrate may be more patchy in nature. A few coral and sponge observation records are listed in the EFH Data Catalog for this area, primarily sea pen-type invertebrates caught during the trawl survey. No ROV or submersible work has been done in this area, at least to the best knowledge of the central collaborative.

This area covers benthic habitat in the 400fm range, with portions of the area extending deeper than 500fm. This area was designed in collaboration with fishermen, and avoids areas with historic

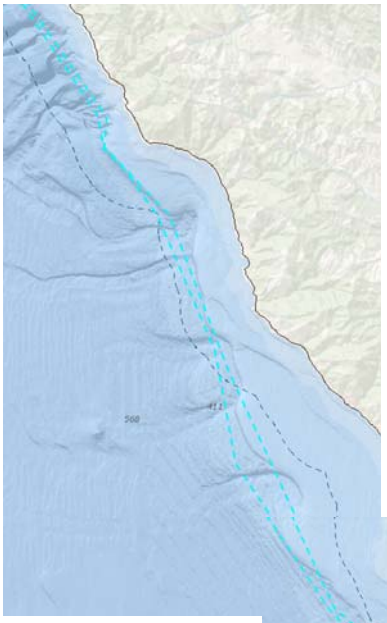
trawling in order to preserve fishing opportunity in the Morro Bay region, while also increasing protection of hard substrate. This area is categorized as a "Full Recommendation."

Trawl RCA 37°07' to 34°27'



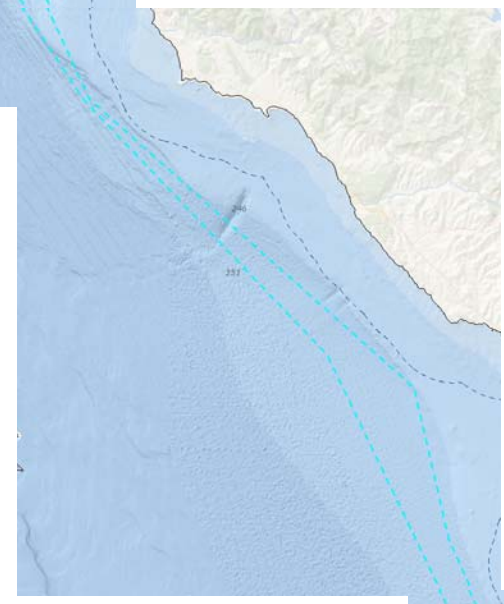
In the region between Ano Nuevo and Point Conception, the year-round Trawl RCA is comprised of the area between the 100fm and 150fm Federal Register lines. The Trawl RCA was discussed in port meetings, and fishermen indicated interest in lifting the Trawl RCA, noting the strong controls provided by the IFQ program and its accountability measures.

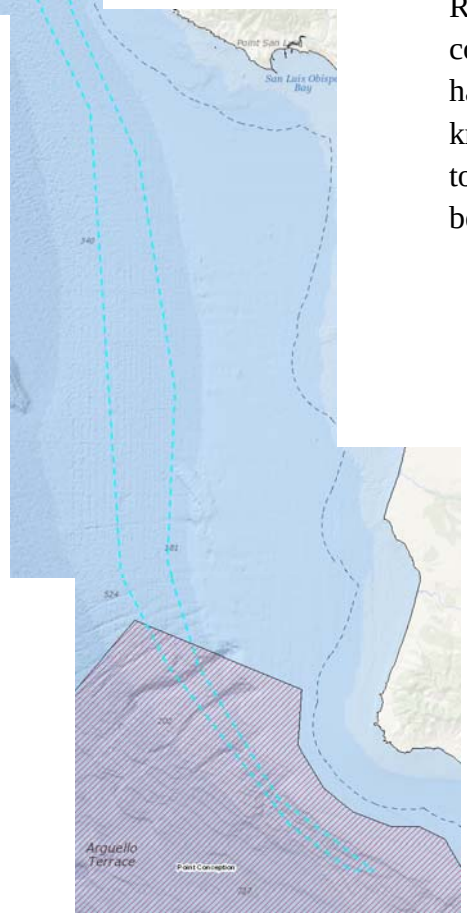
Substrate data layers indicate that the area north of Santa Cruz primarily is comprised of soft sediment. Between Santa Cruz and Carmel, the Trawl RCA contains a mixture of hard and soft substrate, with high numbers of coral and sponge observation records. South of Carmel, the Trawl RCA returns to a majority of soft sediment, with a few patches of hard substrate around Point Sur. Off Morro Bay the Trawl RCA is essentially all soft substrate, except for one large patch of likely hard substrate at La Cruz Canyon.



Significant portions of the Trawl RCA in this region of the coast are located inside California state waters. The Trawl RCA also overlaps with a number of existing EFH closures in this region, including the Monterey Bay/Canyon, Big Sur Coast/Port San Luis, and Point Conception EFH Conservation Areas.

A number of the changes proposed for this region would add EFH protection to areas currently covered by the Trawl RCA. Specifically, the proposed Ascension Canyonhead area would protect habitat within the current Trawl RCA where the RCA runs up the canyon, including small areas of likely hard substrate. The MBNMS Outer Soquel Canyon area would cover a three-mile stretch of the RCA and protect several patches of hard substrate with dozens of coral and sponge observation records. The MBNMS La Cruz Canyon area would encompass a portion of the Trawl RCA, almost all of which is believed to be hard substrate. The proposed Cambria Rough Patch area is comprised of roughly half Trawl RCA area, known by fishermen to contain rugged benthic habitat.





Given the significance of re-opening of the Trawl RCA and the complexity of the associated EFH changes contemplated, stakeholders generally felt there was a further need to analyze and evaluate the overall effects of the proposed recommendations. Accordingly, the area is classified as a “Recommendation in Progress.”

Southern Region

The section of the coast south of Point Conception is singled out as its own region because it was not subject to the same type of collaborative process as the northern or central regions. The collaborative group working on the central regions explicitly limited the scope of its work to north of Point Conception.

The areas in the Southern Region described below were drawn by a few individuals, and subjected to extremely limited vetting and feedback. This means the Council should review the areas in this section very cautiously, and should bear in mind that the areas represent no consensus and will need substantial further work in order to develop a fully supported set of recommendations.

South of Point Conception it proved difficult to engage stakeholders and form a collaborative group to develop a vetted package of EFH changes. This was in part due to there being no active groundfish bottom trawlers in the region, and relatively few people with historical knowledge of the area. The few individuals who were willing to share their knowledge of the Southern California Bight from a groundfish bottom trawl perspective are located across the West Coast, from Morro Bay to Astoria, and therefore provided input during port meetings outside the Southern Region. Also, depending on the time period in which they fished, these individuals' memories may not match the current regulatory landscape—which includes a sizeable Cowcod Conservation Area, several EFH Conservation Areas, and several distinct areas of Trawl RCA.

Moreover, there may be individuals affected by changes to EFH Conservation Areas or the Trawl RCA who do not participate in the federal groundfish fishery. Specifically, local fishermen targeting ridgeback prawn, sea cucumber, or California halibut with bottom trawl gear may be affected by federal regulations, yet those individuals rarely participate in the federal management process. State-managed trawlers have a separate management process and distinct networks. While these fishermen were not involved in developing the areas below, their participation, input and feedback is critical if any recommendations are to be put forward for reconfiguration of EFH and RCA areas in the region south of Point Conception.

The south of Point Conception area was initiated by a few individuals who examined the EFH Data Catalog layers for the region, focusing on bottom trawl effort patterns and relevant habitat characteristics. An initial draft set of areas was drawn up, with intent of providing targeted protection for identified habitat features while avoiding areas with significant bottom trawl effort. A few fishermen with historical knowledge of Southern California were identified and contacted with the intent of discussing EFH and RCA revisions for the region. One fisherman graciously agreed to review the initial draft set of areas, and provided feedback on the areas as

well as some general context on the Southern California region from a bottom trawl perspective. A scientist from NOAA's Deep-Sea Coral program also provided helpful feedback on bottom trawl effort and locations of structure-forming invertebrates in Southern California. With this initial input, the draft areas were revised somewhat, leading to their current state.

Discussions regarding the Southern California region will continue through the fall and winter, including outreach to state-managed trawl fishery participants. The Council will be updated on any progress, or lack thereof, toward a consensus package. If it becomes clear that a consensus set of changes for the Southern California region is not possible, the Council will be notified to this effect, and the areas described below will be modified from their current status as "Recommendations in Progress" to become "No Recommendation" areas. At that point they could be discarded, or simply treated as background information.

6. Point Conception to Mexico

South of Point Conception, the continental shelf widens significantly and the coastline bends eastward. This broad section of the shelf, referred to as the Southern California Bight, is covered by ridges and basins, with several islands protruding above the ocean surface. A steep drop-off at the Patton Escarpment marks the transition to the abyssal plain. The California Current passes offshore in this part of the coast, running along the Patton Escarpment. Closer in to the coast, the Southern California Countercurrent circulates northward. These currents mix around the western edge of the bight, resulting in a wide range of ocean temperatures across the region. In part due to its unusual geography, Southern California has a high level of biodiversity in its marine ecosystems. Over 400 species of fish are understood to exist in the region, along with dozens of species of cetaceans and pinnipeds, and numerous invertebrates. Ecosystems range from seagrass and estuarine habitats to kelp forests, soft-sediment shelf areas, rocky reefs, and deep benthic environments.

Major fishing ports in the Southern California Region include Ventura, Santa Barbara, Port Hueneme, Oxnard, Terminal Island, San Pedro, Dana Point, Mission Bay, and Oceanside. Coastal pelagic species such as market squid and sardine comprise a significant amount of landings by value, as do spiny lobster, tunas, sea urchins, and several species of shrimp and prawn.

In terms of groundfish, a small fixed gear fleet fishes for sablefish and thornyheads in the Southern California Bight. No groundfish bottom trawl fleet exists south of Point Conception, though a handful of boats trawled the area historically. One such fisherman described the Southern California region as a mixed bag overall, from a groundfish trawl perspective. The eastern areas were indicated to be lower productivity—potentially due to warm-water circulation

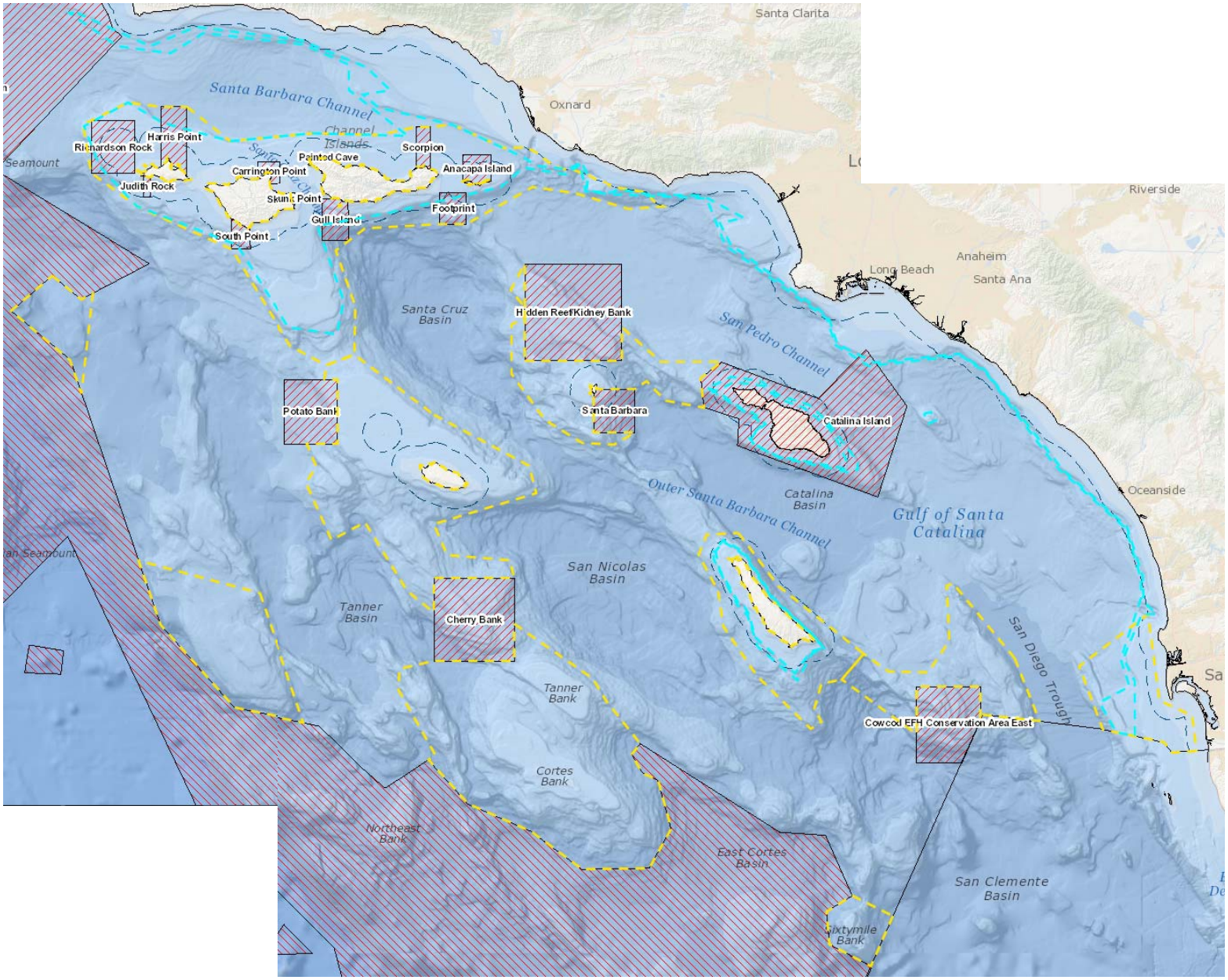
patterns or urban pollution—making it difficult to find groundfish in high-enough volumes for trawling. The western side, by contrast, was indicated to be somewhat more productive and amenable to trawling, potentially due to cooler northern waters passing the Bight and mixing above the ridges and basins.

A number of boats trawl for California halibut, sea cucumber, and ridgeback prawn in the Southern California region. These boats tend to operate close to shore, though a limited amount of landings are registered from certain offshore and deeper areas. State-managed trawlers also retain some incidentally-caught groundfish under the open access provisions of federal groundfish management.

Table 6. Areas from Point Conception to Mexican Border.

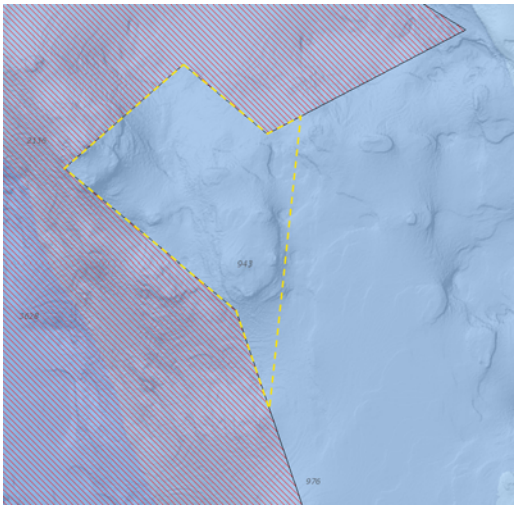
Area Name	**Type**	**Status**
Western Line Adjustment	EFH Closure	Recommendation in Progress
Outer Bank	EFH Closure	Recommendation in Progress
Northern Channel Islands	EFH Closure	Recommendation in Progress
Begg Ridge	EFH Closure	Recommendation in Progress
Tanner and Cortes Banks	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	EFH Closure	Recommendation in Progress
San Clemente Ridge	EFH Closure	Recommendation in Progress
Eastern San Clemente Ridge	EFH Closure	Recommendation in Progress
Coronado Shelf	EFH Closure	Recommendation in Progress
Sixty-Mile Bank	EFH Closure	Recommendation in Progress
Trawl RCA 34°27’ to Mexico	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	RCA Opening	Recommendation in Progress
Trawl RCA around Lasuen Knoll	RCA Opening	Recommendation in Progress

Region 6 Overview:



Western Line Adjustment

This is an area of likely hard substrate on the seaward edge of the Southern California Bight, surrounded on three sides by the 700fm line. Most of the area is very deep—over 1000fm in places—but there is a small ridge that rises up above 600fm. The area sketched here is intended as an adjustment to the 700fm line.



Input from one fishermen with historical knowledge of the region indicated that this is a relatively low-value area for groundfish bottom trawling. Effort layers in the EFH Data Catalog show no effort in both time periods (2002-2006 and 2006-2010), and historical trawl data shows no effort in the vicinity.

California landings tickets from 2007-2011 show a very small amount (between one and eleven pounds per square kilometer) of trawl landings in DFW fishing block 754, part of which overlaps with this area. These landings are likely from state-managed sea cucumber or ridgeback prawn fisheries. Further outreach will be conducted to determine the precise areas being fished; the shape can be adjusted if needed.

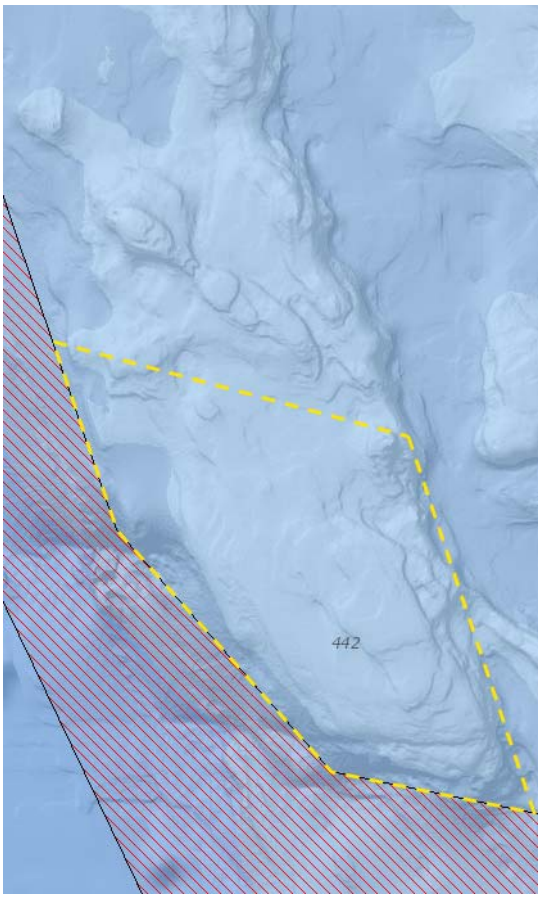
Note that as with all of the Southern California areas, there is no agreement on this shape, and the fact that some feedback was received from fishermen does not necessarily mean the shape is acceptable to industry in its current form.

Outer Bank

This is a distinct ridge or bank feature, occupying the outer edge of the Southern California Bight. From this ridge the seafloor slopes down steeply on the west side, dropping off the edge of the Bight into very deep water. On the east side of the ridge the seafloor also slopes down abruptly (steeper than the west but not dropping as far), marking the transition to Tanner Basin. The north end of the bank narrows into a ridge heading up toward the Northern Channel Islands. The top of the bank shows rumpled topography, and the southern end of the bank is characterized by a wide plateau rising up to fairly shallow depths (200fm).

The substrate data layer shows large patches of hard substrate on this bank, though with a low confidence level. There are a number of coral/sponge observations in this area, including glass

sponges. Observations are primarily from trawl survey records; no research dives have been conducted here.



The original draft shape covered the whole bank feature, but feedback from fishermen indicated that the northern end of the bank can be good for targeting blackgill rockfish with bottom trawl gear. The shape was re-drawn to leave the northern half of the bank open.

In terms of recent activity, the EFH Data Catalog effort data layers show no bottom trawling in the area in both time periods (2002-2006 and 2006-2010), and historical trawl data shows no effort in the vicinity. Landings tickets from 2007-2011 show no bottom trawl landings from any DFW fishing blocks in the area.

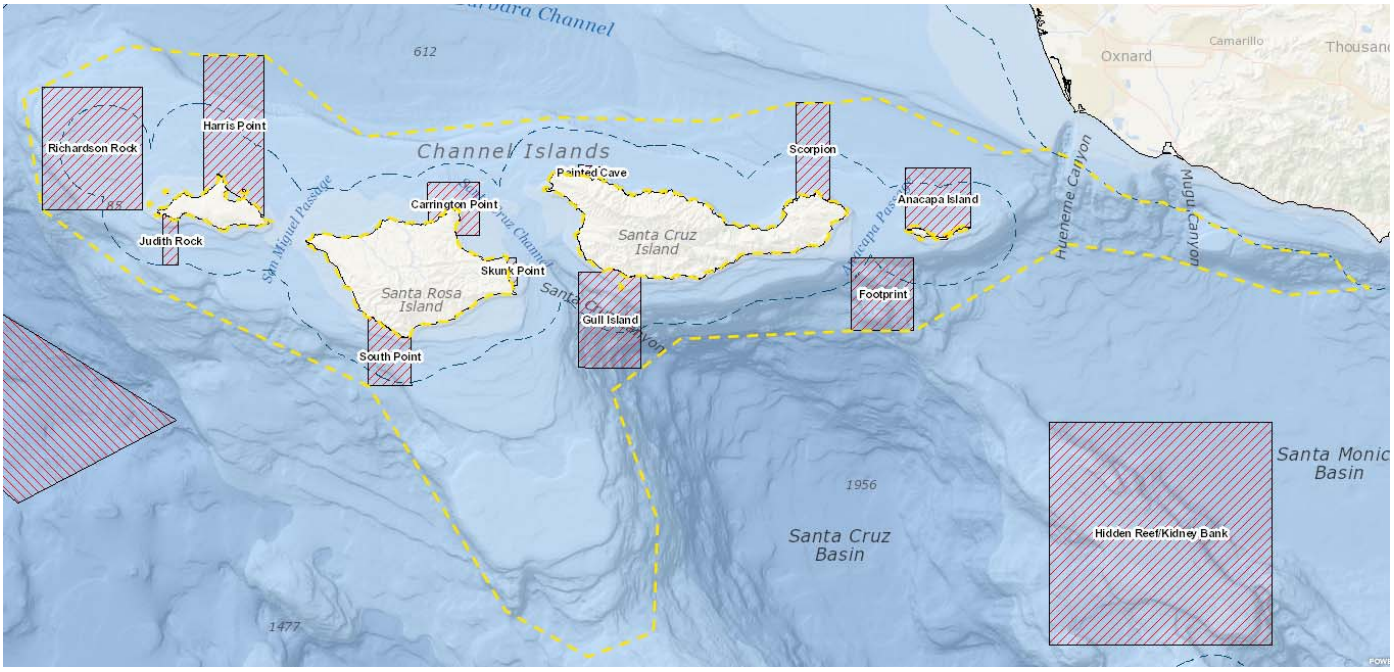
As with all of the Southern California areas, there is no agreement on this shape, and the fact that the shape was re-drawn based on feedback was received from fishermen does not necessarily mean the shape is acceptable to industry in its current form.

Northern Channel Islands

The Northern Channel Islands are a complex area of islands and surrounding shelf, with steep slopes and canyons dropping off to the adjacent basins. The area is rich, diverse, and heavily studied.

Around the islands themselves, there is a shallow shelf with patches of hard and mixed substrate (some areas mapped with high confidence, others low confidence). Within 2-5 miles of the islands, the seafloor drops off steeply, heading down to the Santa Barbara Channel (to the north), the Santa Cruz Basin (to the southeast), and Tanner Basin (to the southwest). The slope contains areas of exposed bedrock and scarps, as well as a number of small canyons. The most significant canyon is Santa Cruz Canyon, much of which is currently covered by the state/federal Gull Island Marine Reserve. To the south of Santa Rosa Island, the shelf extends out for about 20 miles, forming a wide plateau with bands of likely hard substrate.

There are hundreds of coral and sponge observation records around the Channel Islands, both because the ecosystems are rich in structure-forming invertebrates and because the area is well-studied. A dozen or more research dives have been conducted around the islands, the surrounding shelf, and the slope heading down to the adjoining basins. These research dives have found abundant corals and sponges, including hard corals, gorgonian corals, glass sponges, and black corals. Some of the locations of research dives are: on the southern plateau, in Santa Cruz Canyon, on the shelf south of Santa Rosa Island, along the shelf on the north side of the islands, and in the state/federal Footprint Marine Reserve.



In terms of jurisdiction and current regulations, the Trawl RCA completely surrounds the Channel Islands, and covers much of the southern plateau as well. There is also a network of joint state/federal marine reserves around the Channel Islands, Additionally, California law prohibits trawling in state waters around the islands. Finally, the Channel Islands National Marine Sanctuary boundary encircles the islands with a radius of 6 nautical miles.

The shape shown here was drawn by connecting the corners of the Trawl RCA and the state/federal marine reserves, making an outer perimeter around those areas. Only two sections diverge significantly from the current RCA and marine reserve coverage.

First, the south end of this shape was extended a small amount from the current extent of the Trawl RCA, in order to capture areas of likely hard substrate and to better cover the plateau south of the islands. There are numerous coral and sponge observations on the southern plateau, both from research dives and the trawl survey. The southern extension of this shape also connects up with the draft Begg Ridge area to the south. No groundfish trawl effort shows up in

this southern plateau area in the EFH Data Catalog effort layers, or in historical groundfish trawl data. Part of DFW fishing block 749 is included in this area, and that block registered an extremely small amount (between one and eleven pounds) of trawl landings for the period 2007-2011; it is unclear if this effort took place in the area sketched here.

Second, the east end of this shape was extended beyond the islands in order to cover the federal waters portions of Hueneme and Mugu Canyons, and the escarpment east of those canyons. A number of research dives have been conducted in the Mugu-Hueneme area, showing rich soft-sediment habitats with abundant sea pens and sea whips. To the east there are several large patches of likely hard substrate. In terms of topography, the area east of Mugu Canyon contains a distinct ridge, with small canyons perforating the surrounding escarpment. The escarpment in this region is an area of predicted high-value coral habitat, and was identified on this basis for a potential closure by the MCI proposal from 2013. In terms of effort, around Hueneme Canyon and east to Laguna Point trawling occurs almost entirely on the shelf in state waters; these areas are California Halibut Trawl Grounds and bottom trawling is allowed in state waters from 1-3 miles offshore. Almost no effort occurs in the federal waters adjoining these areas based on historical bottom trawl patterns. Around Mugu Canyon, state waters are closed to bottom trawling. Low levels of historical trawl effort exist in federal waters adjacent to Mugu Canyon; this would be precluded by the shape as currently sketched. East from Mugu Canyon to Point Dume, no historical bottom trawl effort exists, and no trawl landings of any sort are registered from 2007-2011 in DFW fishing blocks 706, 705, 704, and 703 (the areas covered by the eastern extension of this shape).

Because the Trawl RCA covers most of the area sketched here, an EFH Conservation Area would simply maintain the same level of protection going forward, in the event the Trawl RCA is lifted. This is important, because if the Trawl RCA were lifted and an EFH Conservation Area not put in place, a significant amount of area would be exposed to trawling for the first time in over a decade, including several research dive sites where sensitive habitat was observed. The state/federal marine reserve network would not be changed, nor would the state prohibition on trawling in state waters around the islands.

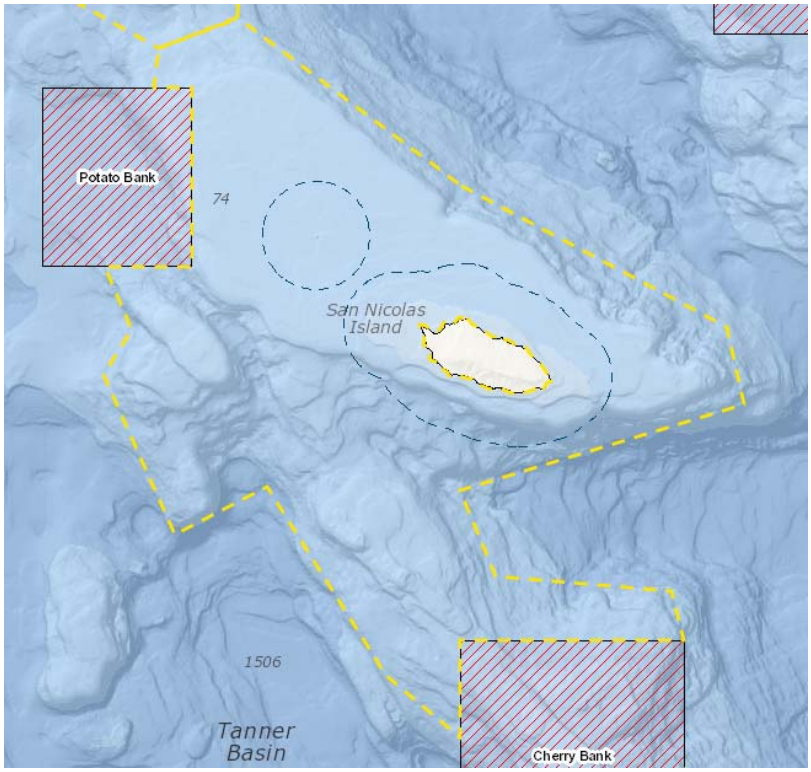
This shape was originally drawn in a way that extended further down the slope on all sides, but feedback from at least one fisherman indicated this extent was not acceptable. Based on this feedback, the area was trimmed as much as possible while still covering the features and regulatory aspects noted above. As a result of the trimming, one research dive site in the Santa Barbara Channel is left out, as are a few patches of likely hard substrate, and a rugged slope area on the southwest side of the islands with a number of coral/sponge records from trawl survey hauls.

Note that as with all of the Southern California areas, there is no agreement on this shape, and the fact that revisions were made in response to fishermen's feedback does not mean the shape is acceptable to industry in its current form.

Begg Ridge

This is a centrally-located ridge in the Southern California Bight, south of the main Channel Islands and north of Tanner and Cortes Banks. The ridge rises up from surrounding basins to form a shallow shelf in the 50-60fm depth range. In the center of the shelf is San Miguel Island, and to the northwest of the island is Begg Rock. Potato Bank sits on the western side of the ridge, and to the south the ridge connects to Cherry Bank.

The shape sketched here would cover the shallow shelf around San Nicolas Island, as well as the ridge connecting to Cherry Bank. Two well-mapped (high confidence) areas of hard and mixed substrate are located in this area, one south of Potato Bank and one north of Cherry Bank. Farther south of Potato Bank, there is an area of steep bathymetry which is designated as likely (low confidence) hard substrate. Off the eastern end of San Nicolas Island there are four or five slot canyons with likely (low confidence) hard substrate.



The banks in this region have interesting flora and fauna, even in areas of soft bottom: research dives have found abundant corals and sponges, such as bubblegum corals, fan corals, and black corals (including several Christmas tree corals). Dozens of submersible and ROV dives have been conducted in the area. A few trawl survey coral and sponge observation records are located in the area as well.

This is known cowcod habitat, from historical angler catch records (1964-74 and 1990-98), and the shape sketched here is also almost entirely within the western CCA. As a result, there is no current groundfish bottom trawling in the area. Historical trawl patterns also show no effort in the area.

In terms of current regulations and jurisdictions, this shape would connect up with a number of existing protected areas. Potato Bank and Cherry Bank are already designated as no-trawl EFH Conservation areas, and state waters around San Miguel Island are already closed to bottom trawling. Also the Begg Rock State Marine Reserve occupies a 3-mile radius circle around Begg Rock. Finally, as noted above the western Cowcod Conservation Area encompasses all of the shape sketched here, except for the very westernmost and northernmost corners. Because the CCA currently prohibits bottom trawling, adding a larger EFH Conservation Area here would simply maintain protection in the event the CCA is lifted, in recognition of the habitat value of these banks.

An earlier version of this shape was discussed with a few fishermen. One person mentioned that there was historic fishing around San Nicolas Island, and it would be good to be able to access those areas in the future, if the CCA is lifted at some point. Based on this feedback, the shape was reduced in size somewhat to its current form. Further information is needed on exactly which places were used historically, and whether they area covered by the shape as sketched here. More precise fishing information also would allow cross-referencing of substrate layers and dive reports. And detailed parsing of the dive reports, in turn, may indicate some areas that could be excluded from a trawl closure. Some of the flat bank-top areas, especially on the northern end of this shape, may be less diverse and have less rationale for prohibiting trawling. The shape could be modified accordingly.

It may also be possible to re-open part of the existing Potato Bank EFH Conservation Area, if this would improve fishing opportunity. The western part of that EFH Conservation Area appears to have no hard or mixed substrate, minimal coral and sponge observation records, and relatively unremarkable seafloor bathymetry. It is unclear why it was chosen for closure in Amendment 19; further research is needed to determine this.

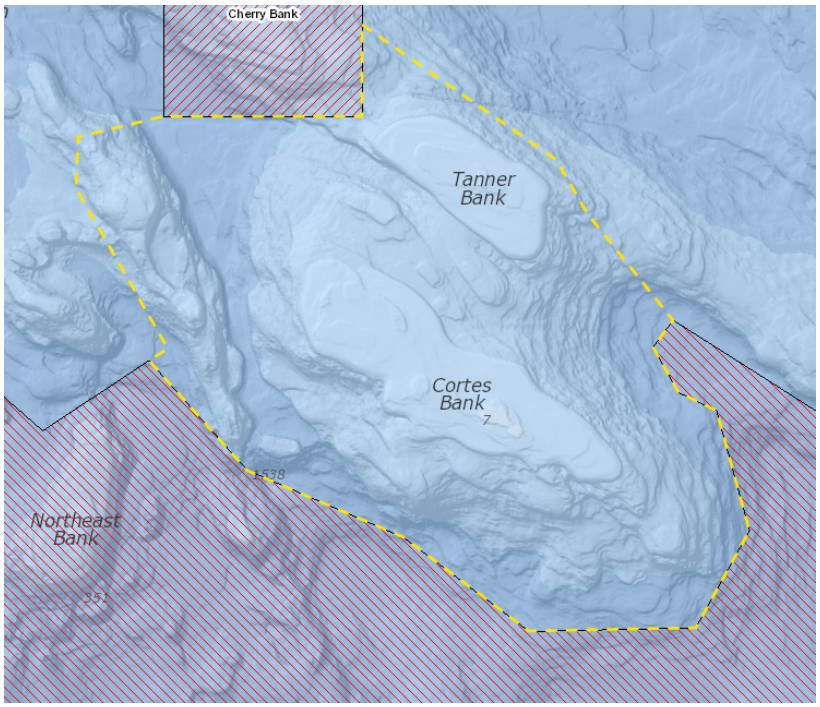
Note that as with all of the Southern California areas, there is no agreement on this shape, and the fact that revisions were made in response to fishermen's feedback does not mean the shape is acceptable to industry in its current form.

Tanner and Cortes Banks

Tanner Bank is a well-known feature that has been mapped with high-resolution sonar and found to have hard and mixed substrate on the bank top. Cortes Bank, larger and located to the south of Tanner Bank, is shown as having likely hard substrate across most of the bank top and sides, but has not been mapped with high-resolution sonar. Most of the saddle between Tanner and

Cortes banks has been mapped with high-resolution sonar, which found distinct patches of hard and mixed substrate, as well as areas of soft substrate.

There are numerous coral and sponge observations on Tanner Bank and Cortes Bank, as well as in the saddle between the banks. These records are from the trawl survey as well as research dives, and include hard corals, soft corals, sea pens, and sponges. This area in general is predicted to have high-value coral habitat, and was identified on this basis by the MCI proposal from 2013.



The sides of the banks have steep slopes and drop off suddenly (e.g., depth change from 40fm to 700fm within a few miles) in the transition to the surrounding basins. To the west of Tanner and Cortes Banks, there is a smaller ridge running north-south that has likely hard substrate and has been the subject of ROV research dives, which found abundant corals on the ridge-top.

The area sketched here would cover the two banks, the saddle between them, and the smaller ridge to the west. It would connect to the existing Cherry Bank EFH Conservation Area in the north and to the 700fm line in the south. With this configuration, it would cover both the shallow bank-top areas and the steep sides of the banks, as well as a small amount of basin-floor area adjacent to the banks. Almost all of this area is within the western CCA and already is closed to fishing, so creating an EFH Conservation Area here simply would maintain protection if the CCA is removed at some point in the future.

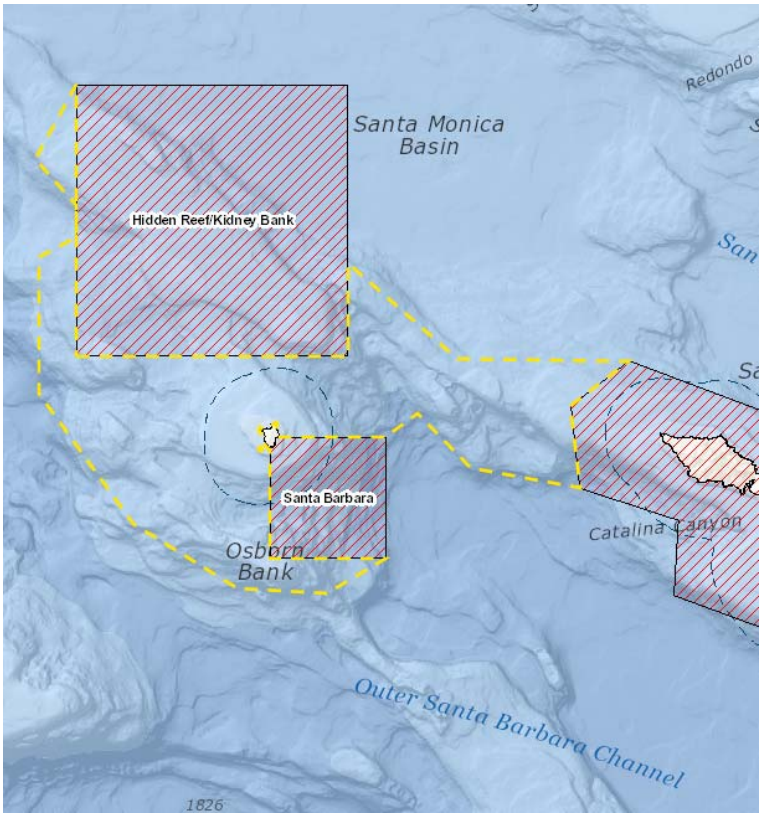
This area originally was drawn larger, as encompassing an additional ridge to the west and the ridge running southeast from Tanner Bank. Initial feedback from fishermen indicated that the draft area was too big, so these extra features were dropped and the line was tightened up on the north side of Tanner Bank. One fisherman also indicated that the saddle area between Tanner and Cortes Banks is trawlable, and would be a good area to leave open. Discussions are still in progress on how to incorporate this feedback.

Note that as with all of the Southern California areas, there is no agreement on this shape, and the fact that revisions were made in response to fishermen's feedback does not mean the shape is acceptable to industry in its current form.

Santa Barbara Plateau

This area would expand on the existing Hidden Reef/Kidney Bank EFH Conservation Area, connecting it with the state-federal Santa Barbara marine reserve and the existing Catalina Island EFH Conservation Area to the east. The area is almost entirely within the western CCA, making the EFH expansion simply a matter of maintaining protection if and when the CCA is removed.

Santa Barbara Island is part of a shallow bank or plateau feature that rises up and forms a boundary between Santa Cruz Basin to the west and Santa Monica Basin to the northeast. Depths on the top of the plateau are generally in the 100-200fm range, with shallower areas in state waters near the island. The top of the bank has fairly high-relief topography, comprised of several distinct ridges and peaks. Kidney Bank occupies the northern part of the plateau, and Osborn Bank occupies the south end. To the east, a saddle-type ridge connects the Santa Barbara Plateau with Santa Catalina Island.



Kidney Bank and Osborn Bank have been mapped with high-resolution sonar, and hard and mixed substrate was documented on both banks. The rest of the plateau has not been mapped, but hard substrate is likely in the shallow waters around Santa Barbara Island, as well as in several large patches in deeper waters. Numerous coral and sponge observations exist within the area, both from the trawl survey and research dives. Gorgonian corals, glass sponges, and hard corals were found, among others.

The boundary line sketched here more or less runs along depth contours, ranging from approximately 300fm to 500fm. Almost all of this area is currently in the western Cowcod

Conservation Area, so bottom fishing is already prohibited. The main effect of designating this area as a no-trawl EFH Conservation Area would be to maintain protection, in recognition of the area's habitat value, if at some point in the future the CCA is removed. The existing Hidden Reef/Kidney Bank EFH Conservation Area, located to the north of Santa Barbara Island, is a no-trawl zone; this would be subsumed into the larger area proposed here. A joint state-federal marine reserve, the Santa Barbara Marine Reserve, occupies a rectangle heading southeast from the island, and would be unchanged by the designation of surrounding waters as an EFH Conservation Area. With respect to the state waters surrounding Santa Barbara Island, bottom trawling is already prohibited by state law, so designation as an EFH Conservation Area would not result in a change in the allowable fishing practices.

No groundfish bottom trawl effort exists in the shape as currently drawn. Historical trawl effort data shows no activity in the area, and both time periods contained in the EFH Data Catalog have zero trawl activity for this area. Other types of bottom trawling appear to be occurring at very low levels in the area —most likely trawling for sea cucumber or ridgeback prawns. California DFW fishing blocks 746 and 745, to the northwest and north of Santa Barbara Island respectively, each register trawl landings at a level of one to eleven pounds per square kilometer for the period of 2007-2011.

No specific feedback from fishermen was received on this area. As mentioned above, one fisherman indicated as an overall matter that the amount of area encompassed by the draft Southern California shapes was too large. On the other hand, several Okeanos Explorer research dive sites on the western slope (toward Santa Cruz Basin) would be excluded by the shape as currently sketched. Those dives found abundant corals and sponges, including a number of fan-type corals, in deep soft-sediment areas. In terms of California state-managed bottom trawlers, outreach is necessary to determine precisely where fishing activity is taking place.

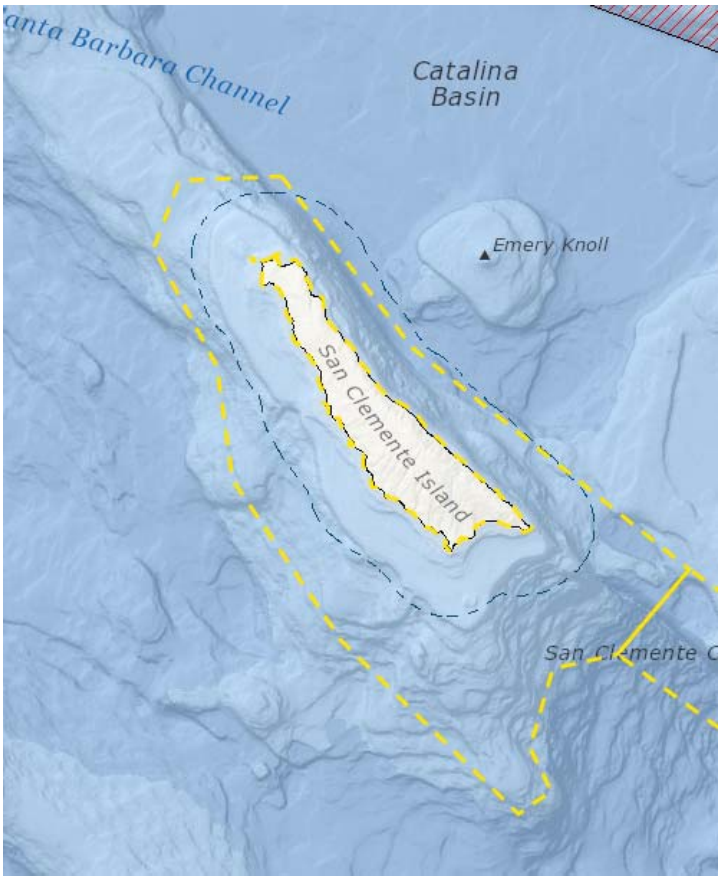
In the course of designing this area, it was noted that the northeast corner of the existing Hidden Reef/Kidney Bank EFH Conservation Area is comprised of flat soft-sediment bottom in the Santa Monica Basin. Because this is not particularly sensitive habitat, it could potentially be opened if doing so would help increase fishing opportunity in the region.

As with all of the Southern California areas, there is no agreement on this shape. Even if this area were accompanied by a re-opening, there is no indication that the package would be acceptable to industry.

San Clemente Ridge

San Clemente ridge is a distinct feature that rises up from deep basins on all sides. At the top of the ridge lies San Clemente Island, and surrounding the island is an elongated shelf area ranging in depth from 30-250fm. To the northwest the ridge gradually drops off, reaching a depth of 450fm before rising up again to join Osborn Bank. The seafloor bathymetry on all sides of the ridge is steep; the drop-off on the northeastern side of the island is extremely sharp, and a the southwestern side drops off only slightly more gradually. San Clemente Canyon, a steep trench, heads southeast from the island into San Clemente Basin.

None of the areas around San Clemente ridge have been mapped with high-resolution sonar, but there are several areas of likely hard substrate surrounding the island, as well as a strip of likely hard substrate running down San Clemente Canyon. Numerous coral and sponge observation records exist around the island, both from the trawl survey and from research dives. Observed corals include gorgonian-type corals and black corals (including Christmas tree corals). Research dives found high densities of corals on the south side of the island, as well as at several points along the west side of the island. Moderate densities of corals were found at the head of San Clemente Canyon and on the east side of the island. The region around San Clemente Island also was identified in the MCI proposal from 2013 as an area of predicted high-suitability coral habitat.



In terms of current regulations, California state law prohibits bottom trawling in state waters around San Clemente Island. The area sketched here would encompass state waters and extend that protection to some of the surrounding deeper areas. The Trawl RCA also encircles San Clemente Island, tracing a fairly narrow band between the 100fm and 150fm Federal Register lines. If San Clemente ridge were added as an EFH Conservation Area, the Trawl RCA could be lifted and protection would be maintained. As an EFH Conservation Area, protection would be based the value of this area as groundfish habitat, rather than on the need for mortality reductions for certain rockfish species.

No fishing effort is reflected in this region in historical groundfish bottom trawl patterns. Similarly, groundfish bottom trawl effort is absent in both time periods displayed in the EFH Data Catalog (2002-2006 and 2006-2010).

The initial draft shape for this area extended to the northwest and connected to Santa Barbara Bank, in order to capture the full ridge feature. Feedback from fishermen indicated historical trawl grounds are located on the northwestern part of the ridge, and the shape was modified to leave that area open.

As currently drawn, the shape does not include the lower flanks of San Clemente ridge, or the adjacent saddle feature in San Nicolas Basin. Trawl survey coral and sponge observations in those areas show a number of interesting species, including numerous black corals (*bathypathes sp.*), hydrocorals (*stylaster sp.*), and glass sponges (*hexactinosida.*).

In terms of other bottom trawl fisheries, state-managed ridgeback prawn or sea cucumber trawlers may access the area to a limited degree: between 46 and 111 pounds of landings per square kilometer are recorded for California DFW fishing block 850, from 2007-2011. Input is needed to identify the areas in use for ridgeback prawn or sea cucumber trawling; the shape may need to be modified accordingly.

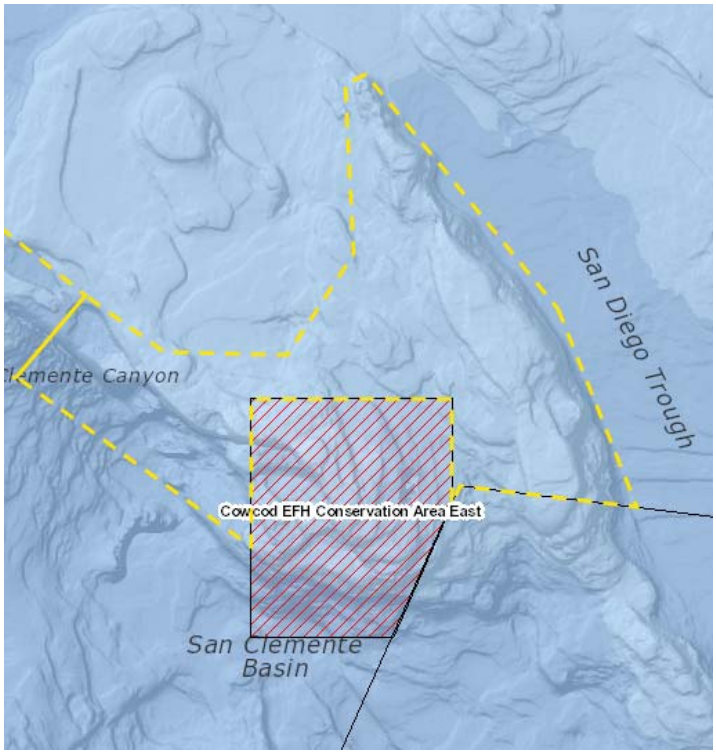
As with all of the Southern California areas, there is no agreement on this shape, and the fact that revisions were made in response to fishermen's feedback does not mean the shape is acceptable to industry in its current form.

Eastern San Clemente Ridge

This area includes the ridge connecting San Clemente Island with the Eastern Cowcod Conservation Area (also known as 43 Fathom Bank), as well as the ridge running northward from the Eastern CCA up the edge of the San Diego Trough. These are well-defined geological features, easily visible on both bathymetric maps and nautical charts. The subsurface topography is rumpled in this area, and sharp drop-offs are found at the edge of both the San Diego Trough and the San Clemente Basin. San Clemente Canyon runs through the western portion of this area.

Only a small part of this area has been mapped with high-resolution sonar, but hard substrate is believed to exist in several places—San Clemente Canyon, the ridge bordering San Diego Trough, and a high spot to the north of 43 Fathom Bank. Several research dives have been conducted on the ridge bordering San Diego Trough. ROV footage from those dives showed diverse structure-forming invertebrate communities, including several types of hard corals

(*lophelia sp., desmophyllum sp.*). A number of coral and sponge observations from the trawl survey are found in the area as well.



Although the eastern ridge rises up above 150fm, there is no Trawl RCA in this area. The area is not covered by the CCA (though the Eastern CCA would be encompassed by the shape as drawn here), and there are no state waters in the area. As such, bottom trawling is currently allowed in the entire shape sketched here. A disused explosives dumping ground occupies the far southeastern corner of this area, however, making bottom trawling in that area unlikely.

Groundfish bottom trawl effort layers show no fishing in this area during either of the time periods displayed in the EFH Data Catalog (2002-2006 and 2006-2010). Historical groundfish bottom trawl effort data also shows no effort in the region. No trawl landings are registered for any of the relevant California DFW fishing blocks, indicating no state-managed trawl fisheries (such as ridgeback prawn or sea cucumber) are active in the area.

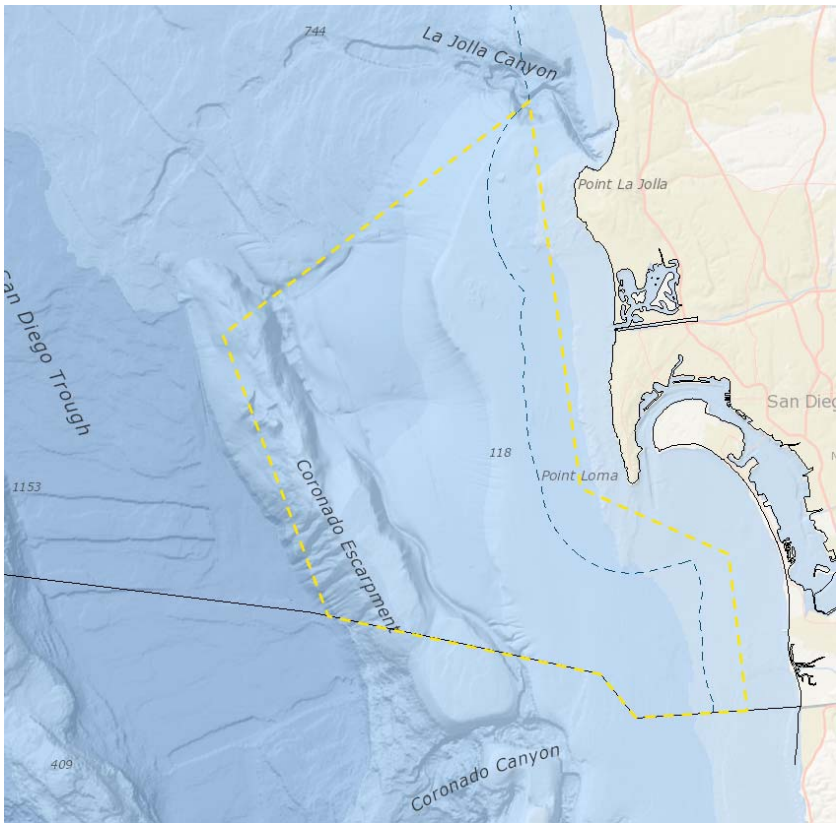
In terms of feedback from industry, one fisherman mentioned there are historical fishing grounds in the vicinity. The original draft shape was trimmed back somewhat based on this input, yielding the current shape—which traces the features fairly tightly. Further input is needed to clarify the exact location of historical fishing areas, and determine whether the modifications were successful in leaving them open. If subsequent modifications to the shape are needed, scientists who conducted research dives in the area may be able to help characterize the seafloor more precisely.

In the course of sketching this shape, it was noted that several black coral and gorgonian coral observation records from the trawl survey are located just to the northeast of this area, around the high spots in the Gulf of Santa Catalina and the northern San Diego Trough. These areas are currently outside the shape as drawn. NGOs expressed interest in trying to extend the boundary around these areas, in order to protect the slow-growing coral communities there. Feedback will be needed on this idea to determine whether it is viable.

As with all of the Southern California areas, there is no agreement on this shape, and the fact that revisions were made in response to fishermen's feedback does not mean the shape is acceptable to industry in its current form.

Coronado Shelf

This area is comprised of several distinct geological features including part of the nearshore shelf, a very steep escarpment sloping down to the San Diego Trough, and a tributary canyon originating in Coronado Canyon to the south. The area is thought to be generally soft bottom, although the confidence level in the substrate mapping is low. There have been several ROV dives in the area, which found significant coral and sponge populations, including hard corals.



The Trawl RCA currently covers a portion of this area, so adding an EFH Conservation Area here would simply extend protection for that portion and switch it over to a habitat basis. This area also is adjacent to a state marine protected area complex (South La Jolla SMCA and South La Jolla SMR), and would provide continuity of protection seaward from those areas.

This area happens to encompass several obstructions, submerged buoys, dump sites, and a naval restricted area. These are not necessarily reasons for designating it as an EFH Conservation Area, but they do indicate that little effort will be displaced. Historical trawl data shows no effort in the area, as do both of the time periods (2002-2006 and 2006-2010) in the EFH Data Catalog effort layers.

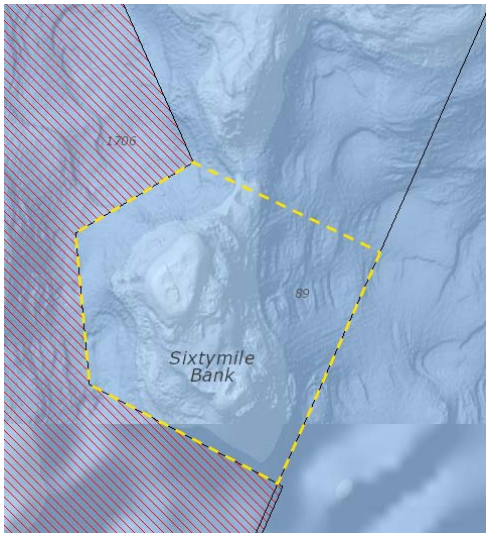
The shoreward boundary of this shape could be drawn as is, or be drawn to trace the 3-mile state waters line. Any overlap between this shape and state waters would be redundant, as bottom trawling is already prohibited in state waters within 3 miles of shore, but allowing overlap would

simplify the waypoints significantly. Discussions with the State of California about how best to approach this will continue over the upcoming months.

Feedback from federal groundfish bottom trawlers suggests this is a relatively low-priority fishing area for them. Less is known about state-managed trawl fisheries, and further conversations are necessary to vet this shape with those fishermen. As with all Southern California areas, there is no agreement on this shape, and the fact that fishermen's feedback was received does not mean the shape is acceptable to industry.

Sixty-Mile Bank

Sixty-Mile Bank is an area of high relief topography located on the southern EEZ boundary, west of Tijuana. The bank shows rapid depth changes over short distances, and while the EFH Data Catalog substrate layers show the area as soft substrate, it has not been mapped and the associated confidence level is low.



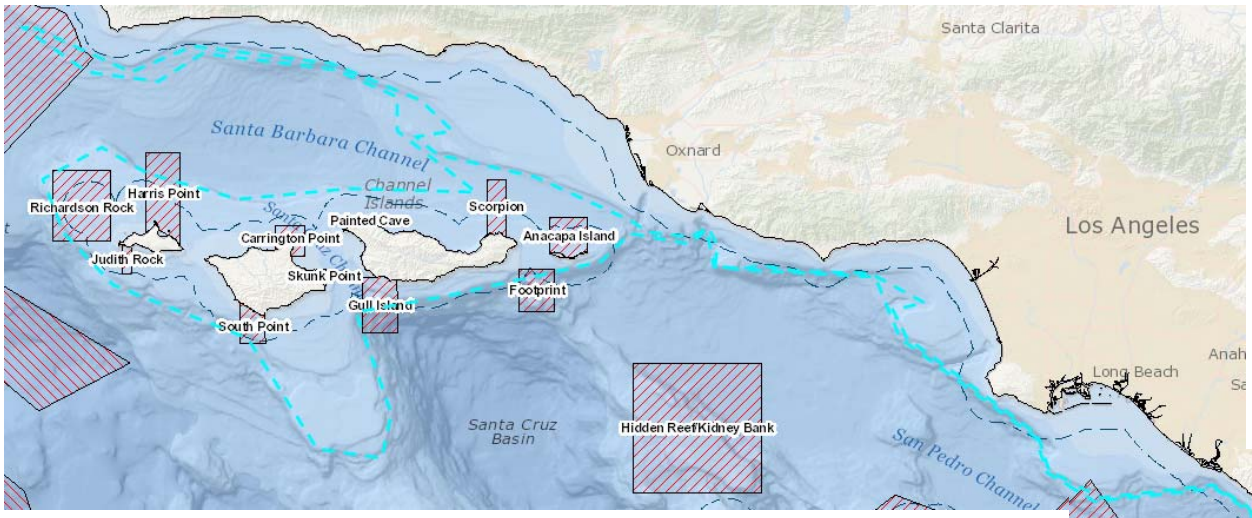
Fishermen and researchers characterize the bank as high-value habitat for cowcod, as well as for other rockfish species. Research dives on the bank found hard corals in varying densities; no trawl survey coral or sponge observations are recorded in the area.

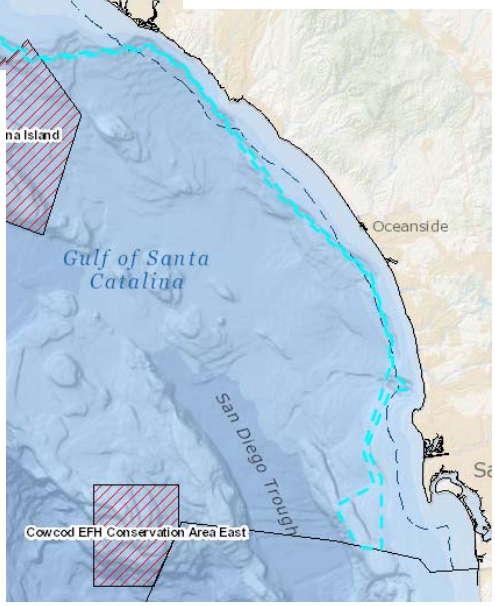
The shape sketched here would fill in the existing gap between the 700fm line and the southern EEZ boundary. Whether this would be implemented as a modification to the 700fm line or a distinct EFH Conservation Area is unclear.

Feedback from fishermen suggests this is a relatively low-priority area for bottom trawling, and there is no current or known historical fishing in the area. Bottom trawl effort layers in the EFH Data Catalog confirm this, as do historical bottom trawl patterns. That said, as with all Southern California areas, there is no agreement on this shape, and the fact that fishermen's feedback was received does not necessarily mean the shape is acceptable to industry.

Trawl RCA 34°27' to Mexico
Trawl RCA around Santa Catalina Island
Trawl RCA around San Clemente Island
Trawl RCA around Lasuen Knoll

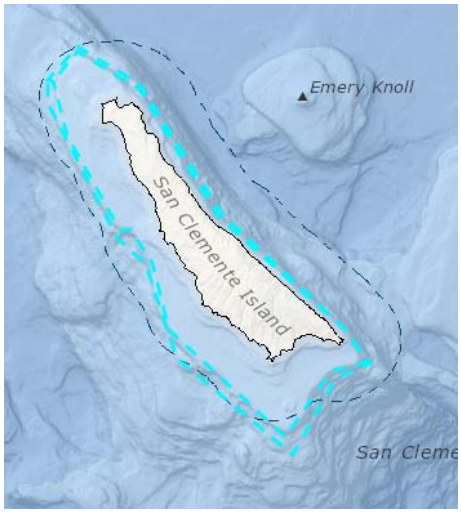
In the south of Point Conception region, the Trawl RCA occupies the space between the 100fm and 150fm Federal Register lines. In practice, this means a narrow strip of ground running along the shoreward side of the Santa Barbara Channel, which expands dramatically to encompass the entire Northern Channel Islands chain, and then narrows back down to a thin strip running south to the Mexico border. The Trawl RCA widens out briefly at a few points—Santa Monica Bay, La Jolla Canyon, and the Coronado Escarpment—but to a much smaller degree than it does around the Channel Islands. Thin ribbons of Trawl RCA also encircle Santa Catalina Island and San Clemente Island, running along the same depth contours. Finally, a small rectangle of Trawl RCA sits atop Lasuen Knoll, an outcrop that rises up to shallow depths in the area between Santa Catalina Island and the mainland.





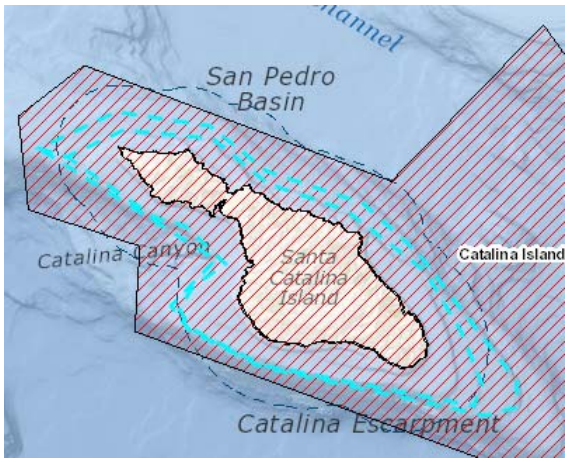
The Trawl RCA passes through state waters in a few areas—Mugu Canyon, Point Dume, off Long Point, between Newport Beach and Dana Point, around Carlsbad Canyon, and at La Jolla Canyon. A significant amount of the Trawl RCA around the Northern Channel Islands also lies within state waters. And around Santa Catalina Island and San Clemente Island, the circles of Trawl RCA primarily lie within state waters.

In most places where the Trawl RCA overlaps with state waters, bottom trawling still would not be allowed upon removal of the RCA, due to California's ban on bottom trawling in state waters.



The only exceptions are designated California Halibut Trawl Grounds, and areas where state waters extend beyond 3 nautical miles from shore due to the presence of offshore rocks (in these cases bottom trawling is allowed in state waters further than 3 miles from shore). The majority of the Trawl RCA is located outside state waters, however, and a removal of the RCA would result in the area being opened to bottom trawling.

The potential changes to EFH Conservation Areas described above are intended to safeguard important groundfish habitat in the Southern California region, and among other things, allow for the removal of the Trawl RCA with no habitat concerns. As such, the different Trawl RCA areas are represented as re-openings in this package.



The RCA areas are classified as "Recommendations in Progress," though. Given the particular circumstances in Southern California—no active groundfish trawl fishery and few people with knowledge of the area—it is difficult to know the comfort level of stakeholders in removing the Trawl RCA, or the level of interest in the EFH changes presented above. For now, the shapes and ideas presented above are intended to show the state of conversations about the Southern California region, with the hope that more definitive progress will come.

If it ultimately proves impossible to create a consensus set of changes for the Southern California region, the shapes and ideas above should be treated in the same way as "No Recommendation" areas elsewhere in this package—simply for the Council's information, to illustrate the thought process regarding this region and to highlight issues relevant to the various areas.

Appendix: Waypoints and Coordinates

The following pages list the waypoints, including latitude and longitude coordinates, for each shape described above. The recommendation type (EFH Opening, EFH Closure, RCA Opening) is listed with each waypoint, as is the recommendation status (Full Recommendation, Recommendation in Progress, No Recommendation). Note that for each shape, the first waypoint is repeated again as the last waypoint, in order to indicate closure of the polygon.

With respect to waypoints for the Trawl RCA, the coordinates listed below are approximations of the actual values. Readers should refer to the Federal Register for the official waypoints for the Trawl RCA.

Waypoints for shapes contained in the Monterey Bay National Marine Sanctuary (MBNMS) proposal also are approximations of the actual values. Readers should refer to the MBNMS proposal from 2013 for precise waypoint coordinates for these shapes.

When a reopening or new closure is intended to match an existing boundary line such as the Exclusive Economic Zone boundary, an existing EFH Conservation Area boundary, or the state waters boundary, the waypoints shown below should be treated as approximations. Readers should refer to the Federal Register or other source of authority for the relevant waypoint or line definition.

Finally, readers should bear in mind that some of these shapes are still in progress, and updates will be provided over the coming months should any of the shapes (or their status) change.

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
REGION 1									
Nitinat Canyon	1	48	11.0675	N	126	45.5656	W	EFH Closure	Full Recommendation
Nitinat Canyon	2	48	9.3365	N	126	47.5225	W	EFH Closure	Full Recommendation
Nitinat Canyon	3	48	7.3845	N	126	49.2941	W	EFH Closure	Full Recommendation
Nitinat Canyon	4	48	5.9541	N	126	53.8465	W	EFH Closure	Full Recommendation
Nitinat Canyon	5	48	5.2318	N	126	56.6172	W	EFH Closure	Full Recommendation
Nitinat Canyon	6	48	4.4611	N	126	56.7922	W	EFH Closure	Full Recommendation
Nitinat Canyon	7	48	3.2083	N	126	54.6602	W	EFH Closure	Full Recommendation
Nitinat Canyon	8	48	0.846	N	126	52.8784	W	EFH Closure	Full Recommendation
Nitinat Canyon	9	48	0.5083	N	126	50.4888	W	EFH Closure	Full Recommendation
Nitinat Canyon	10	48	1.3502	N	126	45.8456	W	EFH Closure	Full Recommendation
Nitinat Canyon	11	48	0.1375	N	126	45.2894	W	EFH Closure	Full Recommendation
Nitinat Canyon	12	47	58.5934	N	126	48.4205	W	EFH Closure	Full Recommendation
Nitinat Canyon	13	47	57.0257	N	126	48.519	W	EFH Closure	Full Recommendation
Nitinat Canyon	14	48	0.4361	N	126	54.9546	W	EFH Closure	Full Recommendation
Nitinat Canyon	15	48	6.941	N	127	2.9087	W	EFH Closure	Full Recommendation
Nitinat Canyon	16	48	10.8116	N	126	54.4501	W	EFH Closure	Full Recommendation
Nitinat Canyon	17	48	10.4357	N	126	53.9907	W	EFH Closure	Full Recommendation
Nitinat Canyon	18	48	10.8889	N	126	48.4289	W	EFH Closure	Full Recommendation
Nitinat Canyon	19	48	11.6306	N	126	47.6667	W	EFH Closure	Full Recommendation
Nitinat Canyon	20	48	12.6971	N	126	44.0623	W	EFH Closure	Full Recommendation
Nitinat Canyon	21	48	11.7223	N	126	44.0005	W	EFH Closure	Full Recommendation
Nitinat Canyon	22	48	11.0675	N	126	45.5656	W	EFH Closure	Full Recommendation
Olympic 2 Northeastern Modification	1	48	21.4742	N	125	50.6271	W	EFH Closure	Recommendation in Progress
Olympic 2 Northeastern Modification	2	48	15.3359	N	125	57.7133	W	EFH Closure	Recommendation in Progress
Olympic 2 Northeastern Modification	3	48	16.9997	N	125	57.1822	W	EFH Closure	Recommendation in Progress
Olympic 2 Northeastern Modification	4	48	21.4605	N	125	51.612	W	EFH Closure	Recommendation in Progress
Olympic 2 Northeastern Modification	5	48	23.89	N	125	54.3697	W	EFH Closure	Recommendation in Progress
Olympic 2 Northeastern Modification	6	48	23.3899	N	125	51.6365	W	EFH Closure	Recommendation in Progress
Olympic 2 Northeastern Modification	7	48	21.4742	N	125	50.6271	W	EFH Closure	Recommendation in Progress
Olympic 2 Southeastern Modification	1	48	7.9974	N	125	59.3638	W	EFH Closure	Recommendation in Progress
Olympic 2 Southeastern Modification	2	48	6.1299	N	126	0.6802	W	EFH Closure	Recommendation in Progress
Olympic 2 Southeastern Modification	3	48	11.1915	N	125	59.0516	W	EFH Closure	Recommendation in Progress
Olympic 2 Southeastern Modification	4	48	9.4398	N	125	58.9067	W	EFH Closure	Recommendation in Progress
Olympic 2 Southeastern Modification	5	48	7.9974	N	125	59.3638	W	EFH Closure	Recommendation in Progress
Olympic 2 Western Modification	1	48	6.1304	N	126	0.6809	W	EFH Closure	Recommendation in Progress
Olympic 2 Western Modification	2	48	5.5583	N	126	8.1928	W	EFH Closure	Recommendation in Progress
Olympic 2 Western Modification	3	48	6.5593	N	126	23.1535	W	EFH Closure	Recommendation in Progress
Olympic 2 Western Modification	4	48	13.9229	N	126	24.4924	W	EFH Closure	Recommendation in Progress

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Olympic 2 Western Modification	5	48	19.067	N	126	27.3667	W	EFH Closure	Recommendation in Progress
Olympic 2 Western Modification	6	48	20.2549	N	126	22.8818	W	EFH Closure	Recommendation in Progress
Olympic 2 Western Modification	7	48	23.1419	N	126	16.8741	W	EFH Closure	Recommendation in Progress
Olympic 2 Western Modification	8	48	16.5918	N	126	16.6617	W	EFH Closure	Recommendation in Progress
Olympic 2 Western Modification	9	48	14.1145	N	126	12.6899	W	EFH Closure	Recommendation in Progress
Olympic 2 Western Modification	10	48	8.4406	N	126	14.6112	W	EFH Closure	Recommendation in Progress
Olympic 2 Western Modification	11	48	6.6595	N	126	6.5459	W	EFH Closure	Recommendation in Progress
Olympic 2 Western Modification	12	48	6.1304	N	126	0.6809	W	EFH Closure	Recommendation in Progress
Biogenic 1 Eastern Modification	1	47	30.3146	N	126	8.8065	W	EFH Opening	Recommendation in Progress
Biogenic 1 Eastern Modification	2	47	30.0792	N	126	16.4948	W	EFH Opening	Recommendation in Progress
Biogenic 1 Eastern Modification	3	47	35.9941	N	126	17.8271	W	EFH Opening	Recommendation in Progress
Biogenic 1 Eastern Modification	4	47	41.5078	N	126	14.1928	W	EFH Opening	Recommendation in Progress
Biogenic 1 Eastern Modification	5	47	39.5382	N	126	10.5261	W	EFH Opening	Recommendation in Progress
Biogenic 1 Eastern Modification	6	47	30.3146	N	126	8.8065	W	EFH Opening	Recommendation in Progress
Biogenic 1 Southern Modification	1	47	30.0783	N	126	16.4999	W	EFH Closure	Recommendation in Progress
Biogenic 1 Southern Modification	2	47	28.5433	N	126	18.8281	W	EFH Closure	Recommendation in Progress
Biogenic 1 Southern Modification	3	47	29.7753	N	126	26.2799	W	EFH Closure	Recommendation in Progress
Biogenic 1 Southern Modification	4	47	29.9875	N	126	26.8412	W	EFH Closure	Recommendation in Progress
Biogenic 1 Southern Modification	5	47	29.9771	N	126	19.9662	W	EFH Closure	Recommendation in Progress
Biogenic 1 Southern Modification	6	47	30.0783	N	126	16.4999	W	EFH Closure	Recommendation in Progress
Biogenic 2 Northern Modification	1	47	28.8471	N	126	3.0228	W	EFH Closure	Recommendation in Progress
Biogenic 2 Northern Modification	2	47	25.41	N	125	59.8659	W	EFH Closure	Recommendation in Progress
Biogenic 2 Northern Modification	3	47	26.5526	N	125	53.6449	W	EFH Closure	Recommendation in Progress
Biogenic 2 Northern Modification	4	47	23.6116	N	125	50.2872	W	EFH Closure	Recommendation in Progress
Biogenic 2 Northern Modification	5	47	22.0215	N	125	50.4314	W	EFH Closure	Recommendation in Progress
Biogenic 2 Northern Modification	6	47	18.9366	N	125	57.9502	W	EFH Closure	Recommendation in Progress
Biogenic 2 Northern Modification	7	47	18.9087	N	126	1.2461	W	EFH Closure	Recommendation in Progress
Biogenic 2 Northern Modification	8	47	19.9978	N	126	1.2461	W	EFH Closure	Recommendation in Progress
Biogenic 2 Northern Modification	9	47	19.9978	N	126	10.0008	W	EFH Closure	Recommendation in Progress
Biogenic 2 Northern Modification	10	47	8.8515	N	126	10.042	W	EFH Closure	Recommendation in Progress
Biogenic 2 Northern Modification	11	47	19.3555	N	126	17.2312	W	EFH Closure	Recommendation in Progress
Biogenic 2 Northern Modification	12	47	24.1659	N	126	7.4516	W	EFH Closure	Recommendation in Progress
Biogenic 2 Northern Modification	13	47	27.2874	N	126	6.5864	W	EFH Closure	Recommendation in Progress
Biogenic 2 Northern Modification	14	47	28.8471	N	126	3.0228	W	EFH Closure	Recommendation in Progress
Biogenic 2 Eastern Modification	1	47	18.8947	N	126	1.2461	W	EFH Opening	Recommendation in Progress
Biogenic 2 Eastern Modification	2	47	8.7674	N	126	0.9371	W	EFH Opening	Recommendation in Progress
Biogenic 2 Eastern Modification	3	47	8.8375	N	126	2.5644	W	EFH Opening	Recommendation in Progress
Biogenic 2 Eastern Modification	4	47	12.0021	N	126	2.8734	W	EFH Opening	Recommendation in Progress
Biogenic 2 Eastern Modification	5	47	17.0088	N	126	5.3041	W	EFH Opening	Recommendation in Progress
Biogenic 2 Eastern Modification	6	47	18.8947	N	126	1.2461	W	EFH Opening	Recommendation in Progress
Grays Canyon Northern Modification	1	46	58.1986	N	125	51.137	W	EFH Closure	Recommendation in Progress

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Grays Canyon Northern Modification	2	46	55.0707	N	125	54.1399	W	EFH Closure	Recommendation in Progress
Grays Canyon Northern Modification	3	46	58.0109	N	125	55.0914	W	EFH Closure	Recommendation in Progress
Grays Canyon Northern Modification	4	46	57.251	N	125	58.1511	W	EFH Closure	Recommendation in Progress
Grays Canyon Northern Modification	5	47	1.1788	N	125	59.4848	W	EFH Closure	Recommendation in Progress
Grays Canyon Northern Modification	6	47	3.3689	N	125	56.3331	W	EFH Closure	Recommendation in Progress
Grays Canyon Northern Modification	7	47	4.2937	N	125	56.7792	W	EFH Closure	Recommendation in Progress
Grays Canyon Northern Modification	8	47	4.6457	N	125	54.9118	W	EFH Closure	Recommendation in Progress
Grays Canyon Northern Modification	9	47	3.8321	N	125	52.5448	W	EFH Closure	Recommendation in Progress
Grays Canyon Northern Modification	10	46	58.1986	N	125	51.137	W	EFH Closure	Recommendation in Progress
Grays Canyon Eastern Modification	1	46	54.4506	N	125	48.3598	W	EFH Opening	Recommendation in Progress
Grays Canyon Eastern Modification	2	46	54.2232	N	125	49.1443	W	EFH Opening	Recommendation in Progress
Grays Canyon Eastern Modification	3	46	58.1982	N	125	51.137	W	EFH Opening	Recommendation in Progress
Grays Canyon Eastern Modification	4	46	59.5999	N	125	49.7909	W	EFH Opening	Recommendation in Progress
Grays Canyon Eastern Modification	5	46	58.719	N	125	48.7802	W	EFH Opening	Recommendation in Progress
Grays Canyon Eastern Modification	6	46	54.4506	N	125	48.3598	W	EFH Opening	Recommendation in Progress
Grays Canyon Western Modification	1	46	51.8884	N	125	57.2155	W	EFH Opening	Recommendation in Progress
Grays Canyon Western Modification	2	46	49.8082	N	125	52.7989	W	EFH Opening	Recommendation in Progress
Grays Canyon Western Modification	3	46	51.5503	N	126	0.0017	W	EFH Opening	Recommendation in Progress
Grays Canyon Western Modification	4	46	56.7897	N	126	0.0017	W	EFH Opening	Recommendation in Progress
Grays Canyon Western Modification	5	46	57.2501	N	125	58.1514	W	EFH Opening	Recommendation in Progress
Grays Canyon Western Modification	6	46	55.9536	N	125	57.6571	W	EFH Opening	Recommendation in Progress
Grays Canyon Western Modification	7	46	55.9395	N	125	55.1439	W	EFH Opening	Recommendation in Progress
Grays Canyon Western Modification	8	46	53.5218	N	125	54.208	W	EFH Opening	Recommendation in Progress
Grays Canyon Western Modification	9	46	51.8884	N	125	57.2155	W	EFH Opening	Recommendation in Progress
Grays Canyon Southern Modification	1	46	54.3807	N	125	52.7308	W	EFH Closure	Recommendation in Progress
Grays Canyon Southern Modification	2	46	53.9901	N	125	49.9512	W	EFH Closure	Recommendation in Progress
Grays Canyon Southern Modification	3	46	54.223	N	125	49.1472	W	EFH Closure	Recommendation in Progress
Grays Canyon Southern Modification	4	46	50.4042	N	125	49.0636	W	EFH Closure	Recommendation in Progress
Grays Canyon Southern Modification	5	46	48.1161	N	125	47.942	W	EFH Closure	Recommendation in Progress
Grays Canyon Southern Modification	6	46	47.4815	N	125	50.8568	W	EFH Closure	Recommendation in Progress
Grays Canyon Southern Modification	7	46	49.8071	N	125	52.7943	W	EFH Closure	Recommendation in Progress
Grays Canyon Southern Modification	8	46	48.9297	N	125	49.1697	W	EFH Closure	Recommendation in Progress
Grays Canyon Southern Modification	9	46	52.3781	N	125	52.0188	W	EFH Closure	Recommendation in Progress
Grays Canyon Southern Modification	10	46	54.3807	N	125	52.7308	W	EFH Closure	Recommendation in Progress
Willapa Shelf	1	46	44.4337	N	125	30.999	W	EFH Closure	Recommendation in Progress
Willapa Shelf	2	46	42.9228	N	125	29.7012	W	EFH Closure	Recommendation in Progress
Willapa Shelf	3	46	42.3014	N	125	29.9072	W	EFH Closure	Recommendation in Progress
Willapa Shelf	4	46	41.9058	N	125	30.8754	W	EFH Closure	Recommendation in Progress
Willapa Shelf	5	46	43.2618	N	125	33.3473	W	EFH Closure	Recommendation in Progress
Willapa Shelf	6	46	43.2053	N	125	35.3661	W	EFH Closure	Recommendation in Progress
Willapa Shelf	7	46	45.2665	N	125	38.1264	W	EFH Closure	Recommendation in Progress

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Willapa Shelf	8	46	45.9015	N	125	38.147	W	EFH Closure	Recommendation in Progress
Willapa Shelf	9	46	46.3248	N	125	37.5496	W	EFH Closure	Recommendation in Progress
Willapa Shelf	10	46	46.3671	N	125	36.6432	W	EFH Closure	Recommendation in Progress
Willapa Shelf	11	46	44.5466	N	125	33.1825	W	EFH Closure	Recommendation in Progress
Willapa Shelf	12	46	44.4337	N	125	30.999	W	EFH Closure	Recommendation in Progress
Willapa Deep	1	46	23.7756	N	125	43.3001	W	EFH Closure	Full Recommendation
Willapa Deep	2	46	22.5678	N	125	46.699	W	EFH Closure	Full Recommendation
Willapa Deep	3	46	24.3864	N	125	56.3395	W	EFH Closure	Full Recommendation
Willapa Deep	4	46	27.5098	N	125	54.4031	W	EFH Closure	Full Recommendation
Willapa Deep	5	46	36.8904	N	126	9.3377	W	EFH Closure	Full Recommendation
Willapa Deep	6	46	35.5883	N	126	4.5792	W	EFH Closure	Full Recommendation
Willapa Deep	7	46	31.5374	N	125	57.5342	W	EFH Closure	Full Recommendation
Willapa Deep	8	46	28.7016	N	125	51.7664	W	EFH Closure	Full Recommendation
Willapa Deep	9	46	23.7756	N	125	43.3001	W	EFH Closure	Full Recommendation
Astoria Deep	1	46	5.7417	N	125	55.3191	W	EFH Closure	Full Recommendation
Astoria Deep	2	46	2.9994	N	125	57.3599	W	EFH Closure	Full Recommendation
Astoria Deep	3	46	5.3673	N	126	2.871	W	EFH Closure	Full Recommendation
Astoria Deep	4	46	9.5301	N	126	4.7507	W	EFH Closure	Full Recommendation
Astoria Deep	5	46	14.1346	N	126	2.7191	W	EFH Closure	Full Recommendation
Astoria Deep	6	46	14.7971	N	126	2.3071	W	EFH Closure	Full Recommendation
Astoria Deep	7	46	8.2834	N	126	0.2011	W	EFH Closure	Full Recommendation
Astoria Deep	8	46	5.7417	N	125	55.3191	W	EFH Closure	Full Recommendation
Canada to 48°00’ Trawl RCA	1	48	10.0003	N	126	39.9999	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	2	48	9.4997	N	126	40.5007	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	3	48	8.0032	N	126	37.9953	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	4	48	5.0047	N	126	37.2537	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	5	48	2.5955	N	126	34.6994	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	6	47	59.0058	N	126	34.0093	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	7	47	57.2607	N	126	29.8193	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	8	47	59.867	N	126	25.8179	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	9	48	1.7997	N	126	24.5407	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	10	48	2.0816	N	126	22.9835	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	11	48	2.9691	N	126	22.8908	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	12	48	4.468	N	126	21.7527	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	13	48	6.1106	N	126	19.3323	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	14	48	7.9517	N	126	18.5469	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	15	48	8.9951	N	126	18.003	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	16	48	9.9999	N	126	17.8099	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	17	48	10.0016	N	126	40.6507	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	18	48	11.4902	N	126	39.2693	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	19	48	12.8898	N	126	37.8299	W	RCA Opening	Recommendation in Progress

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Canada to 48°00’ Trawl RCA	20	48	14.9536	N	126	41.2287	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	21	48	18.3561	N	126	30.0471	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	22	48	20.2549	N	126	22.8805	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	23	48	27.1536	N	126	8.5022	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	24	48	28.1371	N	126	5.8668	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	25	48	29.9377	N	125	59.3149	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	26	48	30.221	N	125	54.9414	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	27	48	30.354	N	125	50.4301	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	28	48	30.1715	N	125	47.3029	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	29	48	29.6067	N	125	43.6349	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	30	48	28.3403	N	125	38.9678	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	31	48	10.0162	N	125	39.0483	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	32	48	9.9995	N	125	58.7265	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	33	48	6.0074	N	125	59.9998	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	34	48	4.6176	N	126	1.7301	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	35	48	4.8378	N	126	4.0373	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	36	48	6.4132	N	126	6.504	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	37	48	6.0005	N	126	7.9975	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	38	48	7.0768	N	126	9.3313	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	39	48	7.2762	N	126	11.1441	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	40	48	3.4441	N	126	16.6647	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	41	48	2.3528	N	126	17.2981	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	42	48	2.3528	N	126	18.0757	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	43	48	0.0014	N	126	19.2995	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	44	48	0.0109	N	126	19.9007	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	45	48	1.9998	N	126	18.5019	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	46	48	4.289	N	126	20.3713	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	47	48	3.4579	N	126	22.1042	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	48	48	3.0001	N	126	22.5007	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	49	48	2.0808	N	126	22.9797	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	50	48	1.7687	N	126	24.0515	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	51	47	58.9933	N	126	25.5012	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	52	47	57.2797	N	126	27.8907	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	53	47	56.5312	N	126	30.3317	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	54	47	57.4987	N	126	36.5012	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	55	48	0.998	N	126	38.5007	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	56	48	1.6559	N	126	36.9557	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	57	48	2.9988	N	126	36.003	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	58	48	4.1467	N	126	36.7059	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	59	48	4.9948	N	126	38.9899	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	60	48	6.1308	N	126	41.5687	W	RCA Opening	Recommendation in Progress

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Canada to 48°00’ Trawl RCA	61	48	7.0007	N	126	45.0088	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	62	48	8.7155	N	126	41.8397	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	63	48	10.0016	N	126	40.652	W	RCA Opening	Recommendation in Progress
Canada to 48°00’ Trawl RCA	64	48	10.0003	N	126	39.9999	W	RCA Opening	Recommendation in Progress
48°00’ to 45°46’ Trawl RCA	1	48	0.0014	N	126	19.2995	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	2	47	59.4991	N	126	18.8798	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	3	47	58.6801	N	126	16.1935	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	4	47	56.623	N	126	13.5027	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	5	47	53.7136	N	126	11.9603	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	6	47	51.7137	N	126	9.3983	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	7	47	49.9614	N	126	6.1075	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	8	47	49.0076	N	126	3.0002	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	9	47	46.9528	N	126	3.9993	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	10	47	46.5756	N	126	3.1444	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	11	47	44.0927	N	126	4.2742	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	12	47	43.3345	N	126	4.4061	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	13	47	40.9466	N	126	4.1383	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	14	47	39.5907	N	126	4.9726	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	15	47	36.2383	N	126	2.7788	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	16	47	34.2823	N	125	58.6711	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	17	47	32.1835	N	125	57.7731	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	18	47	30.2637	N	125	56.1561	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	19	47	30.6116	N	125	54.8068	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	20	47	29.2612	N	125	52.2029	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	21	47	27.3749	N	125	49.3377	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	22	47	25.5981	N	125	48.2479	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	23	47	23.5388	N	125	46.4126	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	24	47	20.5985	N	125	45.9027	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	25	47	17.9907	N	125	45.5835	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	26	47	18.2003	N	125	49.1111	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	27	47	15.0068	N	125	51.0886	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	28	47	12.5969	N	125	54.9015	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	29	47	8.2214	N	125	56.5269	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	30	47	8.4942	N	125	57.7442	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	31	47	1.9165	N	125	54.951	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	32	47	1.081	N	125	59.2151	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	33	46	58.5134	N	125	57.8349	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	34	46	56.7912	N	125	56.0273	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	35	46	58.0074	N	125	55.0952	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	36	46	55.0786	N	125	54.1322	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	37	46	59.5986	N	125	49.7928	W	RCA Opening	Full Recommendation

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
48°00’ to 45°46’ Trawl RCA	38	46	58.7273	N	125	48.7834	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	39	46	54.4454	N	125	48.3592	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	40	46	53.9844	N	125	49.9299	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	41	46	54.3785	N	125	52.7263	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	42	46	52.3689	N	125	52.0105	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	43	46	41.4928	N	125	42.995	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	44	46	34.4911	N	125	28.4931	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	45	46	28.9923	N	125	29.9968	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	46	46	18.405	N	125	37.6939	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	47	46	18.0381	N	125	35.4557	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	48	46	16.999	N	125	22.4987	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	49	46	16.0024	N	125	20.6447	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	50	46	13.5383	N	125	25.4424	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	51	46	12.1552	N	125	30.8414	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	52	46	10.6369	N	125	37.9514	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	53	46	9.3168	N	125	38.9987	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	54	46	2.389	N	125	40.3789	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	55	45	56.432	N	125	37.9926	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	56	45	51.9095	N	125	38.4973	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	57	45	47.2115	N	125	35.5998	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	58	45	46.3967	N	125	32.3587	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	59	45	46.0051	N	125	32.1012	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	60	45	46.0047	N	125	40.8939	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	61	45	51.8337	N	125	42.892	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	62	46	1.1881	N	125	43.4669	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	63	46	2.7576	N	125	44.0128	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	64	46	7.269	N	125	40.9023	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	65	46	9.4635	N	125	40.6345	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	66	46	12.0808	N	125	38.3788	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	67	46	13.3668	N	125	31.3976	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	68	46	14.8772	N	125	26.1241	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	69	46	15.9993	N	125	23.0066	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	70	46	16.159	N	125	25.3414	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	71	46	17.8678	N	125	38.5333	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	72	46	19.465	N	125	38.3582	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	73	46	20.3575	N	125	37.8535	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	74	46	20.6384	N	125	36.2107	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	75	46	21.0538	N	125	37.0006	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	76	46	23.0052	N	125	34.9902	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	77	46	25.5052	N	125	32.9921	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	78	46	30.5208	N	125	30.5511	W	RCA Opening	Full Recommendation

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
48°00’ to 45°46’ Trawl RCA	79	46	31.9984	N	125	30.9991	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	80	46	33.4966	N	125	29.5108	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	81	46	33.8401	N	125	36.9884	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	82	46	36.5017	N	125	38.0132	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	83	46	37.4992	N	125	40.995	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	84	46	39.4862	N	125	42.4833	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	85	46	42.235	N	125	47.8494	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	86	46	49.5231	N	125	53.4061	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	87	46	54.5263	N	125	52.9374	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	88	46	54.5016	N	125	49.0081	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	89	46	58.0003	N	125	49.9969	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	90	46	54.7901	N	125	54.1373	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	91	46	55.9574	N	125	54.8809	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	92	46	57.09	N	125	58.8598	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	93	46	56.6154	N	126	0.0082	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	94	46	58.3588	N	125	59.8176	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	95	46	58.4677	N	125	59.076	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	96	47	1.0388	N	125	59.5395	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	97	47	2.8992	N	125	56.8771	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	98	47	3.6149	N	125	55.9604	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	99	47	6.0697	N	125	58.798	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	100	47	9.006	N	125	58.9936	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	101	47	9.4928	N	125	57.5053	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	102	47	12.4049	N	125	58.1027	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	103	47	11.8661	N	125	56.8874	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	104	47	14.3076	N	125	52.6181	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	105	47	15.9575	N	125	53.1486	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	106	47	16.8066	N	125	50.8517	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	107	47	17.7703	N	125	51.379	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	108	47	18.0676	N	125	53.2928	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	109	47	19.171	N	125	50.862	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	110	47	18.5041	N	125	49.0081	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	111	47	18.2003	N	125	45.841	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	112	47	23.9362	N	125	47.2314	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	113	47	24.9923	N	125	47.9987	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	114	47	28.5651	N	125	51.5026	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	115	47	29.4983	N	125	54.4927	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	116	47	29.5331	N	125	56.496	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	117	47	30.9003	N	125	57.3096	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	118	47	35.5229	N	126	4.54	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	119	47	38.9871	N	126	6.0129	W	RCA Opening	Full Recommendation

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
48°00’ to 45°46’ Trawl RCA	120	47	42.0871	N	126	4.7512	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	121	47	45.0039	N	126	5.4979	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	122	47	45.9768	N	126	4.2568	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	123	47	48.4957	N	126	5.0087	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	124	47	48.8796	N	126	5.9047	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	125	47	53.4995	N	126	13.5027	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	126	47	58.7512	N	126	17.5485	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	127	48	0.0109	N	126	19.9007	W	RCA Opening	Full Recommendation
48°00’ to 45°46’ Trawl RCA	128	48	0.0014	N	126	19.2995	W	RCA Opening	Full Recommendation
REGION 2									
Garibaldi Reef	1	45	41.5381	N	125	18.7112	W	EFH Closure	Recommendation in Progress
Garibaldi Reef	2	45	37.4347	N	125	20.1119	W	EFH Closure	Recommendation in Progress
Garibaldi Reef	3	45	38.0398	N	125	23.8816	W	EFH Closure	Recommendation in Progress
Garibaldi Reef	4	45	39.8685	N	125	24.6438	W	EFH Closure	Recommendation in Progress
Garibaldi Reef	5	45	40.7034	N	125	21.9865	W	EFH Closure	Recommendation in Progress
Garibaldi Reef	6	45	44.2062	N	125	22.3058	W	EFH Closure	Recommendation in Progress
Garibaldi Reef	7	45	44.4074	N	125	21.42	W	EFH Closure	Recommendation in Progress
Garibaldi Reef	8	45	41.5381	N	125	18.7112	W	EFH Closure	Recommendation in Progress
Stonewall Bank Modification	1	44	40.0349	N	125	22.2412	W	EFH Closure	No Recommendation
Stonewall Bank Modification	2	44	35.1236	N	125	21.788	W	EFH Closure	No Recommendation
Stonewall Bank Modification	3	44	37.8275	N	125	23.0909	W	EFH Closure	No Recommendation
Stonewall Bank Modification	4	44	38.1647	N	125	25.1508	W	EFH Closure	No Recommendation
Stonewall Bank Modification	5	44	34.6743	N	125	26.84	W	EFH Closure	No Recommendation
Stonewall Bank Modification	6	44	39.8005	N	125	27.7206	W	EFH Closure	No Recommendation
Stonewall Bank Modification	7	44	40.4451	N	125	24.3011	W	EFH Closure	No Recommendation
Stonewall Bank Modification	8	44	40.0349	N	125	22.2412	W	EFH Closure	No Recommendation
Daisy Bank Northern Modification	1	44	39.9707	N	125	40.4037	W	EFH Closure	No Recommendation
Daisy Bank Northern Modification	2	44	37.1703	N	125	38.6008	W	EFH Closure	No Recommendation
Daisy Bank Northern Modification	3	44	39.7307	N	125	41.4294	W	EFH Closure	No Recommendation
Daisy Bank Northern Modification	4	44	41.3502	N	125	48.0289	W	EFH Closure	No Recommendation
Daisy Bank Northern Modification	5	44	41.8088	N	125	47.5465	W	EFH Closure	No Recommendation
Daisy Bank Northern Modification	6	44	41.699	N	125	44.5648	W	EFH Closure	No Recommendation
Daisy Bank Northern Modification	7	44	39.9707	N	125	40.4037	W	EFH Closure	No Recommendation
Daisy Bank Western Modification	1	44	39.337	N	125	48.0924	W	EFH Opening	No Recommendation
Daisy Bank Western Modification	2	44	38.2506	N	125	46.2835	W	EFH Opening	No Recommendation
Daisy Bank Western Modification	3	44	38.52	N	125	49.1121	W	EFH Opening	No Recommendation
Daisy Bank Western Modification	4	44	40.2701	N	125	49.1108	W	EFH Opening	No Recommendation
Daisy Bank Western Modification	5	44	41.1242	N	125	48.2572	W	EFH Opening	No Recommendation

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Daisy Bank Western Modification	6	44	39.337	N	125	48.0924	W	EFH Opening	No Recommendation
Daisy Bank Southern Modification	1	44	38.2512	N	125	46.2829	W	EFH Closure	No Recommendation
Daisy Bank Southern Modification	2	44	36.8996	N	125	42.9097	W	EFH Closure	No Recommendation
Daisy Bank Southern Modification	3	44	37.5704	N	125	41.7021	W	EFH Closure	No Recommendation
Daisy Bank Southern Modification	4	44	35.5494	N	125	39.2701	W	EFH Closure	No Recommendation
Daisy Bank Southern Modification	5	44	35.9541	N	125	42.8138	W	EFH Closure	No Recommendation
Daisy Bank Southern Modification	6	44	38.2512	N	125	46.2829	W	EFH Closure	No Recommendation
Heceta Bank Modification	1	44	22.465	N	125	37.8086	W	EFH Closure	No Recommendation
Heceta Bank Modification	2	44	20.6976	N	125	35.6045	W	EFH Closure	No Recommendation
Heceta Bank Modification	3	44	25.7763	N	125	30.7018	W	EFH Closure	No Recommendation
Heceta Bank Modification	4	44	25.26	N	125	27.4425	W	EFH Closure	No Recommendation
Heceta Bank Modification	5	44	20.4015	N	125	30.0998	W	EFH Closure	No Recommendation
Heceta Bank Modification	6	44	19.1799	N	125	34.1007	W	EFH Closure	No Recommendation
Heceta Bank Modification	7	44	16.8492	N	125	35.3733	W	EFH Closure	No Recommendation
Heceta Bank Modification	8	44	13.5219	N	125	40.4499	W	EFH Closure	No Recommendation
Heceta Bank Modification	9	44	20.3011	N	125	38.7209	W	EFH Closure	No Recommendation
Heceta Bank Modification	10	44	13.4694	N	125	54.0829	W	EFH Closure	No Recommendation
Heceta Bank Modification	11	44	2.8797	N	125	53.9609	W	EFH Closure	No Recommendation
Heceta Bank Modification	12	44	0.1377	N	125	55.2531	W	EFH Closure	No Recommendation
Heceta Bank Modification	13	43	57.6794	N	125	55.4814	W	EFH Closure	No Recommendation
Heceta Bank Modification	14	43	58.61	N	125	49.872	W	EFH Closure	No Recommendation
Heceta Bank Modification	15	44	3.2607	N	125	49.4214	W	EFH Closure	No Recommendation
Heceta Bank Modification	16	44	3.4597	N	125	45.711	W	EFH Closure	No Recommendation
Heceta Bank Modification	17	43	57.7229	N	125	46.0988	W	EFH Closure	No Recommendation
Heceta Bank Modification	18	43	56.1583	N	125	49.6419	W	EFH Closure	No Recommendation
Heceta Bank Modification	19	43	55.8935	N	125	55.3557	W	EFH Closure	No Recommendation
Heceta Bank Modification	20	43	56.8873	N	125	56.5505	W	EFH Closure	No Recommendation
Heceta Bank Modification	21	43	58.9173	N	125	57.0045	W	EFH Closure	No Recommendation
Heceta Bank Modification	22	44	1.7611	N	125	55.7393	W	EFH Closure	No Recommendation
Heceta Bank Modification	23	44	7.1505	N	125	55.52	W	EFH Closure	No Recommendation
Heceta Bank Modification	24	44	9.9419	N	125	56.8002	W	EFH Closure	No Recommendation
Heceta Bank Modification	25	44	13.7965	N	125	56.3367	W	EFH Closure	No Recommendation
Heceta Bank Modification	26	44	16.1795	N	125	53.5352	W	EFH Closure	No Recommendation
Heceta Bank Modification	27	44	19.3421	N	125	46.5282	W	EFH Closure	No Recommendation
Heceta Bank Modification	28	44	25.2011	N	125	43.5924	W	EFH Closure	No Recommendation
Heceta Bank Modification	29	44	27.0191	N	125	44.008	W	EFH Closure	No Recommendation
Heceta Bank Modification	30	44	29.3932	N	125	41.5051	W	EFH Closure	No Recommendation
Heceta Bank Modification	31	44	28.2174	N	125	38.9416	W	EFH Closure	No Recommendation
Heceta Bank Modification	32	44	22.465	N	125	37.8086	W	EFH Closure	No Recommendation
Arago Reef	1	43	17.8291	N	125	26.2614	W	EFH Closure	Full Recommendation
Arago Reef	2	43	13.7338	N	125	25.3962	W	EFH Closure	Full Recommendation

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Arago Reef	3	43	13.2385	N	125	26.179	W	EFH Closure	Full Recommendation
Arago Reef	4	43	14.034	N	125	28.0329	W	EFH Closure	Full Recommendation
Arago Reef	5	43	10.7308	N	125	28.5273	W	EFH Closure	Full Recommendation
Arago Reef	6	43	8.6723	N	125	26.8381	W	EFH Closure	Full Recommendation
Arago Reef	7	43	5.2137	N	125	27.6621	W	EFH Closure	Full Recommendation
Arago Reef	8	43	7.3945	N	125	30.649	W	EFH Closure	Full Recommendation
Arago Reef	9	43	8.6488	N	125	30.62	W	EFH Closure	Full Recommendation
Arago Reef	10	43	10.2229	N	125	37.8194	W	EFH Closure	Full Recommendation
Arago Reef	11	43	16.9023	N	125	37.4795	W	EFH Closure	Full Recommendation
Arago Reef	12	43	16.4973	N	125	28.7248	W	EFH Closure	Full Recommendation
Arago Reef	13	43	17.8291	N	125	26.2614	W	EFH Closure	Full Recommendation
Bandon High Spot Northern Modification	1	43	5.1583	N	125	49.0499	W	EFH Opening	Recommendation in Progress
Bandon High Spot Northern Modification	2	43	2.9395	N	125	46.8703	W	EFH Opening	Recommendation in Progress
Bandon High Spot Northern Modification	3	43	0.9378	N	125	46.5716	W	EFH Opening	Recommendation in Progress
Bandon High Spot Northern Modification	4	43	3.2039	N	125	47.5166	W	EFH Opening	Recommendation in Progress
Bandon High Spot Northern Modification	5	43	4.3327	N	125	49.3499	W	EFH Opening	Recommendation in Progress
Bandon High Spot Northern Modification	6	43	4.3176	N	125	50.6271	W	EFH Opening	Recommendation in Progress
Bandon High Spot Northern Modification	7	43	2.6394	N	125	52.0098	W	EFH Opening	Recommendation in Progress
Bandon High Spot Northern Modification	8	43	4.6016	N	125	53.0102	W	EFH Opening	Recommendation in Progress
Bandon High Spot Northern Modification	9	43	5.8869	N	125	51.603	W	EFH Opening	Recommendation in Progress
Bandon High Spot Northern Modification	10	43	8.832	N	125	50.9322	W	EFH Opening	Recommendation in Progress
Bandon High Spot Northern Modification	11	43	8.7709	N	125	49.8198	W	EFH Opening	Recommendation in Progress
Bandon High Spot Northern Modification	12	43	5.1583	N	125	49.0499	W	EFH Opening	Recommendation in Progress
Bandon High Spot Southern Modification	1	42	53.6653	N	125	51.809	W	EFH Opening	Recommendation in Progress
Bandon High Spot Southern Modification	2	42	52.8909	N	125	52.5905	W	EFH Opening	Recommendation in Progress
Bandon High Spot Southern Modification	3	42	53.82	N	125	55.7602	W	EFH Opening	Recommendation in Progress
Bandon High Spot Southern Modification	4	42	57.5615	N	125	54.1007	W	EFH Opening	Recommendation in Progress
Bandon High Spot Southern Modification	5	42	58.0006	N	125	52.9909	W	EFH Opening	Recommendation in Progress
Bandon High Spot Southern Modification	6	42	55.9114	N	125	53.511	W	EFH Opening	Recommendation in Progress
Bandon High Spot Southern Modification	7	42	53.6653	N	125	51.809	W	EFH Opening	Recommendation in Progress
45°46’ to 43°57’ Trawl RCA	1	45	46.0063	N	125	32.1073	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	2	45	41.8077	N	125	28.1831	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	3	45	36.9411	N	125	24.4752	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	4	45	31.8366	N	125	22.0445	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	5	45	27.0845	N	125	21.7345	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	6	45	18.1289	N	125	17.595	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	7	45	11.0715	N	125	16.9709	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	8	45	4.3935	N	125	18.3408	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	9	44	58.0462	N	125	21.5501	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	10	44	47.683	N	125	31.3966	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	11	44	44.5301	N	125	33.5792	W	RCA Opening	No Recommendation

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
45°46’ to 43°57’ Trawl RCA	12	44	39.9328	N	125	34.9851	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	13	44	32.886	N	125	36.8133	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	14	44	30.3417	N	125	38.5436	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	15	44	30.0406	N	125	42.3133	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	16	44	26.8398	N	125	44.914	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	17	44	17.9832	N	125	51.0423	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	18	44	12.9219	N	125	56.279	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	19	44	2.3378	N	125	55.4602	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	20	43	59.1823	N	125	56.9395	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	21	43	57.001	N	125	56.7618	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	22	43	57.0038	N	125	57.4352	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	23	43	57.8787	N	125	58.2488	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	24	44	13.1886	N	125	58.6608	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	25	44	17.574	N	125	55.0334	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	26	44	21.7259	N	125	49.8218	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	27	44	38.4821	N	125	49.1111	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	28	44	40.2698	N	125	49.1111	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	29	44	41.3427	N	125	48.0296	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	30	44	42.2432	N	125	48.0554	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	31	44	48.2482	N	125	40.619	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	32	44	46.8777	N	125	38.1934	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	33	45	0.4064	N	125	29.1307	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	34	45	13.0455	N	125	21.9199	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	35	45	34.8945	N	125	32.5914	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	36	45	40.8316	N	125	40.8971	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	37	45	45.9991	N	125	41.8199	W	RCA Opening	No Recommendation
45°46’ to 43°57’ Trawl RCA	38	45	46.0063	N	125	32.1073	W	RCA Opening	No Recommendation
43°57’ to 42°50’ Trawl RCA	1	43	57.0006	N	125	56.7614	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	2	43	56.7413	N	125	56.738	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	3	43	56.0689	N	125	55.407	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	4	43	54.6161	N	125	48.2305	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	5	43	55.907	N	125	41.0979	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	6	43	57.3568	N	125	38.6775	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	7	43	56.4632	N	125	34.604	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	8	43	42.7204	N	125	32.4102	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	9	43	30.9047	N	125	34.4341	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	10	43	20.8446	N	125	39.3831	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	11	43	17.4388	N	125	41.1649	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	12	43	7.037	N	125	41.2421	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	13	43	3.4452	N	125	44.3526	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	14	43	3.9118	N	125	50.8054	W	RCA Opening	Full Recommendation

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
43°57’ to 42°50’ Trawl RCA	15	42	55.6969	N	125	52.7778	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	16	42	54.1091	N	125	47.3447	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	17	42	49.9994	N	125	45.3306	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	18	42	49.9994	N	125	50.6001	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	19	42	53.9205	N	125	54.6008	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	20	43	4.2391	N	125	53.0559	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	21	43	10.6477	N	125	49.9505	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	22	43	13.2944	N	125	46.9997	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	23	43	20.2041	N	125	43.06	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	24	43	28.7878	N	125	40.0072	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	25	43	39.0407	N	125	38.5488	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	26	43	49.7266	N	125	40.2637	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	27	43	51.3534	N	125	37.9462	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	28	43	52.3188	N	125	49.4201	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	29	43	56.8866	N	125	57.3266	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	30	43	57.0034	N	125	57.4361	W	RCA Opening	Full Recommendation
43°57’ to 42°50’ Trawl RCA	31	43	57.0006	N	125	56.7614	W	RCA Opening	Full Recommendation
REGION 3									
Blanco Reef	1	42	50.7116	N	125	33.0433	W	EFH Closure	Full Recommendation
Blanco Reef	2	42	50.3933	N	125	33.465	W	EFH Closure	Full Recommendation
Blanco Reef	3	42	50.455	N	125	33.745	W	EFH Closure	Full Recommendation
Blanco Reef	4	42	50.6017	N	125	33.8366	W	EFH Closure	Full Recommendation
Blanco Reef	5	42	50.5933	N	125	33.9533	W	EFH Closure	Full Recommendation
Blanco Reef	6	42	50.35	N	125	34.1066	W	EFH Closure	Full Recommendation
Blanco Reef	7	42	50.0467	N	125	33.9583	W	EFH Closure	Full Recommendation
Blanco Reef	8	42	50.0117	N	125	33.5167	W	EFH Closure	Full Recommendation
Blanco Reef	9	42	49.8484	N	125	33.1933	W	EFH Closure	Full Recommendation
Blanco Reef	10	42	49.4835	N	125	32.8197	W	EFH Closure	Full Recommendation
Blanco Reef	11	42	47.6299	N	125	32.4224	W	EFH Closure	Full Recommendation
Blanco Reef	12	42	45.9409	N	125	35.0055	W	EFH Closure	Full Recommendation
Blanco Reef	13	42	44.632	N	125	37.8967	W	EFH Closure	Full Recommendation
Blanco Reef	14	42	44.8135	N	125	39.627	W	EFH Closure	Full Recommendation
Blanco Reef	15	42	45.8118	N	125	40.7188	W	EFH Closure	Full Recommendation
Blanco Reef	16	42	48.2081	N	125	40.657	W	EFH Closure	Full Recommendation
Blanco Reef	17	42	48.4726	N	125	39.9669	W	EFH Closure	Full Recommendation
Blanco Reef	18	42	47.3843	N	125	38.9678	W	EFH Closure	Full Recommendation
Blanco Reef	19	42	47.7845	N	125	37.5001	W	EFH Closure	Full Recommendation
Blanco Reef	20	42	50.229	N	125	36.4187	W	EFH Closure	Full Recommendation

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Blanco Reef	21	42	50.863	N	125	33.921	W	EFH Closure	Full Recommendation
Blanco Reef	22	42	51.5995	N	125	33.0558	W	EFH Closure	Full Recommendation
Blanco Reef	23	42	51.4243	N	125	32.5682	W	EFH Closure	Full Recommendation
Blanco Reef	24	42	51.34	N	125	32.7	W	EFH Closure	Full Recommendation
Blanco Reef	25	42	50.7116	N	125	33.0433	W	EFH Closure	Full Recommendation
Rogue River Reef	1	42	29.3579	N	125	36.5281	W	EFH Closure	Full Recommendation
Rogue River Reef	2	42	27.5803	N	125	32.8614	W	EFH Closure	Full Recommendation
Rogue River Reef	3	42	28.2384	N	125	29.8463	W	EFH Closure	Full Recommendation
Rogue River Reef	4	42	27.0834	N	125	26.2002	W	EFH Closure	Full Recommendation
Rogue River Reef	5	42	26.3083	N	125	26.2534	W	EFH Closure	Full Recommendation
Rogue River Reef	6	42	24.8637	N	125	26.1899	W	EFH Closure	Full Recommendation
Rogue River Reef	7	42	22.7872	N	125	28.6515	W	EFH Closure	Full Recommendation
Rogue River Reef	8	42	24.0961	N	125	32.4108	W	EFH Closure	Full Recommendation
Rogue River Reef	9	42	22.2774	N	125	39.9194	W	EFH Closure	Full Recommendation
Rogue River Reef	10	42	25.4568	N	125	43.9117	W	EFH Closure	Full Recommendation
Rogue River Reef	11	42	27.8738	N	125	44.6327	W	EFH Closure	Full Recommendation
Rogue River Reef	12	42	29.2715	N	125	44.2207	W	EFH Closure	Full Recommendation
Rogue River Reef	13	42	29.712	N	125	39.833	W	EFH Closure	Full Recommendation
Rogue River Reef	14	42	29.3579	N	125	36.5281	W	EFH Closure	Full Recommendation
Brush Patch	1	41	53.3052	N	125	50.4662	W	EFH Closure	Full Recommendation
Brush Patch	2	41	49.669	N	125	54.6601	W	EFH Closure	Full Recommendation
Brush Patch	3	41	52.2238	N	125	57.6933	W	EFH Closure	Full Recommendation
Brush Patch	4	41	56.3163	N	125	58.3152	W	EFH Closure	Full Recommendation
Brush Patch	5	41	57.6886	N	125	55.6984	W	EFH Closure	Full Recommendation
Brush Patch	6	41	58.0562	N	125	51.1871	W	EFH Closure	Full Recommendation
Brush Patch	7	41	53.3052	N	125	50.4662	W	EFH Closure	Full Recommendation
Saint George Reef	1	41	53.0805	N	125	25.2525	W	EFH Closure	Full Recommendation
Saint George Reef	2	41	51.3644	N	125	21.5614	W	EFH Closure	Full Recommendation
Saint George Reef	3	41	51.5543	N	125	17.1209	W	EFH Closure	Full Recommendation
Saint George Reef	4	41	50.812	N	125	17.3425	W	EFH Closure	Full Recommendation
Saint George Reef	5	41	48.1372	N	125	19.0032	W	EFH Closure	Full Recommendation
Saint George Reef	6	41	47.4653	N	125	19.1964	W	EFH Closure	Full Recommendation
Saint George Reef	7	41	46.6051	N	125	19.0831	W	EFH Closure	Full Recommendation
Saint George Reef	8	41	45.5834	N	125	18.5784	W	EFH Closure	Full Recommendation
Saint George Reef	9	41	44.6152	N	125	17.8575	W	EFH Closure	Full Recommendation
Saint George Reef	10	41	43.47	N	125	16.1992	W	EFH Closure	Full Recommendation
Saint George Reef	11	41	42.5628	N	125	14.6852	W	EFH Closure	Full Recommendation
Saint George Reef	12	41	42.0015	N	125	13.3359	W	EFH Closure	Full Recommendation
Saint George Reef	13	41	41.2862	N	125	13.7994	W	EFH Closure	Full Recommendation
Saint George Reef	14	41	42.6551	N	125	17.1571	W	EFH Closure	Full Recommendation
Saint George Reef	15	41	49.0018	N	125	23.1896	W	EFH Closure	Full Recommendation

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Saint George Reef	16	41	52.0011	N	125	25.8061	W	EFH Closure	Full Recommendation
Saint George Reef	17	41	53.0805	N	125	25.2525	W	EFH Closure	Full Recommendation
Reading Rock Reef	1	41	19.6241	N	125	10.0297	W	EFH Closure	Recommendation in Progress
Reading Rock Reef	2	41	19.013	N	125	11.1833	W	EFH Closure	Recommendation in Progress
Reading Rock Reef	3	41	19.6705	N	125	12.3883	W	EFH Closure	Recommendation in Progress
Reading Rock Reef	4	41	20.9194	N	125	13.7388	W	EFH Closure	Recommendation in Progress
Reading Rock Reef	5	41	21.6964	N	125	13.305	W	EFH Closure	Recommendation in Progress
Reading Rock Reef	6	41	22.137	N	125	11.2245	W	EFH Closure	Recommendation in Progress
Reading Rock Reef	7	41	21.1475	N	125	9.6074	W	EFH Closure	Recommendation in Progress
Reading Rock Reef	8	41	19.6241	N	125	10.0297	W	EFH Closure	Recommendation in Progress
Reading Rock Shelf-Slope Break	1	41	17.8949	N	125	24.9296	W	EFH Closure	Recommendation in Progress
Reading Rock Shelf-Slope Break	2	41	17.2217	N	125	26.9895	W	EFH Closure	Recommendation in Progress
Reading Rock Shelf-Slope Break	3	41	23.1069	N	125	30.4605	W	EFH Closure	Recommendation in Progress
Reading Rock Shelf-Slope Break	4	41	30.9965	N	125	30.2957	W	EFH Closure	Recommendation in Progress
Reading Rock Shelf-Slope Break	5	41	31.012	N	125	28.7405	W	EFH Closure	Recommendation in Progress
Reading Rock Shelf-Slope Break	6	41	24.0959	N	125	28.483	W	EFH Closure	Recommendation in Progress
Reading Rock Shelf-Slope Break	7	41	17.8949	N	125	24.9296	W	EFH Closure	Recommendation in Progress
Trinidad Canyon	1	41	9.4359	N	125	43.1059	W	EFH Closure	Full Recommendation
Trinidad Canyon	2	41	7.8075	N	125	51.2832	W	EFH Closure	Full Recommendation
Trinidad Canyon	3	41	14.5182	N	125	52.6698	W	EFH Closure	Full Recommendation
Trinidad Canyon	4	41	17.6642	N	125	54.3036	W	EFH Closure	Full Recommendation
Trinidad Canyon	5	41	18.368	N	125	45.5043	W	EFH Closure	Full Recommendation
Trinidad Canyon	6	41	17.602	N	125	43.4237	W	EFH Closure	Full Recommendation
Trinidad Canyon	7	41	9.4359	N	125	43.1059	W	EFH Closure	Full Recommendation
Mad River Rough Patch	1	40	54.1296	N	125	26.2735	W	EFH Closure	Recommendation in Progress
Mad River Rough Patch	2	40	53.6625	N	125	26.6855	W	EFH Closure	Recommendation in Progress
Mad River Rough Patch	3	40	54.4877	N	125	28.2201	W	EFH Closure	Recommendation in Progress
Mad River Rough Patch	4	40	54.8847	N	125	28.5394	W	EFH Closure	Recommendation in Progress
Mad River Rough Patch	5	40	57.2657	N	125	29.1007	W	EFH Closure	Recommendation in Progress
Mad River Rough Patch	6	40	57.3746	N	125	28.9566	W	EFH Closure	Recommendation in Progress
Mad River Rough Patch	7	40	57.2735	N	125	28.3386	W	EFH Closure	Recommendation in Progress
Mad River Rough Patch	8	40	54.5578	N	125	26.2477	W	EFH Closure	Recommendation in Progress
Mad River Rough Patch	9	40	54.1296	N	125	26.2735	W	EFH Closure	Recommendation in Progress
Eel River Canyon Modification 1	1	40	38.2693	N	125	27.1598	W	EFH Opening	Full Recommendation
Eel River Canyon Modification 1	2	40	35.6015	N	125	28.7533	W	EFH Opening	Full Recommendation
Eel River Canyon Modification 1	3	40	35.7931	N	125	29.2039	W	EFH Opening	Full Recommendation
Eel River Canyon Modification 1	4	40	37.0802	N	125	28.4228	W	EFH Opening	Full Recommendation
Eel River Canyon Modification 1	5	40	37.5649	N	125	28.7833	W	EFH Opening	Full Recommendation
Eel River Canyon Modification 1	6	40	38.5751	N	125	28.4924	W	EFH Opening	Full Recommendation
Eel River Canyon Modification 1	7	40	38.2693	N	125	27.1598	W	EFH Opening	Full Recommendation
Eel River Canyon Modification 2	1	40	39.7931	N	125	31.2282	W	EFH Closure	Full Recommendation

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Eel River Canyon Modification 2	2	40	39.3399	N	125	30.4866	W	EFH Closure	Full Recommendation
Eel River Canyon Modification 2	3	40	39.4103	N	125	29.4258	W	EFH Closure	Full Recommendation
Eel River Canyon Modification 2	4	40	38.8555	N	125	28.4164	W	EFH Closure	Full Recommendation
Eel River Canyon Modification 2	5	40	38.5751	N	125	28.4937	W	EFH Closure	Full Recommendation
Eel River Canyon Modification 2	6	40	39.6896	N	125	33.3577	W	EFH Closure	Full Recommendation
Eel River Canyon Modification 2	7	40	40.1525	N	125	32.526	W	EFH Closure	Full Recommendation
Eel River Canyon Modification 2	8	40	39.7931	N	125	31.2282	W	EFH Closure	Full Recommendation
Eel River Canyon Modification 3	1	40	37.5131	N	125	34.4559	W	EFH Opening	Full Recommendation
Eel River Canyon Modification 3	2	40	37.4701	N	125	40.4632	W	EFH Opening	Full Recommendation
Eel River Canyon Modification 3	3	40	38.2674	N	125	39.1101	W	EFH Opening	Full Recommendation
Eel River Canyon Modification 3	4	40	38.2205	N	125	35.7215	W	EFH Opening	Full Recommendation
Eel River Canyon Modification 3	5	40	37.5131	N	125	34.4559	W	EFH Opening	Full Recommendation
Eel River Canyon Modification 4	1	40	41.67	N	125	42.9229	W	EFH Closure	Recommendation in Progress
Eel River Canyon Modification 4	2	40	40.3317	N	125	41.8159	W	EFH Closure	Recommendation in Progress
Eel River Canyon Modification 4	3	40	40.7506	N	125	47.5103	W	EFH Closure	Recommendation in Progress
Eel River Canyon Modification 4	4	40	41.887	N	125	47.1833	W	EFH Closure	Recommendation in Progress
Eel River Canyon Modification 4	5	40	41.67	N	125	42.9229	W	EFH Closure	Recommendation in Progress
Blunts Reef Modification	1	40	28.504	N	125	32.4208	W	EFH Closure	Full Recommendation
Blunts Reef Modification	2	40	24.6588	N	125	29.4901	W	EFH Closure	Full Recommendation
Blunts Reef Modification	3	40	27.5304	N	125	26.8384	W	EFH Closure	Full Recommendation
Blunts Reef Modification	4	40	24.4286	N	125	26.856	W	EFH Closure	Full Recommendation
Blunts Reef Modification	5	40	22.4871	N	125	30.9167	W	EFH Closure	Full Recommendation
Blunts Reef Modification	6	40	28.3097	N	125	33.4884	W	EFH Closure	Full Recommendation
Blunts Reef Modification	7	40	29.9861	N	125	33.4884	W	EFH Closure	Full Recommendation
Blunts Reef Modification	8	40	30.4593	N	125	32.2303	W	EFH Closure	Full Recommendation
Blunts Reef Modification	9	40	28.504	N	125	32.4208	W	EFH Closure	Full Recommendation
Mendocino Ridge Modification 1	1	40	16.1578	N	125	39.0078	W	EFH Closure	Full Recommendation
Mendocino Ridge Modification 1	2	40	15.813	N	125	38.3808	W	EFH Closure	Full Recommendation
Mendocino Ridge Modification 1	3	40	17.4553	N	125	45.416	W	EFH Closure	Full Recommendation
Mendocino Ridge Modification 1	4	40	18.386	N	125	48.5465	W	EFH Closure	Full Recommendation
Mendocino Ridge Modification 1	5	40	19.9793	N	125	52.727	W	EFH Closure	Full Recommendation
Mendocino Ridge Modification 1	6	40	19.2598	N	125	47.9659	W	EFH Closure	Full Recommendation
Mendocino Ridge Modification 1	7	40	17.471	N	125	40.7716	W	EFH Closure	Full Recommendation
Mendocino Ridge Modification 1	8	40	16.1578	N	125	39.0078	W	EFH Closure	Full Recommendation
Mendocino Ridge Modification 2	1	40	14.9631	N	125	35.4163	W	EFH Opening	Full Recommendation
Mendocino Ridge Modification 2	2	40	13.8368	N	125	31.9002	W	EFH Opening	Full Recommendation
Mendocino Ridge Modification 2	3	40	14.4	N	125	35.8192	W	EFH Opening	Full Recommendation
Mendocino Ridge Modification 2	4	40	15.809	N	125	38.3723	W	EFH Opening	Full Recommendation
Mendocino Ridge Modification 2	5	40	15.9181	N	125	36.3844	W	EFH Opening	Full Recommendation
Mendocino Ridge Modification 2	6	40	14.9631	N	125	35.4163	W	EFH Opening	Full Recommendation
Mendocino Ridge Modification 3	1	40	10.4237	N	125	19.7396	W	EFH Closure	Full Recommendation

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Mendocino Ridge Modification 3	2	40	10.0238	N	125	20.4883	W	EFH Closure	Full Recommendation
Mendocino Ridge Modification 3	3	40	10.4239	N	125	22.2616	W	EFH Closure	Full Recommendation
Mendocino Ridge Modification 3	4	40	13.8359	N	125	31.895	W	EFH Closure	Full Recommendation
Mendocino Ridge Modification 3	5	40	12.5007	N	125	22.5909	W	EFH Closure	Full Recommendation
Mendocino Ridge Modification 3	6	40	10.4237	N	125	19.7396	W	EFH Closure	Full Recommendation
42°50’ to 40°10’ Trawl RCA	1	42	49.9992	N	125	45.3286	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	2	42	43.9929	N	125	42.37	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	3	42	38.2265	N	125	41.2409	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	4	42	33.0179	N	125	42.3796	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	5	42	31.8957	N	125	42.0384	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	6	42	30.0794	N	125	42.6693	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	7	42	28.2817	N	125	47.0576	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	8	42	25.2187	N	125	43.5094	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	9	42	19.2111	N	125	37.8857	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	10	42	16.2818	N	125	36.1039	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	11	42	5.6579	N	125	34.9143	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	12	41	59.9942	N	125	35.2748	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	13	41	47.0367	N	125	27.6324	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	14	41	32.8409	N	125	28.8014	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	15	41	24.1786	N	125	28.4564	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	16	41	10.116	N	125	20.4947	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	17	40	51.4094	N	125	24.3829	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	18	40	43.7053	N	125	29.8829	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	19	40	40.1445	N	125	30.8974	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	20	40	37.3429	N	125	29.0435	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	21	40	34.7544	N	125	29.8211	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	22	40	36.7839	N	125	37.0618	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	23	40	32.4382	N	125	39.5646	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	24	40	30.3791	N	125	37.2987	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	25	40	28.4796	N	125	36.9433	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	26	40	24.823	N	125	35.1203	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	27	40	23.3014	N	125	31.5978	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	28	40	23.5289	N	125	28.7808	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	29	40	22.4305	N	125	24.9957	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	30	40	21.7242	N	125	24.9339	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	31	40	21.8576	N	125	27.9671	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	32	40	21.3985	N	125	28.7293	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	33	40	19.6754	N	125	28.4821	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	34	40	17.7279	N	125	25.4228	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	35	40	18.3878	N	125	23.3217	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	36	40	15.7454	N	125	26.043	W	RCA Opening	Full Recommendation

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
42°50’ to 40°10’ Trawl RCA	37	40	16.7494	N	125	33.7047	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	38	40	16.2858	N	125	34.3529	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	39	40	10.0029	N	125	21.1262	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	40	40	9.9999	N	125	24.5547	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	41	40	14.0026	N	125	33.024	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	42	40	16.278	N	125	34.5126	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	43	40	22.2739	N	125	31.3554	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	44	40	25.0073	N	125	36.3562	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	45	40	27.3317	N	125	37.2781	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	46	40	29.9957	N	125	38.1532	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	47	40	31.3426	N	125	41.0165	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	48	40	36.0958	N	125	40.1053	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	49	40	37.4171	N	125	37.0463	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	50	40	35.6696	N	125	30.4236	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	51	40	38.8631	N	125	30.1507	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	52	40	40.6054	N	125	32.1694	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	53	40	44.4935	N	125	30.8819	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	54	40	50.2952	N	125	26.1492	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	55	40	53.9365	N	125	26.1183	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	56	40	54.7188	N	125	28.1525	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	57	41	6.6681	N	125	23.3014	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	58	41	10.9804	N	125	22.9821	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	59	41	13.4563	N	125	24.3674	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	60	41	21.1412	N	125	29.0383	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	61	41	47.7547	N	125	29.5481	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	62	41	59.9903	N	125	36.83	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	63	42	13.6324	N	125	38.2771	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	64	42	15.1155	N	125	38.3389	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	65	42	19.687	N	125	41.5833	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	66	42	24.9488	N	125	46.0637	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	67	42	28.4108	N	125	49.1793	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	68	42	30.9625	N	125	43.839	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	69	42	32.0783	N	125	43.5815	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	70	42	31.8241	N	125	46.2233	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	71	42	38.8004	N	125	43.0922	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	72	42	41.7463	N	125	44.6912	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	73	42	46.1824	N	125	44.5226	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	74	42	47.5658	N	125	48.1223	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	75	42	49.9992	N	125	50.5994	W	RCA Opening	Full Recommendation
42°50’ to 40°10’ Trawl RCA	76	42	49.9992	N	125	45.3286	W	RCA Opening	Full Recommendation

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
REGION 4									
Delgada Canyon	1	40	7.1699	N	125	9.4955	W	EFH Opening	Full Recommendation
Delgada Canyon	2	40	7.0517	N	125	9.17	W	EFH Opening	Full Recommendation
Delgada Canyon	3	40	6.9433	N	125	8.4367	W	EFH Opening	Full Recommendation
Delgada Canyon	4	40	6.5084	N	125	7.4094	W	EFH Opening	Full Recommendation
Delgada Canyon	5	40	1.1807	N	125	8.8406	W	EFH Opening	Full Recommendation
Delgada Canyon	6	40	2.48	N	125	12.9308	W	EFH Opening	Full Recommendation
Delgada Canyon	7	40	5.7107	N	125	9.4212	W	EFH Opening	Full Recommendation
Delgada Canyon	8	40	7.1809	N	125	9.6105	W	EFH Opening	Full Recommendation
Delgada Canyon	9	40	7.1699	N	125	9.4955	W	EFH Opening	Full Recommendation
Spanish Canyon Line Adjustment 1	1	39	56.67	N	125	26.5816	W	EFH Opening	Full Recommendation
Spanish Canyon Line Adjustment 1	2	39	54.4344	N	125	24.0617	W	EFH Opening	Full Recommendation
Spanish Canyon Line Adjustment 1	3	39	55.1944	N	125	29.3233	W	EFH Opening	Full Recommendation
Spanish Canyon Line Adjustment 1	4	39	56.67	N	125	26.5816	W	EFH Opening	Full Recommendation
Spanish Canyon Line Adjustment 2	1	39	52.289	N	125	34.7191	W	EFH Closure	Full Recommendation
Spanish Canyon Line Adjustment 2	2	39	50.7706	N	125	37.541	W	EFH Closure	Full Recommendation
Spanish Canyon Line Adjustment 2	3	39	52.6251	N	125	40.6441	W	EFH Closure	Full Recommendation
Spanish Canyon Line Adjustment 2	4	39	52.289	N	125	34.7191	W	EFH Closure	Full Recommendation
Navarro Canon	1	39	6.068	N	125	8.5499	W	EFH Closure	Full Recommendation
Navarro Canon	2	39	4.765	N	125	11.7943	W	EFH Closure	Full Recommendation
Navarro Canon	3	39	11.8431	N	125	13.3013	W	EFH Closure	Full Recommendation
Navarro Canon	4	39	11.3893	N	125	10.3847	W	EFH Closure	Full Recommendation
Navarro Canon	5	39	8.7284	N	125	10.3829	W	EFH Closure	Full Recommendation
Navarro Canon	6	39	7.1625	N	125	8.9822	W	EFH Closure	Full Recommendation
Navarro Canon	7	39	6.068	N	125	8.5499	W	EFH Closure	Full Recommendation
Point Arena South Modification 1	1	38	49.5003	N	124	45.831	W	EFH Opening	Full Recommendation
Point Arena South Modification 1	2	38	41.2191	N	124	41.7604	W	EFH Opening	Full Recommendation
Point Arena South Modification 1	3	38	35.49	N	124	34.7901	W	EFH Opening	Full Recommendation
Point Arena South Modification 1	4	38	34.3709	N	124	37.4693	W	EFH Opening	Full Recommendation
Point Arena South Modification 1	5	38	36.0243	N	124	41.3047	W	EFH Opening	Full Recommendation
Point Arena South Modification 1	6	38	41.9537	N	124	45.4068	W	EFH Opening	Full Recommendation
Point Arena South Modification 1	7	38	41.4331	N	124	47.4523	W	EFH Opening	Full Recommendation
Point Arena South Modification 1	8	38	47.2811	N	124	51.1907	W	EFH Opening	Full Recommendation
Point Arena South Modification 1	9	38	49.5003	N	124	45.831	W	EFH Opening	Full Recommendation
Point Arena South Modification 2	1	38	34.9184	N	124	42.528	W	EFH Closure	Full Recommendation
Point Arena South Modification 2	2	38	34.6245	N	124	42.3246	W	EFH Closure	Full Recommendation
Point Arena South Modification 2	3	38	35.9762	N	124	44.2208	W	EFH Closure	Full Recommendation
Point Arena South Modification 2	4	38	38.2655	N	124	46.5701	W	EFH Closure	Full Recommendation
Point Arena South Modification 2	5	38	41.1136	N	124	48.6873	W	EFH Closure	Full Recommendation

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Point Arena South Modification 2	6	38	41.4307	N	124	47.4533	W	EFH Closure	Full Recommendation
Point Arena South Modification 2	7	38	35.7386	N	124	43.8193	W	EFH Closure	Full Recommendation
Point Arena South Modification 2	8	38	34.9184	N	124	42.528	W	EFH Closure	Full Recommendation
Point Arena South Modification 3	1	38	33.2383	N	124	35.1836	W	EFH Closure	Full Recommendation
Point Arena South Modification 3	2	38	32.0118	N	124	35.7784	W	EFH Closure	Full Recommendation
Point Arena South Modification 3	3	38	33.183	N	124	40.3162	W	EFH Closure	Full Recommendation
Point Arena South Modification 3	4	38	34.3709	N	124	37.4709	W	EFH Closure	Full Recommendation
Point Arena South Modification 3	5	38	33.2383	N	124	35.1836	W	EFH Closure	Full Recommendation
Point Arena South Modification 4	1	38	33.1828	N	124	40.3188	W	EFH Opening	Full Recommendation
Point Arena South Modification 4	2	38	32.8616	N	124	41.09	W	EFH Opening	Full Recommendation
Point Arena South Modification 4	3	38	34.6243	N	124	42.3234	W	EFH Opening	Full Recommendation
Point Arena South Modification 4	4	38	33.1828	N	124	40.3188	W	EFH Opening	Full Recommendation
The Football	1	38	25.647	N	124	33.2584	W	EFH Closure	Recommendation in Progress
The Football	2	38	25.5179	N	124	34.3926	W	EFH Closure	Recommendation in Progress
The Football	3	38	27.451	N	124	35.1007	W	EFH Closure	Recommendation in Progress
The Football	4	38	27.5971	N	124	34.2021	W	EFH Closure	Recommendation in Progress
The Football	5	38	25.647	N	124	33.2584	W	EFH Closure	Recommendation in Progress
Gobbler’s Knob	1	38	8.6812	N	124	26.0135	W	EFH Closure	Full Recommendation
Gobbler’s Knob	2	38	6.8259	N	124	26.0547	W	EFH Closure	Full Recommendation
Gobbler’s Knob	3	38	7.1338	N	124	27.6357	W	EFH Closure	Full Recommendation
Gobbler’s Knob	4	38	8.6164	N	124	27.028	W	EFH Closure	Full Recommendation
Gobbler’s Knob	5	38	8.6812	N	124	26.0135	W	EFH Closure	Full Recommendation
Cordell Bank Modification 1	1	38	5.4595	N	124	25.9685	W	EFH Closure	Full Recommendation
Cordell Bank Modification 1	2	38	4.44	N	124	24.4377	W	EFH Closure	Full Recommendation
Cordell Bank Modification 1	3	38	4.8798	N	124	27.8482	W	EFH Closure	Full Recommendation
Cordell Bank Modification 1	4	38	4.8504	N	124	30.3613	W	EFH Closure	Full Recommendation
Cordell Bank Modification 1	5	38	5.727	N	124	28.4559	W	EFH Closure	Full Recommendation
Cordell Bank Modification 1	6	38	5.4595	N	124	25.9685	W	EFH Closure	Full Recommendation
Cordell Bank Modification 2	1	37	57.121	N	124	25.043	W	EFH Closure	Full Recommendation
Cordell Bank Modification 2	2	37	57.1058	N	124	25.643	W	EFH Closure	Full Recommendation
Cordell Bank Modification 2	3	37	57.8276	N	124	26.0987	W	EFH Closure	Full Recommendation
Cordell Bank Modification 2	4	37	58.9338	N	124	27.1957	W	EFH Closure	Full Recommendation
Cordell Bank Modification 2	5	37	59.5973	N	124	28.0143	W	EFH Closure	Full Recommendation
Cordell Bank Modification 2	6	38	0.7822	N	124	30.0433	W	EFH Closure	Full Recommendation
Cordell Bank Modification 2	7	38	1.5612	N	124	30.5789	W	EFH Closure	Full Recommendation
Cordell Bank Modification 2	8	38	2.1799	N	124	30.9138	W	EFH Closure	Full Recommendation
Cordell Bank Modification 2	9	38	2.3117	N	124	30.8804	W	EFH Closure	Full Recommendation
Cordell Bank Modification 2	10	38	0.8189	N	124	29.6084	W	EFH Closure	Full Recommendation
Cordell Bank Modification 2	11	37	59.43	N	124	27.2909	W	EFH Closure	Full Recommendation
Cordell Bank Modification 2	12	37	57.121	N	124	25.043	W	EFH Closure	Full Recommendation
Cordell Bank Modification 3	1	38	3.0665	N	124	7.3452	W	EFH Opening	Full Recommendation

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Cordell Bank Modification 3	2	38	3.0513	N	124	21.3309	W	EFH Opening	Full Recommendation
Cordell Bank Modification 3	3	38	5.7705	N	124	6.8315	W	EFH Opening	Full Recommendation
Cordell Bank Modification 3	4	38	4.0487	N	124	7.2809	W	EFH Opening	Full Recommendation
Cordell Bank Modification 3	5	38	3.0665	N	124	7.3452	W	EFH Opening	Full Recommendation
Cordell Bank Modification 4	1	37	54.7657	N	124	23.6367	W	EFH Opening	Recommendation in Progress
Cordell Bank Modification 4	2	37	50.8103	N	124	24.5341	W	EFH Opening	Recommendation in Progress
Cordell Bank Modification 4	3	37	55.4489	N	124	27.4927	W	EFH Opening	Recommendation in Progress
Cordell Bank Modification 4	4	37	56.7561	N	124	23.1423	W	EFH Opening	Recommendation in Progress
Cordell Bank Modification 4	5	37	54.7657	N	124	23.6367	W	EFH Opening	Recommendation in Progress
Point Reyes Reef	1	38	5.8673	N	123	59.2651	W	EFH Closure	Full Recommendation
Point Reyes Reef	2	38	2.6888	N	124	2.6846	W	EFH Closure	Full Recommendation
Point Reyes Reef	3	38	2.9808	N	124	3.8382	W	EFH Closure	Full Recommendation
Point Reyes Reef	4	38	6.5157	N	124	3.6322	W	EFH Closure	Full Recommendation
Point Reyes Reef	5	38	8.6871	N	124	1.8607	W	EFH Closure	Full Recommendation
Point Reyes Reef	6	38	9.0435	N	124	0.3775	W	EFH Closure	Full Recommendation
Point Reyes Reef	7	38	7.877	N	123	58.812	W	EFH Closure	Full Recommendation
Point Reyes Reef	8	38	5.8673	N	123	59.2651	W	EFH Closure	Full Recommendation
Rittenburg Bank	1	37	53.3184	N	124	15.0051	W	EFH Closure	Recommendation in Progress
Rittenburg Bank	2	37	51.5786	N	124	18.7335	W	EFH Closure	Recommendation in Progress
Rittenburg Bank	3	37	53.3022	N	124	20.8347	W	EFH Closure	Recommendation in Progress
Rittenburg Bank	4	37	54.9601	N	124	16.3234	W	EFH Closure	Recommendation in Progress
Rittenburg Bank	5	37	53.3184	N	124	15.0051	W	EFH Closure	Recommendation in Progress
Farallon Islands Modification	1	37	46.9365	N	124	11.6542	W	EFH Closure	Full Recommendation
Farallon Islands Modification	2	37	46.5112	N	124	14.1364	W	EFH Closure	Full Recommendation
Farallon Islands Modification	3	37	47.8665	N	124	16.9418	W	EFH Closure	Full Recommendation
Farallon Islands Modification	4	37	49.2305	N	124	16.8117	W	EFH Closure	Full Recommendation
Farallon Islands Modification	5	37	46.9365	N	124	11.6542	W	EFH Closure	Full Recommendation
Farallon Escarpment	1	37	50.6463	N	124	24.5701	W	EFH Closure	Full Recommendation
Farallon Escarpment	2	37	44.8538	N	124	13.7319	W	EFH Closure	Full Recommendation
Farallon Escarpment	3	37	45.5765	N	124	12.7367	W	EFH Closure	Full Recommendation
Farallon Escarpment	4	37	45.1836	N	124	11.869	W	EFH Closure	Full Recommendation
Farallon Escarpment	5	37	42.7114	N	124	9.0404	W	EFH Closure	Full Recommendation
Farallon Escarpment	6	37	40.733	N	124	8.416	W	EFH Closure	Full Recommendation
Farallon Escarpment	7	37	39.1462	N	124	6.759	W	EFH Closure	Full Recommendation
Farallon Escarpment	8	37	38.2603	N	124	8.2705	W	EFH Closure	Full Recommendation
Farallon Escarpment	9	37	34.3172	N	124	7.4327	W	EFH Closure	Full Recommendation
Farallon Escarpment	10	37	29.5472	N	124	9.7398	W	EFH Closure	Full Recommendation
Farallon Escarpment	11	37	29.1804	N	124	13.9701	W	EFH Closure	Full Recommendation
Farallon Escarpment	12	37	40.2897	N	124	12.8307	W	EFH Closure	Full Recommendation
Farallon Escarpment	13	37	47.522	N	124	25.2782	W	EFH Closure	Full Recommendation
Farallon Escarpment	14	37	50.6463	N	124	24.5701	W	EFH Closure	Full Recommendation

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Pescadero Reef	1	37	17.5987	N	123	26.4403	W	EFH Closure	Recommendation in Progress
Pescadero Reef	2	37	17.0087	N	123	27.9853	W	EFH Closure	Recommendation in Progress
Pescadero Reef	3	37	17.7626	N	123	29.592	W	EFH Closure	Recommendation in Progress
Pescadero Reef	4	37	19.3846	N	123	29.6332	W	EFH Closure	Recommendation in Progress
Pescadero Reef	5	37	19.5975	N	123	26.6463	W	EFH Closure	Recommendation in Progress
Pescadero Reef	6	37	17.5987	N	123	26.4403	W	EFH Closure	Recommendation in Progress
Pigeon Point Reef	1	37	7.2031	N	123	26.8211	W	EFH Closure	Recommendation in Progress
Pigeon Point Reef	2	37	6.0203	N	123	28.1395	W	EFH Closure	Recommendation in Progress
Pigeon Point Reef	3	37	8.911	N	123	31.765	W	EFH Closure	Recommendation in Progress
Pigeon Point Reef	4	37	10.29	N	123	29.7051	W	EFH Closure	Recommendation in Progress
Pigeon Point Reef	5	37	7.2031	N	123	26.8211	W	EFH Closure	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	1	40	10.0019	N	125	21.1185	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	2	40	7.7	N	125	18.4406	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	3	40	8.8398	N	125	15.8579	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	4	40	6.5293	N	125	17.3894	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	5	40	3.1565	N	125	14.4392	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	6	40	2.1896	N	125	12.8491	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	7	40	2.8904	N	125	11.778	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	8	40	2.781	N	125	10.6991	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	9	40	4.5695	N	125	10.0798	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	10	40	6.0588	N	125	8.3012	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	11	40	4.0542	N	125	8.9301	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	12	40	1.1703	N	125	8.8014	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	13	40	1.0293	N	125	10.0625	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	14	39	58.0712	N	125	11.8887	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	15	39	56.3895	N	125	8.7074	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	16	39	54.6399	N	125	7.2989	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	17	39	53.8577	N	125	7.9491	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	18	39	51.9509	N	125	7.6311	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	19	39	48.7786	N	125	3.2885	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	20	39	47.3592	N	125	3.3103	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	21	39	40.0756	N	124	58.3665	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	22	39	36.1562	N	124	56.8975	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	23	39	30.7505	N	124	55.8598	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	24	39	31.6195	N	124	57.3301	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	25	39	30.9072	N	124	57.8805	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	26	39	1.7906	N	124	56.5898	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	27	38	59.4186	N	124	55.6693	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	28	38	58.8921	N	124	56.2789	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	29	38	57.4948	N	124	56.2802	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	30	38	54.7228	N	124	55.6815	W	RCA Opening	Recommendation in Progress

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
40°10’ to 37°07’ Trawl RCA	31	38	48.9486	N	124	51.8487	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	32	38	36.6672	N	124	40.1973	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	33	38	33.821	N	124	39.2309	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	34	38	29.0168	N	124	33.5179	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	35	38	18.8744	N	124	25.9258	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	36	38	14.113	N	124	23.2569	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	37	38	11.07	N	124	22.0698	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	38	38	3.1806	N	124	20.7695	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	39	37	55.0697	N	124	26.8102	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	40	37	50.6595	N	124	23.0611	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	41	37	45.1782	N	124	11.8769	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	42	37	35.6669	N	124	1.1975	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	43	37	26.8103	N	123	55.57	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	44	37	26.7796	N	123	53.9104	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	45	37	25.741	N	123	54.1306	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	46	37	25.33	N	123	53.5873	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	47	37	25.2891	N	123	52.5689	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	48	37	24.499	N	123	52.0887	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	49	37	23.2508	N	123	53.1186	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	50	37	15.5771	N	123	48.3586	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	51	37	7.0056	N	123	41.2559	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	52	37	7.0097	N	123	42.9103	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	53	37	15.1567	N	123	51.6374	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	54	37	19.8712	N	123	53.98	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	55	37	22.8103	N	123	54.3585	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	56	37	24.5508	N	123	52.4801	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	57	37	25.1603	N	123	52.7311	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	58	37	24.4189	N	123	54.9378	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	59	37	25.0478	N	123	55.6421	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	60	37	26.5098	N	123	54.231	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	61	37	26.0999	N	123	57.0699	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	62	37	35.6686	N	124	1.7601	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	63	37	44.4717	N	124	11.5692	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	64	37	51.469	N	124	24.9177	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	65	37	55.3177	N	124	27.1888	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	66	37	58.2295	N	124	26.9004	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	67	38	0.0011	N	124	28.6004	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	68	38	0.7476	N	124	29.7147	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	69	38	1.8805	N	124	30.9803	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	70	38	4.2784	N	124	31.6987	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	71	38	6.15	N	124	29.9993	W	RCA Opening	Recommendation in Progress

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
40°10’ to 37°07’ Trawl RCA	72	38	7.159	N	124	28.1788	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	73	38	10.1002	N	124	27.1977	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	74	38	8.7489	N	124	24.48	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	75	38	14.4324	N	124	25.562	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	76	38	18.7492	N	124	31.2095	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	77	38	28.7819	N	124	37.0649	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	78	38	37.5162	N	124	43.7752	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	79	38	39.6012	N	124	46.4768	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	80	38	41.4184	N	124	46.7491	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	81	38	54.308	N	124	56.7282	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	82	39	0.2519	N	124	56.7411	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	83	39	5.6753	N	124	57.8103	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	84	39	31.4715	N	124	58.7296	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	85	39	32.3513	N	124	57.4189	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	86	39	31.4008	N	124	56.7012	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	87	39	31.6401	N	124	56.1617	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	88	39	32.9716	N	124	56.4282	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	89	39	34.2203	N	124	56.8209	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	90	39	34.5906	N	124	58.0794	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	91	39	39.8199	N	124	59.9784	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	92	39	45.3406	N	125	3.2988	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	93	39	47.9478	N	125	5.2209	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	94	39	48.5986	N	125	4.5012	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	95	39	48.9398	N	125	4.7394	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	96	39	49.101	N	125	6.0011	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	97	39	52.5675	N	125	8.5503	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	98	39	54.8216	N	125	7.6594	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	99	39	56.2986	N	125	8.9546	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	100	39	57.0291	N	125	11.3402	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	101	39	58.2488	N	125	12.5595	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	102	40	2.1807	N	125	9.0692	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	103	40	3.6285	N	125	9.1219	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	104	40	2.6016	N	125	10.6051	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	105	40	1.9992	N	125	12.9695	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	106	40	2.988	N	125	15.5502	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	107	40	5.8992	N	125	17.7685	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	108	40	8.0997	N	125	16.6999	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	109	40	7.0001	N	125	19.0006	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	110	40	9.9998	N	125	22.9602	W	RCA Opening	Recommendation in Progress
40°10’ to 37°07’ Trawl RCA	111	40	10.0019	N	125	21.1185	W	RCA Opening	Recommendation in Progress

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
REGION 5									
Ascension Canyonhead	1	36	59.2038	N	123	24.6395	W	EFH Closure	Recommendation in Progress
Ascension Canyonhead	2	36	56.8811	N	123	24.8421	W	EFH Closure	Recommendation in Progress
Ascension Canyonhead	3	36	57.2988	N	123	26.3562	W	EFH Closure	Recommendation in Progress
Ascension Canyonhead	4	36	56.663	N	123	27.0489	W	EFH Closure	Recommendation in Progress
Ascension Canyonhead	5	37	1.5531	N	123	24.7353	W	EFH Closure	Recommendation in Progress
Ascension Canyonhead	6	37	1.401	N	123	24.3696	W	EFH Closure	Recommendation in Progress
Ascension Canyonhead	7	37	1.0021	N	123	24.3542	W	EFH Closure	Recommendation in Progress
Ascension Canyonhead	8	37	0.6125	N	123	24.0318	W	EFH Closure	Recommendation in Progress
Ascension Canyonhead	9	36	59.2038	N	123	24.6395	W	EFH Closure	Recommendation in Progress
MBNMS Ascension and Ano Nuevo Canyon Complex	1	36	53.5829	N	123	22.4752	W	EFH Closure	Full Recommendation
MBNMS Ascension and Ano Nuevo Canyon Complex	2	36	52.721	N	123	22.1147	W	EFH Closure	Full Recommendation
MBNMS Ascension and Ano Nuevo Canyon Complex	3	36	54.0102	N	123	29.945	W	EFH Closure	Full Recommendation
MBNMS Ascension and Ano Nuevo Canyon Complex	4	36	57.2984	N	123	26.3569	W	EFH Closure	Full Recommendation
MBNMS Ascension and Ano Nuevo Canyon Complex	5	36	56.535	N	123	23.5837	W	EFH Closure	Full Recommendation
MBNMS Ascension and Ano Nuevo Canyon Complex	6	36	54.1718	N	123	23.6764	W	EFH Closure	Full Recommendation
MBNMS Ascension and Ano Nuevo Canyon Complex	7	36	53.5829	N	123	22.4752	W	EFH Closure	Full Recommendation
MBNMS Lower Portion of Cabrillo Canyon	1	36	51.4115	N	123	14.1418	W	EFH Opening	Full Recommendation
MBNMS Lower Portion of Cabrillo Canyon	2	36	49.5981	N	123	15.0816	W	EFH Opening	Full Recommendation
MBNMS Lower Portion of Cabrillo Canyon	3	36	50.4729	N	123	19.0251	W	EFH Opening	Full Recommendation
MBNMS Lower Portion of Cabrillo Canyon	4	36	49.0931	N	123	21.8433	W	EFH Opening	Full Recommendation
MBNMS Lower Portion of Cabrillo Canyon	5	36	52.7216	N	123	22.1163	W	EFH Opening	Full Recommendation
MBNMS Lower Portion of Cabrillo Canyon	6	36	51.4115	N	123	14.1418	W	EFH Opening	Full Recommendation
MBNMS South of Davenport	1	36	54.492	N	123	12.4774	W	EFH Closure	Full Recommendation
MBNMS South of Davenport	2	36	53.9989	N	123	13.0452	W	EFH Closure	Full Recommendation
MBNMS South of Davenport	3	36	56.7841	N	123	17.9092	W	EFH Closure	Full Recommendation
MBNMS South of Davenport	4	36	57.7974	N	123	18.1384	W	EFH Closure	Full Recommendation
MBNMS South of Davenport	5	36	57.8365	N	123	17.7161	W	EFH Closure	Full Recommendation
MBNMS South of Davenport	6	36	57.3777	N	123	17.044	W	EFH Closure	Full Recommendation
MBNMS South of Davenport	7	36	55.8384	N	123	14.2593	W	EFH Closure	Full Recommendation
MBNMS South of Davenport	8	36	54.8029	N	123	12.6074	W	EFH Closure	Full Recommendation
MBNMS South of Davenport	9	36	54.492	N	123	12.4774	W	EFH Closure	Full Recommendation
MBNMS Outer Soquel Canyon	1	36	47.3693	N	123	3.158	W	EFH Closure	Full Recommendation
MBNMS Outer Soquel Canyon	2	36	46.3061	N	123	5.4818	W	EFH Closure	Full Recommendation
MBNMS Outer Soquel Canyon	3	36	48.5023	N	123	6.0174	W	EFH Closure	Full Recommendation
MBNMS Outer Soquel Canyon	4	36	49.1846	N	123	3.1219	W	EFH Closure	Full Recommendation
MBNMS Outer Soquel Canyon	5	36	47.8013	N	123	2.7138	W	EFH Closure	Full Recommendation
MBNMS Outer Soquel Canyon	6	36	47.3693	N	123	3.158	W	EFH Closure	Full Recommendation
Monterey Bay Modification	1	36	45.5018	N	122	53.2032	W	EFH Closure	Recommendation in Progress

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Monterey Bay Modification	2	36	45.477	N	122	53.9139	W	EFH Closure	Recommendation in Progress
Monterey Bay Modification	3	36	45.6008	N	122	54.161	W	EFH Closure	Recommendation in Progress
Monterey Bay Modification	4	36	46.4754	N	122	53.1311	W	EFH Closure	Recommendation in Progress
Monterey Bay Modification	5	36	46.4754	N	122	52.6779	W	EFH Closure	Recommendation in Progress
Monterey Bay Modification	6	36	45.8813	N	122	52.5131	W	EFH Closure	Recommendation in Progress
Monterey Bay Modification	7	36	45.5018	N	122	53.2032	W	EFH Closure	Recommendation in Progress
MBNMS Southwest of Smooth Ridge	1	36	42.0377	N	123	16.0634	W	EFH Closure	Full Recommendation
MBNMS Southwest of Smooth Ridge	2	36	40.2991	N	123	13.3083	W	EFH Closure	Full Recommendation
MBNMS Southwest of Smooth Ridge	3	36	40.7586	N	123	17.2672	W	EFH Closure	Full Recommendation
MBNMS Southwest of Smooth Ridge	4	36	44.3246	N	123	18.4903	W	EFH Closure	Full Recommendation
MBNMS Southwest of Smooth Ridge	5	36	42.0377	N	123	16.0634	W	EFH Closure	Full Recommendation
MBNMS South of Mars Cable	1	36	40.0254	N	123	9.0931	W	EFH Opening	Full Recommendation
MBNMS South of Mars Cable	2	36	39.885	N	123	9.6918	W	EFH Opening	Full Recommendation
MBNMS South of Mars Cable	3	36	41.2965	N	123	9.3429	W	EFH Opening	Full Recommendation
MBNMS South of Mars Cable	4	36	40.993	N	123	8.5279	W	EFH Opening	Full Recommendation
MBNMS South of Mars Cable	5	36	40.0254	N	123	9.0931	W	EFH Opening	Full Recommendation
MBNMS West of Carmel Canyon	1	36	30.7922	N	123	1.2216	W	EFH Opening	Full Recommendation
MBNMS West of Carmel Canyon	2	36	30.5925	N	123	3.4463	W	EFH Opening	Full Recommendation
MBNMS West of Carmel Canyon	3	36	34.6947	N	123	4.9874	W	EFH Opening	Full Recommendation
MBNMS West of Carmel Canyon	4	36	35.4101	N	123	4.4351	W	EFH Opening	Full Recommendation
MBNMS West of Carmel Canyon	5	36	32.374	N	123	1.689	W	EFH Opening	Full Recommendation
MBNMS West of Carmel Canyon	6	36	30.7922	N	123	1.2216	W	EFH Opening	Full Recommendation
MBNMS West of Sobranes Point	1	36	30.5997	N	123	3.4425	W	EFH Closure	Full Recommendation
MBNMS West of Sobranes Point	2	36	25.4073	N	123	13.5426	W	EFH Closure	Full Recommendation
MBNMS West of Sobranes Point	3	36	25.717	N	123	17.2067	W	EFH Closure	Full Recommendation
MBNMS West of Sobranes Point	4	36	30.0212	N	123	9.8502	W	EFH Closure	Full Recommendation
MBNMS West of Sobranes Point	5	36	30.5997	N	123	3.4425	W	EFH Closure	Full Recommendation
MBNMS East of Sur Ridge	1	36	25.2513	N	123	11.6117	W	EFH Opening	Full Recommendation
MBNMS East of Sur Ridge	2	36	16.0508	N	123	14.3684	W	EFH Opening	Full Recommendation
MBNMS East of Sur Ridge	3	36	16.1391	N	123	15.9404	W	EFH Opening	Full Recommendation
MBNMS East of Sur Ridge	4	36	13.8569	N	123	15.952	W	EFH Opening	Full Recommendation
MBNMS East of Sur Ridge	5	36	17.9531	N	123	17.1249	W	EFH Opening	Full Recommendation
MBNMS East of Sur Ridge	6	36	25.4088	N	123	13.5403	W	EFH Opening	Full Recommendation
MBNMS East of Sur Ridge	7	36	25.2513	N	123	11.6117	W	EFH Opening	Full Recommendation
MBNMS Triangle South of Surveyors Knoll	1	36	12.2986	N	123	10.1966	W	EFH Closure	Full Recommendation
MBNMS Triangle South of Surveyors Knoll	2	36	10.819	N	123	15.9695	W	EFH Closure	Full Recommendation
MBNMS Triangle South of Surveyors Knoll	3	36	13.8493	N	123	15.9528	W	EFH Closure	Full Recommendation
MBNMS Triangle South of Surveyors Knoll	4	36	12.2986	N	123	10.1966	W	EFH Closure	Full Recommendation
MBNMS Sur Canyon Slot Canyons	1	36	11.8909	N	122	55.8157	W	EFH Opening	Full Recommendation
MBNMS Sur Canyon Slot Canyons	2	36	9.9331	N	122	56.574	W	EFH Opening	Full Recommendation
MBNMS Sur Canyon Slot Canyons	3	36	9.9498	N	123	3.7271	W	EFH Opening	Full Recommendation

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
MBNMS Sur Canyon Slot Canyons	4	36	12.2982	N	123	10.1914	W	EFH Opening	Full Recommendation
MBNMS Sur Canyon Slot Canyons	5	36	14.8354	N	123	0.2741	W	EFH Opening	Full Recommendation
MBNMS Sur Canyon Slot Canyons	6	36	13.9507	N	122	58.4549	W	EFH Opening	Full Recommendation
MBNMS Sur Canyon Slot Canyons	7	36	12.5808	N	122	58.5464	W	EFH Opening	Full Recommendation
MBNMS Sur Canyon Slot Canyons	8	36	11.8909	N	122	55.8157	W	EFH Opening	Full Recommendation
MBNMS Point Sur Platform	1	36	15.8025	N	122	56.4967	W	EFH Closure	Full Recommendation
MBNMS Point Sur Platform	2	36	15.2087	N	122	58.8348	W	EFH Closure	Full Recommendation
MBNMS Point Sur Platform	3	36	16.6641	N	123	1.1869	W	EFH Closure	Full Recommendation
MBNMS Point Sur Platform	4	36	17.955	N	123	2.2517	W	EFH Closure	Full Recommendation
MBNMS Point Sur Platform	5	36	18.5568	N	123	1.5255	W	EFH Closure	Full Recommendation
MBNMS Point Sur Platform	6	36	17.6562	N	122	57.8498	W	EFH Closure	Full Recommendation
MBNMS Point Sur Platform	7	36	16.7243	N	122	57.3503	W	EFH Closure	Full Recommendation
MBNMS Point Sur Platform	8	36	15.9728	N	122	56.5663	W	EFH Closure	Full Recommendation
MBNMS Point Sur Platform	9	36	15.8025	N	122	56.4967	W	EFH Closure	Full Recommendation
MBNMS Between Partington Point and Lopez Point	1	36	2.3369	N	122	39.3666	W	EFH Closure	Full Recommendation
MBNMS Between Partington Point and Lopez Point	2	35	58.8928	N	122	45.3817	W	EFH Closure	Full Recommendation
MBNMS Between Partington Point and Lopez Point	3	35	58.9949	N	122	50.4916	W	EFH Closure	Full Recommendation
MBNMS Between Partington Point and Lopez Point	4	36	4.8764	N	122	51.3478	W	EFH Closure	Full Recommendation
MBNMS Between Partington Point and Lopez Point	5	36	7.4281	N	122	43.1376	W	EFH Closure	Full Recommendation
MBNMS Between Partington Point and Lopez Point	6	36	6.8009	N	122	42.5428	W	EFH Closure	Full Recommendation
MBNMS Between Partington Point and Lopez Point	7	36	6.0479	N	122	42.1797	W	EFH Closure	Full Recommendation
MBNMS Between Partington Point and Lopez Point	8	36	5.1167	N	122	41.0957	W	EFH Closure	Full Recommendation
MBNMS Between Partington Point and Lopez Point	9	36	4.8525	N	122	41.03	W	EFH Closure	Full Recommendation
MBNMS Between Partington Point and Lopez Point	10	36	3.9627	N	122	40.5498	W	EFH Closure	Full Recommendation
MBNMS Between Partington Point and Lopez Point	11	36	2.6763	N	122	39.6769	W	EFH Closure	Full Recommendation
MBNMS Between Partington Point and Lopez Point	12	36	2.3369	N	122	39.3666	W	EFH Closure	Full Recommendation
MBNMS La Cruz Canyon	1	35	42.8541	N	122	25.9165	W	EFH Closure	Full Recommendation
MBNMS La Cruz Canyon	2	35	42.8269	N	122	26.3105	W	EFH Closure	Full Recommendation
MBNMS La Cruz Canyon	3	35	43.6234	N	122	26.9182	W	EFH Closure	Full Recommendation
MBNMS La Cruz Canyon	4	35	45.1439	N	122	27.607	W	EFH Closure	Full Recommendation
MBNMS La Cruz Canyon	5	35	46.877	N	122	27.804	W	EFH Closure	Full Recommendation
MBNMS La Cruz Canyon	6	35	49.1534	N	122	29.4275	W	EFH Closure	Full Recommendation
MBNMS La Cruz Canyon	7	35	49.525	N	122	28.7065	W	EFH Closure	Full Recommendation
MBNMS La Cruz Canyon	8	35	49.1544	N	122	27.8374	W	EFH Closure	Full Recommendation
MBNMS La Cruz Canyon	9	35	48.6742	N	122	27.5825	W	EFH Closure	Full Recommendation
MBNMS La Cruz Canyon	10	35	47.844	N	122	27.7435	W	EFH Closure	Full Recommendation
MBNMS La Cruz Canyon	11	35	46.501	N	122	26.5732	W	EFH Closure	Full Recommendation
MBNMS La Cruz Canyon	12	35	45.3968	N	122	25.9912	W	EFH Closure	Full Recommendation
MBNMS La Cruz Canyon	13	35	44.1857	N	122	24.6857	W	EFH Closure	Full Recommendation
MBNMS La Cruz Canyon	14	35	43.8272	N	122	26.5217	W	EFH Closure	Full Recommendation
MBNMS La Cruz Canyon	15	35	42.8541	N	122	25.9165	W	EFH Closure	Full Recommendation

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
MBNMS West of Piedras Blancas SCMA	1	35	39.1219	N	122	20.8955	W	EFH Closure	Full Recommendation
MBNMS West of Piedras Blancas SCMA	2	35	39.1062	N	122	21.3242	W	EFH Closure	Full Recommendation
MBNMS West of Piedras Blancas SCMA	3	35	40.6302	N	122	22.6348	W	EFH Closure	Full Recommendation
MBNMS West of Piedras Blancas SCMA	4	35	42.8416	N	122	23.6686	W	EFH Closure	Full Recommendation
MBNMS West of Piedras Blancas SCMA	5	35	42.8541	N	122	22.7481	W	EFH Closure	Full Recommendation
MBNMS West of Piedras Blancas SCMA	6	35	42.1255	N	122	22.6206	W	EFH Closure	Full Recommendation
MBNMS West of Piedras Blancas SCMA	7	35	41.107	N	122	22.1263	W	EFH Closure	Full Recommendation
MBNMS West of Piedras Blancas SCMA	8	35	40.4388	N	122	21.592	W	EFH Closure	Full Recommendation
MBNMS West of Piedras Blancas SCMA	9	35	39.7307	N	122	21.2289	W	EFH Closure	Full Recommendation
MBNMS West of Piedras Blancas SCMA	10	35	39.4671	N	122	20.992	W	EFH Closure	Full Recommendation
MBNMS West of Piedras Blancas SCMA	11	35	39.1219	N	122	20.8955	W	EFH Closure	Full Recommendation
Cambria Rough Patch	1	35	30.498	N	122	11.1082	W	EFH Closure	Full Recommendation
Cambria Rough Patch	2	35	30.4142	N	122	15.2075	W	EFH Closure	Full Recommendation
Cambria Rough Patch	3	35	31.5376	N	122	15.9902	W	EFH Closure	Full Recommendation
Cambria Rough Patch	4	35	31.8058	N	122	12.9003	W	EFH Closure	Full Recommendation
Cambria Rough Patch	5	35	30.498	N	122	11.1082	W	EFH Closure	Full Recommendation
Big Sur Coast Modification	1	35	2.6744	N	122	30.6667	W	EFH Closure	Full Recommendation
Big Sur Coast Modification	2	35	2.5058	N	122	35.3634	W	EFH Closure	Full Recommendation
Big Sur Coast Modification	3	35	20.4849	N	122	35.8166	W	EFH Closure	Full Recommendation
Big Sur Coast Modification	4	35	20.4009	N	122	33.0769	W	EFH Closure	Full Recommendation
Big Sur Coast Modification	5	35	9.7189	N	122	33.9214	W	EFH Closure	Full Recommendation
Big Sur Coast Modification	6	35	6.2148	N	122	33.5095	W	EFH Closure	Full Recommendation
Big Sur Coast Modification	7	35	4.0909	N	122	32.1911	W	EFH Closure	Full Recommendation
Big Sur Coast Modification	8	35	2.6744	N	122	30.6667	W	EFH Closure	Full Recommendation
37°07’ to 34°27’ Trawl RCA	1	37	7.0058	N	123	41.2549	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	2	37	3.1785	N	123	38.15	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	3	37	0.4785	N	123	33.9284	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	4	36	58.6995	N	123	27.2143	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	5	37	0.8476	N	123	24.6999	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	6	36	58.0022	N	123	24.1386	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	7	36	58.7396	N	123	21.5096	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	8	36	56.9695	N	123	21.3189	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	9	36	51.518	N	123	10.6756	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	10	36	48.3885	N	123	7.596	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	11	36	47.4307	N	123	3.2186	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	12	36	50.9473	N	122	58.034	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	13	36	49.919	N	122	58.0096	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	14	36	48.8791	N	122	58.8979	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	15	36	47.7009	N	122	58.7486	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	16	36	48.371	N	122	51.1384	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	17	36	45.7395	N	122	54.1703	W	RCA Opening	Recommendation in Progress

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
37°07’ to 34°27’ Trawl RCA	18	36	45.5075	N	122	57.7186	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	19	36	38.8404	N	123	1.317	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	20	36	35.6185	N	123	0.9784	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	21	36	32.4589	N	122	59.1505	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	22	36	32.7905	N	122	57.6684	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	23	36	31.9785	N	122	56.547	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	24	36	31.7906	N	122	58.3961	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	25	36	30.307	N	123	0.2188	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	26	36	29.3499	N	123	0.3603	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	27	36	27.657	N	122	59.7978	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	28	36	26.2219	N	122	58.3505	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	29	36	21.2009	N	123	0.7195	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	30	36	20.4698	N	123	2.921	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	31	36	18.4606	N	123	4.5085	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	32	36	15.918	N	123	1.3272	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	33	36	13.7594	N	122	57.2678	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	34	36	14.4292	N	122	55.4293	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	35	36	10.2393	N	122	43.0802	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	36	36	2.4892	N	122	36.5101	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	37	36	1.0784	N	122	36.6298	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	38	35	57.8387	N	122	32.8086	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	39	35	50.3571	N	122	29.3196	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	40	35	39.029	N	122	22.8604	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	41	35	24.2957	N	122	2.5574	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	42	35	16.5325	N	122	0.3893	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	43	35	4.8222	N	121	53.9623	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	44	34	52.5156	N	121	51.6192	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	45	34	43.3581	N	121	52.1187	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	46	34	37.6469	N	121	49.9944	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	47	34	30.8006	N	121	45.0196	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	48	34	27.0015	N	121	39.0058	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	49	34	26.9949	N	121	40.4105	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	50	34	29.2833	N	121	44.1828	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	51	34	37.7444	N	121	51.9565	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	52	34	42.7617	N	121	55.0905	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	53	35	7.4134	N	121	57.0754	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	54	35	26.0017	N	122	8.0034	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	55	35	38.9379	N	122	23.1591	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	56	35	45.8399	N	122	28.8394	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	57	35	51.313	N	122	30.0779	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	58	35	57.7324	N	122	33.4446	W	RCA Opening	Recommendation in Progress

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
37°07’ to 34°27’ Trawl RCA	59	35	59.9984	N	122	35.4492	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	60	36	1.0076	N	122	36.689	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	61	36	2.5701	N	122	37.0214	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	62	36	10.12	N	122	43.331	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	63	36	13.7895	N	122	58.1201	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	64	36	15.3811	N	123	1.402	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	65	36	18.8994	N	123	5.3209	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	66	36	23.4315	N	122	59.7605	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	67	36	38.998	N	123	1.711	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	68	36	44.8076	N	122	58.2825	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	69	36	48.8317	N	122	59.1412	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	70	36	50.3421	N	122	58.3958	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	71	36	47.2606	N	123	3.2225	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	72	36	47.6293	N	123	7.3668	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	73	36	52.0197	N	123	12.0969	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	74	36	55.8501	N	123	21.9489	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	75	36	58.3786	N	123	21.8482	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	76	36	57.5012	N	123	24.978	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	77	37	0.2492	N	123	24.8492	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	78	36	58.0001	N	123	27.7949	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	79	36	59.7012	N	123	33.7095	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	80	37	1.6802	N	123	37.281	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	81	37	7.0089	N	123	42.9093	W	RCA Opening	Recommendation in Progress
37°07’ to 34°27’ Trawl RCA	82	37	7.0058	N	123	41.2549	W	RCA Opening	Recommendation in Progress
REGION 6									
Western Line Adjustment	1	33	46.2603	N	121	43.6401	W	EFH Closure	Recommendation in Progress
Western Line Adjustment	2	33	42.5399	N	121	38.2404	W	EFH Closure	Recommendation in Progress
Western Line Adjustment	3	33	43.4852	N	121	36.0752	W	EFH Closure	Recommendation in Progress
Western Line Adjustment	4	33	27.8381	N	121	38.0873	W	EFH Closure	Recommendation in Progress
Western Line Adjustment	5	33	33.1377	N	121	40.2476	W	EFH Closure	Recommendation in Progress
Western Line Adjustment	6	33	40.7114	N	121	51.2914	W	EFH Closure	Recommendation in Progress
Western Line Adjustment	7	33	46.2603	N	121	43.6401	W	EFH Closure	Recommendation in Progress
Outer Bank	1	32	56.5907	N	121	4.6421	W	EFH Closure	Recommendation in Progress
Outer Bank	2	32	36.2957	N	120	56.5325	W	EFH Closure	Recommendation in Progress
Outer Bank	3	32	38.5403	N	121	9.541	W	EFH Closure	Recommendation in Progress
Outer Bank	4	32	51.5668	N	121	23.3484	W	EFH Closure	Recommendation in Progress
Outer Bank	5	33	1.6945	N	121	27.4534	W	EFH Closure	Recommendation in Progress
Outer Bank	6	32	56.5907	N	121	4.6421	W	EFH Closure	Recommendation in Progress

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Northern Channel Islands	1	34	12.4993	N	121	18.4028	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	2	34	7.1001	N	121	10.3702	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	3	34	8.3892	N	120	54.7887	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	4	34	8.1211	N	120	42.5044	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	5	34	9.3501	N	120	35.5008	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	6	34	9.3501	N	120	32.8021	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	7	34	9.6942	N	120	28.8071	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	8	34	6.0015	N	120	18.8788	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	9	34	6.2494	N	120	15.1826	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	10	34	5.6289	N	120	13.3956	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	11	34	4.9871	N	120	12.2276	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	12	34	3.9206	N	120	10.6003	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	13	34	3.3233	N	120	9.5394	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	14	34	2.7772	N	120	7.706	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	15	34	2.6406	N	120	6.4186	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	16	34	2.7174	N	120	5.883	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	17	34	2.4529	N	120	5.3474	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	18	34	2.2224	N	120	4.6264	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	19	34	2.0773	N	120	3.5656	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	20	34	1.3774	N	120	2.309	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	21	34	1.0957	N	120	1.6086	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	22	34	0.9591	N	120	0.7744	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	23	34	0.7456	N	120	0.1152	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	24	34	0.2078	N	119	59.2397	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	25	33	59.9286	N	119	58.5633	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	26	33	59.5844	N	119	56.6957	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	27	33	59.1232	N	119	52.5964	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	28	33	58.7816	N	119	51.9372	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	29	33	58.0641	N	119	51.3192	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	30	33	57.4149	N	119	50.5365	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	31	33	56.9365	N	119	49.2181	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	32	33	56.4683	N	119	55.7028	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	33	33	59.0208	N	120	5.7388	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	34	33	59.926	N	120	13.5872	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	35	33	54.1103	N	120	26.0005	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	36	33	54.1103	N	120	31.0009	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	37	33	53.5455	N	120	44.8541	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	38	33	50.0561	N	120	50.313	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	39	33	41.4078	N	120	46.6674	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	40	33	33.9115	N	120	46.9635	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	41	33	32.213	N	120	52.2369	W	EFH Closure	Recommendation in Progress

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Northern Channel Islands	42	33	35.3024	N	120	58.9446	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	43	33	50.4004	N	121	10.0008	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	44	33	57.0892	N	121	27.7608	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	45	34	2.2118	N	121	36.29	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	46	34	9.7746	N	121	37.8268	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	47	34	13.1608	N	121	29.4017	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	48	34	12.4993	N	121	23.3004	W	EFH Closure	Recommendation in Progress
Northern Channel Islands	49	34	12.4993	N	121	18.4028	W	EFH Closure	Recommendation in Progress
Begg Ridge	1	33	24.5049	N	120	32.0023	W	EFH Closure	Recommendation in Progress
Begg Ridge	2	33	16.6233	N	120	14.2044	W	EFH Closure	Recommendation in Progress
Begg Ridge	3	33	12.2404	N	120	13.0447	W	EFH Closure	Recommendation in Progress
Begg Ridge	4	33	7.4121	N	120	32.0785	W	EFH Closure	Recommendation in Progress
Begg Ridge	5	33	2.6157	N	120	29.6322	W	EFH Closure	Recommendation in Progress
Begg Ridge	6	33	1.7522	N	120	17.8494	W	EFH Closure	Recommendation in Progress
Begg Ridge	7	32	58.9984	N	120	17.049	W	EFH Closure	Recommendation in Progress
Begg Ridge	8	32	58.9984	N	120	32.0504	W	EFH Closure	Recommendation in Progress
Begg Ridge	9	32	53.5843	N	120	32.0502	W	EFH Closure	Recommendation in Progress
Begg Ridge	10	32	57.0163	N	120	36.9812	W	EFH Closure	Recommendation in Progress
Begg Ridge	11	33	7.6843	N	120	45.0109	W	EFH Closure	Recommendation in Progress
Begg Ridge	12	33	4.9924	N	120	51.1907	W	EFH Closure	Recommendation in Progress
Begg Ridge	13	33	13.9101	N	120	55.9943	W	EFH Closure	Recommendation in Progress
Begg Ridge	14	33	16.4702	N	120	54.0522	W	EFH Closure	Recommendation in Progress
Begg Ridge	15	33	20.0001	N	120	55.8572	W	EFH Closure	Recommendation in Progress
Begg Ridge	16	33	20.0001	N	120	50.0598	W	EFH Closure	Recommendation in Progress
Begg Ridge	17	33	30	N	120	50.0616	W	EFH Closure	Recommendation in Progress
Begg Ridge	18	33	30.0008	N	120	52.579	W	EFH Closure	Recommendation in Progress
Begg Ridge	19	33	32.213	N	120	52.235	W	EFH Closure	Recommendation in Progress
Begg Ridge	20	33	33.9125	N	120	46.9615	W	EFH Closure	Recommendation in Progress
Begg Ridge	21	33	24.5049	N	120	32.0023	W	EFH Closure	Recommendation in Progress
Tanner and Cortes Banks	1	32	51.8363	N	120	17.0508	W	EFH Closure	Recommendation in Progress
Tanner and Cortes Banks	2	32	43.2611	N	120	2.3986	W	EFH Closure	Recommendation in Progress
Tanner and Cortes Banks	3	32	39.7939	N	120	0.0091	W	EFH Closure	Recommendation in Progress
Tanner and Cortes Banks	4	32	33.0398	N	119	53.5702	W	EFH Closure	Recommendation in Progress
Tanner and Cortes Banks	5	32	31.3046	N	119	55.0875	W	EFH Closure	Recommendation in Progress
Tanner and Cortes Banks	6	32	28.4206	N	119	53.1486	W	EFH Closure	Recommendation in Progress
Tanner and Cortes Banks	7	32	27.2626	N	119	50.293	W	EFH Closure	Recommendation in Progress
Tanner and Cortes Banks	8	32	19.6199	N	119	47.8005	W	EFH Closure	Recommendation in Progress
Tanner and Cortes Banks	9	32	13.3978	N	119	51.874	W	EFH Closure	Recommendation in Progress
Tanner and Cortes Banks	10	32	13.1778	N	120	4.437	W	EFH Closure	Recommendation in Progress
Tanner and Cortes Banks	11	32	19.1913	N	120	13.9591	W	EFH Closure	Recommendation in Progress
Tanner and Cortes Banks	12	32	23.4654	N	120	25.7007	W	EFH Closure	Recommendation in Progress

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Tanner and Cortes Banks	13	32	30.4615	N	120	33.1512	W	EFH Closure	Recommendation in Progress
Tanner and Cortes Banks	14	32	31.2374	N	120	31.7311	W	EFH Closure	Recommendation in Progress
Tanner and Cortes Banks	15	32	41.4584	N	120	38.6535	W	EFH Closure	Recommendation in Progress
Tanner and Cortes Banks	16	32	44.7167	N	120	38.4475	W	EFH Closure	Recommendation in Progress
Tanner and Cortes Banks	17	32	46.0011	N	120	32.0498	W	EFH Closure	Recommendation in Progress
Tanner and Cortes Banks	18	32	46	N	120	17.0509	W	EFH Closure	Recommendation in Progress
Tanner and Cortes Banks	19	32	51.8363	N	120	17.0508	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	1	33	33.0009	N	120	15.0596	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	2	33	32.9998	N	119	57.0596	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	3	33	38.1148	N	119	57.0602	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	4	33	32.819	N	119	49.8054	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	5	33	32.7299	N	119	38.3805	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	6	33	30.2512	N	119	42.2512	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	7	33	25.6802	N	119	41.6603	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	8	33	26.7895	N	119	48.8784	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	9	33	29.8137	N	119	52.4215	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	10	33	28.5005	N	119	54.5407	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	11	33	28.5	N	120	1.7364	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	12	33	28.7617	N	120	1.69	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	13	33	29.05	N	120	1.845	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	14	33	29.2583	N	120	1.6967	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	15	33	29.36	N	120	1.81	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	16	33	29.0017	N	120	2.3617	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	17	33	29.015	N	120	2.5783	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	18	33	28.9517	N	120	2.67	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	19	33	29.0683	N	120	2.9066	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	20	33	28.805	N	120	2.9417	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	21	33	28.645	N	120	2.6833	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	22	33	28.25	N	120	2.6816	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	23	33	28.08	N	120	2.5984	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	24	33	27.8567	N	120	2.3383	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	25	33	27.859	N	120	2.2015	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	26	33	21.781	N	120	2.1998	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	27	33	21.781	N	119	54.5407	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	28	33	19.8667	N	119	58.4262	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	29	33	20.1076	N	120	4.4	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	30	33	23.6893	N	120	11.2776	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	31	33	30.9157	N	120	17.5675	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	32	33	38.5012	N	120	17.5263	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	33	33	39.5965	N	120	15.066	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	34	33	41.3328	N	120	15.0679	W	EFH Closure	Recommendation in Progress

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Santa Barbara Plateau	35	33	43.8898	N	120	17.7851	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	36	33	48.0013	N	120	15.0615	W	EFH Closure	Recommendation in Progress
Santa Barbara Plateau	37	33	33.0009	N	120	15.0596	W	EFH Closure	Recommendation in Progress
San Clemente Ridge	1	33	6.056	N	119	35.2674	W	EFH Closure	Recommendation in Progress
San Clemente Ridge	2	32	57.8357	N	119	27.7898	W	EFH Closure	Recommendation in Progress
San Clemente Ridge	3	32	47.1472	N	119	11.8511	W	EFH Closure	Recommendation in Progress
San Clemente Ridge	4	32	43.0803	N	119	15.9593	W	EFH Closure	Recommendation in Progress
San Clemente Ridge	5	32	42.375	N	119	19.6685	W	EFH Closure	Recommendation in Progress
San Clemente Ridge	6	32	38.5777	N	119	21.0487	W	EFH Closure	Recommendation in Progress
San Clemente Ridge	7	32	36.5132	N	119	19.7921	W	EFH Closure	Recommendation in Progress
San Clemente Ridge	8	32	35.4112	N	119	21.6873	W	EFH Closure	Recommendation in Progress
San Clemente Ridge	9	32	43.6792	N	119	31.8479	W	EFH Closure	Recommendation in Progress
San Clemente Ridge	10	32	51.4717	N	119	38.0483	W	EFH Closure	Recommendation in Progress
San Clemente Ridge	11	32	56.9023	N	119	38.9753	W	EFH Closure	Recommendation in Progress
San Clemente Ridge	12	33	2.5691	N	119	42.6214	W	EFH Closure	Recommendation in Progress
San Clemente Ridge	13	33	5.8317	N	119	41.1176	W	EFH Closure	Recommendation in Progress
San Clemente Ridge	14	33	6.056	N	119	35.2674	W	EFH Closure	Recommendation in Progress
Eastern San Clemente Ridge	1	32	46.456	N	118	43.6653	W	EFH Closure	Recommendation in Progress
Eastern San Clemente Ridge	2	32	36.5332	N	118	39.0073	W	EFH Closure	Recommendation in Progress
Eastern San Clemente Ridge	3	32	37.6138	N	118	49.5123	W	EFH Closure	Recommendation in Progress
Eastern San Clemente Ridge	4	32	36.7051	N	118	50.0003	W	EFH Closure	Recommendation in Progress
Eastern San Clemente Ridge	5	32	42.0013	N	118	50.0016	W	EFH Closure	Recommendation in Progress
Eastern San Clemente Ridge	6	32	42.0013	N	119	2.002	W	EFH Closure	Recommendation in Progress
Eastern San Clemente Ridge	7	32	34.5748	N	119	2.0007	W	EFH Closure	Recommendation in Progress
Eastern San Clemente Ridge	8	32	43.0803	N	119	15.9593	W	EFH Closure	Recommendation in Progress
Eastern San Clemente Ridge	9	32	47.1477	N	119	11.8504	W	EFH Closure	Recommendation in Progress
Eastern San Clemente Ridge	10	32	44.3334	N	119	7.1647	W	EFH Closure	Recommendation in Progress
Eastern San Clemente Ridge	11	32	44.1687	N	118	59.8609	W	EFH Closure	Recommendation in Progress
Eastern San Clemente Ridge	12	32	49.226	N	118	55.8441	W	EFH Closure	Recommendation in Progress
Eastern San Clemente Ridge	13	32	57.7531	N	118	56.3732	W	EFH Closure	Recommendation in Progress
Eastern San Clemente Ridge	14	32	58.2197	N	118	55.1166	W	EFH Closure	Recommendation in Progress
Eastern San Clemente Ridge	15	32	46.456	N	118	43.6653	W	EFH Closure	Recommendation in Progress
Coronado Shelf	1	32	31.9258	N	118	9.6982	W	EFH Closure	Recommendation in Progress
Coronado Shelf	2	32	31.6491	N	118	14.3441	W	EFH Closure	Recommendation in Progress
Coronado Shelf	3	32	33.2027	N	118	15.8304	W	EFH Closure	Recommendation in Progress
Coronado Shelf	4	32	35.2566	N	118	27.2013	W	EFH Closure	Recommendation in Progress
Coronado Shelf	5	32	45.1689	N	118	31.63	W	EFH Closure	Recommendation in Progress
Coronado Shelf	6	32	53.3505	N	118	18.8134	W	EFH Closure	Recommendation in Progress
Coronado Shelf	7	32	39.7469	N	118	16.6607	W	EFH Closure	Recommendation in Progress
Coronado Shelf	8	32	37.4225	N	118	10.4603	W	EFH Closure	Recommendation in Progress
Coronado Shelf	9	32	31.9258	N	118	9.6982	W	EFH Closure	Recommendation in Progress

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Sixty-Mile Bank	1	32	5.8879	N	119	6.3211	W	EFH Closure	Recommendation in Progress
Sixty-Mile Bank	2	31	57.8944	N	119	10.5089	W	EFH Closure	Recommendation in Progress
Sixty-Mile Bank	3	32	1.3186	N	119	18.2105	W	EFH Closure	Recommendation in Progress
Sixty-Mile Bank	4	32	6.5709	N	119	18.7795	W	EFH Closure	Recommendation in Progress
Sixty-Mile Bank	5	32	9.0095	N	119	13.9609	W	EFH Closure	Recommendation in Progress
Sixty-Mile Bank	6	32	5.8879	N	119	6.3211	W	EFH Closure	Recommendation in Progress
34°27’ to Mexico Trawl RCA	1	34	27.0015	N	121	39.0058	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	2	34	21.9005	N	121	25.2505	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	3	34	24.8594	N	121	16.8086	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	4	34	22.7995	N	120	57.0573	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	5	34	18.5879	N	120	44.8354	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	6	34	15.0403	N	120	40.3396	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	7	34	14.4007	N	120	45.3877	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	8	34	12.3205	N	120	42.4086	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	9	34	9.7091	N	120	28.8473	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	10	34	4.6985	N	120	15.377	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	11	34	3.3302	N	120	12.9296	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	12	34	2.72	N	120	7.0111	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	13	34	3.8998	N	120	4.6409	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	14	34	1.8002	N	120	3.2312	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	15	33	59.3199	N	120	3.5003	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	16	33	59.0007	N	119	59.5491	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	17	33	59.5099	N	119	57.2484	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	18	33	58.8203	N	119	52.4668	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	19	33	58.5406	N	119	41.8594	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	20	33	55.0698	N	119	34.2492	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	21	33	54.2802	N	119	38.6794	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	22	33	50.9997	N	119	36.6606	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	23	33	39.7701	N	119	18.4096	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	24	33	35.5014	N	119	16.8505	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	25	33	32.68	N	119	9.8196	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	26	33	34.0898	N	118	54.0611	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	27	33	31.5983	N	118	49.2782	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	28	33	16.0716	N	118	34.7415	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	29	33	7.0582	N	118	22.7085	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	30	32	59.2754	N	118	19.6894	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	31	32	55.3587	N	118	19.5396	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	32	32	53.3495	N	118	17.0514	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	33	32	53.3601	N	118	19.9683	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	34	32	46.39	N	118	23.4496	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	35	32	42.7906	N	118	21.1592	W	RCA Opening	Recommendation in Progress

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
34°27’ to Mexico Trawl RCA	36	32	34.2085	N	118	21.1997	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	37	32	34.8226	N	118	24.6861	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	38	32	39.4704	N	118	27.7794	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	39	32	41.9997	N	118	22.1596	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	40	32	46.2904	N	118	23.8887	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	41	32	55.8288	N	118	20.1499	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	42	32	58.9374	N	118	20.0499	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	43	33	6.7711	N	118	22.9211	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	44	33	16.5302	N	118	36.1294	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	45	33	31.169	N	118	49.1083	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	46	33	33.7111	N	118	53.7187	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	47	33	32.151	N	119	10.8419	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	48	33	35.422	N	119	17.1401	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	49	33	39.5397	N	119	18.6993	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	50	33	50.9292	N	119	37.6507	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	51	33	58.0804	N	119	41.1384	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	52	33	58.8694	N	119	59.3701	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	53	33	59.2996	N	120	3.7295	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	54	34	3.599	N	120	4.7104	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	55	34	1.97	N	120	7.2776	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	56	34	3.1201	N	120	15.5109	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	57	33	59.9419	N	120	19.5685	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	58	33	55.8801	N	120	41.046	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	59	33	53.9612	N	120	53.7712	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	60	33	42.2829	N	120	48.8505	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	61	33	37.0407	N	120	50.1689	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	62	33	38.1599	N	120	59.2275	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	63	33	50.9981	N	121	8.9967	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	64	33	57.0913	N	121	27.7602	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	65	34	3.1388	N	121	34.7022	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	66	34	9.4092	N	121	37.7483	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	67	34	13.1601	N	121	29.3978	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	68	34	10.074	N	121	22.9631	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	69	34	7.1011	N	121	10.3692	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	70	34	8.3885	N	120	54.7806	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	71	34	8	N	120	37.0012	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	72	34	14.9998	N	120	48	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	73	34	18.9994	N	120	48.0013	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	74	34	22.1109	N	120	56.6337	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	75	34	23.9703	N	121	15.2504	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	76	34	20.7898	N	121	21.5773	W	RCA Opening	Recommendation in Progress

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
34°27’ to Mexico Trawl RCA	77	34	21.8878	N	121	31.3607	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	78	34	26.9949	N	121	40.4116	W	RCA Opening	Recommendation in Progress
34°27’ to Mexico Trawl RCA	79	34	27.0015	N	121	39.0058	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	1	33	28.6508	N	119	41.0687	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	2	33	28.2293	N	119	39.3789	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	3	33	25.2993	N	119	34.3198	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	4	33	24.8709	N	119	32.4504	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	5	33	23.0497	N	119	30.1098	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	6	33	21.9105	N	119	31.9779	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	7	33	20.8309	N	119	32.8296	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	8	33	19.8392	N	119	32.1588	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	9	33	18.1006	N	119	27.9475	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	10	33	16.0902	N	119	15.4604	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	11	33	17.1396	N	119	14.9583	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	12	33	19.7198	N	119	16.2497	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	13	33	22.6708	N	119	18.4113	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	14	33	25.6791	N	119	22.9985	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	15	33	26.9705	N	119	27.5703	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	16	33	29.141	N	119	30.8121	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	17	33	29.6006	N	119	36.1075	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	18	33	28.2304	N	119	39.3789	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	19	33	28.6514	N	119	41.0667	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	20	33	30.4595	N	119	36.5194	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	21	33	29.781	N	119	31.0104	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	22	33	27.5699	N	119	27.6887	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	23	33	25.9993	N	119	22.0007	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	24	33	23.5985	N	119	18.7872	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	25	33	17.2408	N	119	12.9396	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	26	33	16.0008	N	119	13.0001	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	27	33	15.6208	N	119	14.7395	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	28	33	17.9995	N	119	28.0016	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	29	33	19.8102	N	119	32.2399	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	30	33	20.9697	N	119	33.2905	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	31	33	23.2292	N	119	30.6905	W	RCA Opening	Recommendation in Progress
Trawl RCA around Santa Catalina Island	32	33	28.6508	N	119	41.0687	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	1	33	3.208	N	119	39.8507	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	2	33	3.1281	N	119	39.592	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	3	33	0.218	N	119	38.6792	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	4	32	55.1302	N	119	35.3086	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	5	32	55.1707	N	119	34.6403	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	6	32	53.3607	N	119	33.2293	W	RCA Opening	Recommendation in Progress

Area Name	Waypoint Number	Latitude Degrees	Latitude Minutes	N or S	Longitude Degrees	Longitude Minutes	E or W	Area Type	Area Status
Trawl RCA around San Clemente Island	7	32	49.7496	N	119	32.1002	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	8	32	44.0306	N	119	24.6998	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	9	32	47.5292	N	119	21.7593	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	10	32	48.0098	N	119	19.4896	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	11	32	49.7778	N	119	20.8774	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	12	32	55.7948	N	119	28.9163	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	13	33	2.6706	N	119	34.061	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	14	33	4.7304	N	119	37.9801	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	15	33	3.1292	N	119	39.5907	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	16	33	3.2091	N	119	39.8507	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	17	33	5.0012	N	119	37.9994	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	18	33	2.9997	N	119	34.0005	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	19	32	55.9871	N	119	28.7979	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	20	32	49.7897	N	119	20.8195	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	21	32	47.9502	N	119	19.3093	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	22	32	47.1493	N	119	21.5302	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	23	32	43.0304	N	119	24.2094	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	24	32	48.2597	N	119	31.62	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	25	32	53.2818	N	119	33.5821	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	26	32	54.687	N	119	35.4489	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	27	33	1.928	N	119	39.8495	W	RCA Opening	Recommendation in Progress
Trawl RCA around San Clemente Island	28	33	3.208	N	119	39.8507	W	RCA Opening	Recommendation in Progress
Trawl RCA around Lasuen Knoll	1	33	24.7399	N	119	0.607	W	RCA Opening	Recommendation in Progress
Trawl RCA around Lasuen Knoll	2	33	24.9903	N	118	59.3208	W	RCA Opening	Recommendation in Progress
Trawl RCA around Lasuen Knoll	3	33	23.6598	N	118	58.2806	W	RCA Opening	Recommendation in Progress
Trawl RCA around Lasuen Knoll	4	33	23.2104	N	118	59.5487	W	RCA Opening	Recommendation in Progress
Trawl RCA around Lasuen Knoll	5	33	24.7399	N	119	0.607	W	RCA Opening	Recommendation in Progress