

GROUND FISH AMENDMENT 28 REGULATION DEVELOPMENT UPDATE

In drafting regulations for the Council's final preferred alternative for Amendment 28, recommended in April 2018, NMFS has not identified any issues that require further Council input. However, this report describes the approach NMFS intends to use to resolve challenges we encountered in drafting simple, enforceable regulatory definitions for the Essential Fish Habitat Conservation Area (EFHCA) boundaries, and provides an opportunity for early feedback. We include conceptual images and preliminary draft regulations of example polygons to illustrate our preferred approach (pages 6-10). The draft regulations are subject to change.

Essential Fish Habitat Conservation Areas

Corrections to the Quinault Canyon coordinates

The Washington Department of Fish and Wildlife (WDFW) motion on EFHCAs off Washington included an image and coordinates for Quinault Canyon. Shortly after the April 2018 Council meeting, WDFW staff notified the Amendment 28 project team that the image was correct but one of the coordinates was incorrect. NMFS intends to include the correct coordinates that match the image shown in the motion in the Amendment 28 proposed rule.

The coordinates that correspond to the image from the motion are:

Quinault Canyon. The boundary of the Quinault Canyon EFH Conservation Area is defined by straight lines connecting all of the following points in the order stated:

- (1) 47° 17.00' N. lat., 125° 15.63' W. long.;
- (2) 47° 17.00' N. lat., 125° 10.00' W. long.;
- (3) 47° 08.82' N. lat., 125° 10.01' W. long.; and
- (4) Connecting back to 47° 17.00' N. lat., 125° 15.63' W. long.

EFHCAs that border state waters

Some EFHCAs the Council recommended in April match the boundary between federal and state waters¹ (Table 1). In developing the regulations for these areas, NMFS found it challenging to identify simple coordinates for the state-water boundary line. NMFS explored several options for defining the state water boundaries of these EFHCAs. Initially, NMFS considered using latitude and longitude coordinate pairs to describe the entire boundary of these EFHCAs, including the part that matches state waters. However, this approach would require defining over 30,000 coordinate pairs for the Southern Bight alone, because in some cases, state water boundaries are curved rather than straight lines. Instead, NMFS intends to propose enforceable regulatory descriptions that would exactly match the footprint of the areas in the Council's April final preferred alternative, without codifying thousands of coordinate pairs.

¹ The state water boundary used in maps and analyses that informed the April 2018 decision are based on the public mapping data set assembled by the Bureau of Ocean Energy Management (BOEM). The state water boundary in the BOEM data set is located approximately 3 nautical miles from the shoreline off WA, OR and CA. State waters are described by the Submerged Lands Act and the Magnuson-Stevens Fishery Conservation and Management Act. Off California, the BOEM data set incorporated the state water boundary are also defined by the Supreme Court (*United States v. California*, 135 S. Ct. 563 [2014]).

NMFS’s preferred approach would use the existing regulatory definition of the Exclusive Economic Zone (EEZ) to describe the EFHCA boundary that matches the state water boundary. The Magnuson-Stevens Act regulations at 50 CFR 600.10 describe that the EEZ extends seaward of the boundary (i.e., 3 nm from shore) of each of the coastal states. The state water boundary of each EFHCA is, by extension of this definition, an exact match to the seaward boundary of each of the coastal states. The portions of the EFHCA boundary that fall in federal waters (e.g. do not match with boundary of the coastal states) would be defined using a series of straight lines connecting latitude and longitude coordinate pairs, and additional regulatory text would describe that the EFHCA is the entire EEZ shoreward of that line.

Figure 1 shows an example polygon, where the black line in federal waters would be defined in regulation with coordinate pairs, and the EFHCA will be defined as the areas shoreward of the boundary line formed by connecting each of the coordinate pairs with a straight line. The first and last points of the black line would be established based on the point of intersection of the EFHCA with the state water boundary.

In some of the more complicated polygons, boundaries of existing EFHCAs that had modifications adopted in April 2018 may need to be split into multiple polygons in the regulations. These polygons will still encompass the exact same area specified in the Council’s final preferred alternative, but the boundaries may be split to allow for a definition that conforms to our preferred approach (See Figure 2).

Table 1. The EFHCAs in the April 2018 Council final preferred alternative clipped by state waters or adjacent to the tribal usual and accustomed fishing area. Names of the polygons match those used on the Sound GIS web mapping tool.
<http://www.soundgis.com/efh/efh2018-metrics/>

EFHCA Name (State)	Notes
Grays Canyon (Washington) - new/modification	The Council-recommended modification to the northern portion of the existing Grays Canyon EFHCA has a shoreward (eastern) boundary that matches the tribal usual and accustomed area fishing area boundaries. The latitude and longitude coordinate pairs that NMFS intends to propose are approximate and meant for informational purposes only. The shoreward boundary of the EFHCA would be consistent with the 2018 adjudicated boundary, as implemented in regulation by NMFS.
Arago Reef (Oregon) - new, close	A narrow (<1,700 feet at its widest) portion of federal water would be left open between the shoreward side of the EFHCA and the state water boundary, and requires a slightly modified approach from the simple polygons described in this report. See Figure 3.

EFHCA Name (State)	Notes
Rogue River Reef (Oregon) - new, close	See example in Figure 1.
Blunts Reef (California) <ul style="list-style-type: none"> ● Blunts Reef – Amendment 19 ● Blunts Reef Modification - close 	The Blunts Reef EFHCA from Amendment 19 and the modification from Amendment 28 will likely need to be split to allow for the regulatory format described here (Figure 2).
Mendocino Ridge (California) - <ul style="list-style-type: none"> ● Modification 3 - close 	Rather than modify the boundary of the existing Mendocino Ridge EFHCA, Modification 3 (which expands the current Mendocino Ridge closure) will be defined separately to allow for the regulatory format described in this report for simple polygons.
Delgada Canyon (California) - modification, reopen ^{1/}	The Delgada Canyon reopener results in the entirety of the Delgada Canyon EFHCA existing only in state waters. NMFS will likely note in the definition for this area that the EFHCA is shoreward of the EEZ.
Point Reyes Reef (California) - new, close	See example in Figure 1.
Pescadero Reef ^{2/} (California) - new, close	See example in Figure 1.
Monterey Bay/Canyon (California) modifications <ul style="list-style-type: none"> ● Outer Soquel Canyon - close ● West of Carmel Canyon - reopen^{1/} ● West of Sobranes Point - close 	Rather than modify the boundary of the existing EFHCA, Outer Soquel Canyon (which expands the current Monterey Bay/Canyon closure) will be defined separately to allow for the regulatory format described here. The West of Carmel Canyon reopener may mean that a small portion of the existing Monterey Bay/Canyon EFHCA in state waters may have to be split off and defined separately. Two boundaries of the West of Sobranes Point EFHCA match the boundaries of existing EFHCAs: Monterey Bay/Canyon (north) and Point Sur Deep (south). Draft regulations have the boundaries of the West of Sobranes Point EFHCA defined as its own polygon rather than incorporate it into one or the other neighboring EFHCAs.

EFHCA Name (State)	Notes
Big Sur Coast/Port San Luis (California) modifications <ul style="list-style-type: none"> ● Point Sur Platform - close ● Between Partington Point and Lopez Point - close 	Rather than modify the boundary of the existing EFHCA, these two polygons (which expand the current Big Sur Coast/Port San Luis closure) will be defined separately to allow for the regulatory format described here.
West of Piedras Blancas SMCA (California) - new, close	See example in Figure 1.
Southern CA Bight (California) - new, close	See section below.

^{1/}These only reopen federal waters, and state waters remain part of the existing EFHCA.

^{2/}There are two polygons considered in the PDEIS (April 2018) named Pescadero Reef. The Council chose the Collaborative polygon, northwest of Pescadero Point, which was clipped by state waters.

Approach to define the Southern California Bight

The Council’s final preferred alternative for the Southern California Bight EFHCA covers much of the federal waters in the area, with the exception of a few areas of federal waters that were intentionally left open to bottom trawling. Both the shoreward boundary and the boundaries around islands match the state water boundary, which poses challenges for writing a simple and enforceable definition for the Southern California Bight EFHCA in the regulations.

NMFS’s preferred approach focused primarily on defining the external boundary of the Southern California Bight EFHCA, using the definition of the EEZ. The Council’s final preferred alternative for the Southern California Bight EFHCA is partially bounded by California state waters on its shoreward side. It is bounded in federal waters on the west/southwest/seaward side by regulations defining the 700-fm line (boundary line that froze the footprint of the trawl fishery in Amendment 19) and the EEZ. Therefore, only the shoreward boundary needs to be newly defined in regulation.

Approximately 72 miles of the shoreward boundary of the Southern California Bight match state waters (not including the boundaries around islands). To define these portions of the boundary with latitude and longitude coordinates would require codifying over 30,000 latitude and longitude coordinate pairs. To avoid adding this large volume of coordinates to the regulations, NMFS prefers using an approach similar to the one described earlier in this report. The shoreward boundary would be defined by latitude and longitude coordinate pairs for the portions of the shoreward boundary that do not match state waters, with segments connected by the seaward boundary of California to form a continuous shoreward boundary. The regulatory definition would then describe that the EFHCA is all waters in the EEZ seaward of those lines and shoreward of the 700-fm line (See Figure 4). With this approach to the regulatory definition, state waters around islands are not included because they are not part of the EEZ.

For purposes of the analysis in the PDEIS, existing EFHCAs (Figure 5a) were not included in the analysis of the Southern California Bight polygon (Figure 5b) so that only the “new closure” square miles and other metrics could be calculated. Rather than attempt to define those cut-outs in the definition of the Southern California Bight, the Southern California Bight will overlap those existing closures. For example, Cherry Bank (one of the EFHCAs from Amendment 19 and depicted as a cut-out in the Southern California Bight analysis) will continue to be described as a separate EFHCA but will also be covered by the Southern California Bight EFHCA. The resulting new closures are the same as described in the PDEIS that supported Council recommendations, but our approach greatly simplifies how we describe the Southern California Bight EFHCA in regulations.

Figure 1

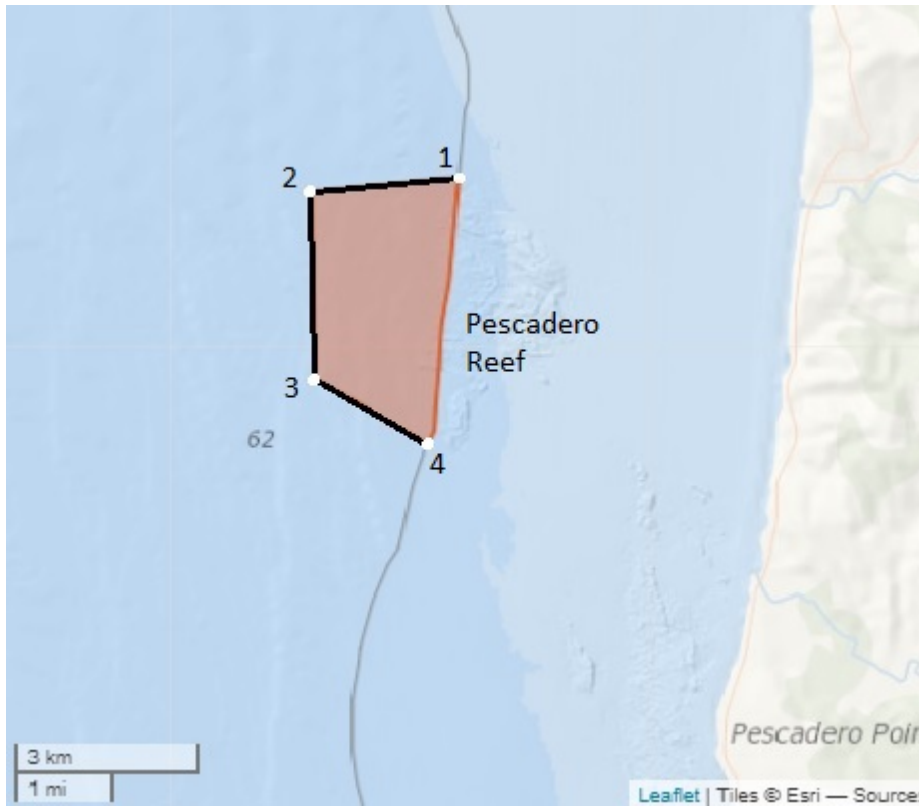


Figure 1. Example of a simple polygon, Pescadero Reef, where the EFHCA will be defined as the EEZ shoreward of the black boundary line, with the black boundary line defined by latitude and longitude coordinates in regulation. The approach depicted here would be similar for: Rouge River Reef, Point Reyes Reef, Pescadero Reef (pictured above), and West of Piedras Blancas SMCA.

Example draft regulatory text for simple polygons:

§660.79 EFH Conservation Areas off the Coast of California.

Pescadero Reef is defined as the areas within the West Coast EEZ shoreward (east) of a boundary line defined by connecting the following coordinates in the order stated:

- (1) 37° 17.18' N. lat., 122° 28.34' W. long.;*
- (2) 37° 17.76' N. lat., 122° 29.59' W. long.;*
- (3) 37° 19.38' N. lat., 122° 29.63' W. long.;*
- (4) 37° 19.50' N. lat., 122° 28.00' W. long.;*

Figure 2

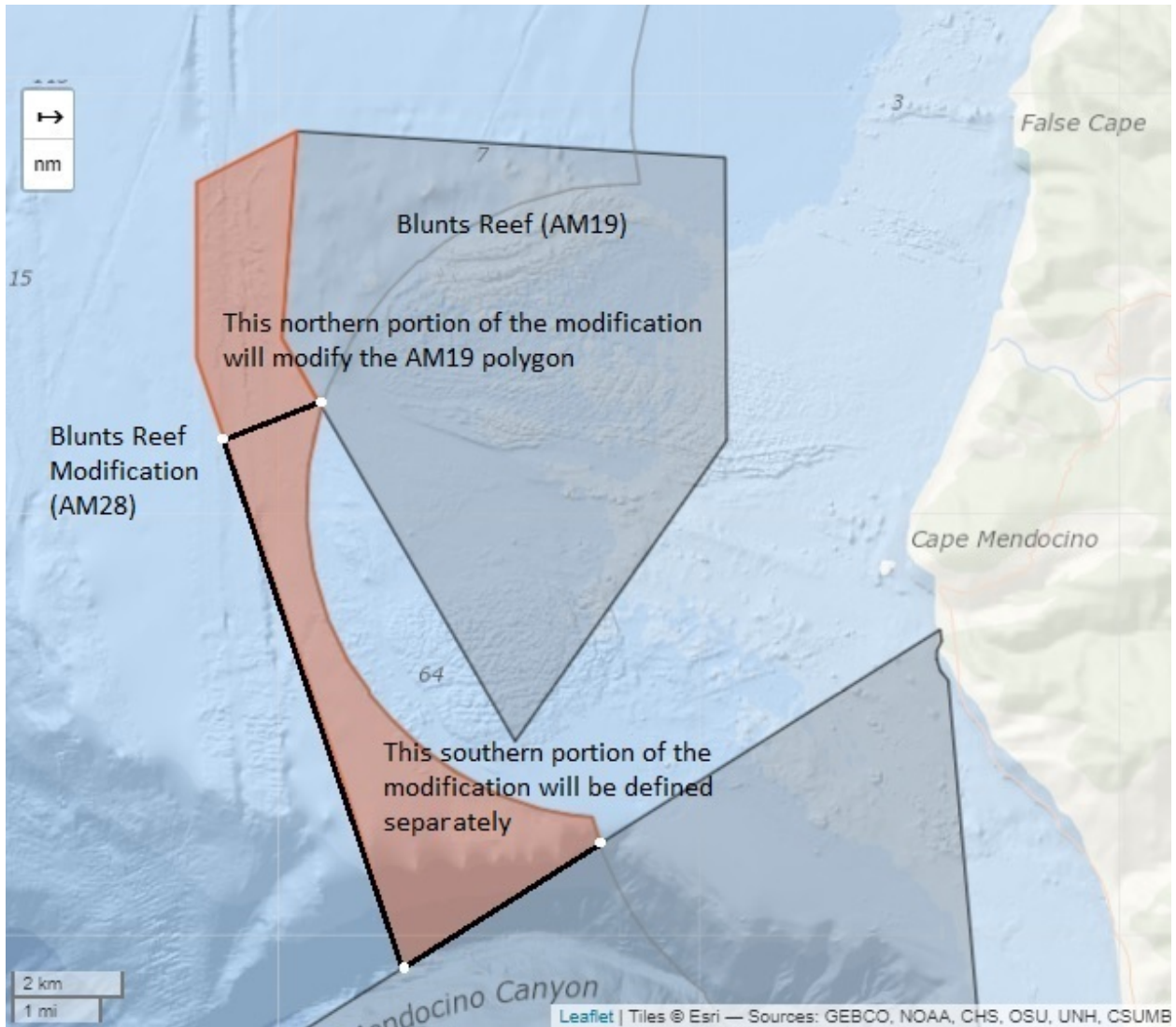


Figure 2. Concept drawing of Blunts Reef and Blunts Reef Modification. Latitude and longitude coordinates and resulting lines are approximate and for informational purposes only. This is an example of dividing the definition for a single, complex EFHCA polygon into two separate polygons to simplify the regulatory definition. NMFS intends to use the same approach for the West of Carmel Canyon reopener.

Example draft regulatory text for Blunts Reef and Blunts Reef modification:

§660.79 EFH Conservation Areas off the Coast of California.

Blunts Reef. The boundary of the Blunts Reef EFH Conservation Area is defined by straight lines connecting all of the following points in the order stated: [placeholder for the revised lat/long coordinates that incorporate the northern portion of the modification]

Blunts Reef Modification. The boundary of the Blunts Reef Modification EFHCA has a northern boundary that is coterminous with Blunts Reef and is defined as the areas within the West Coast

EEZ shoreward (east) of a boundary line defined by connecting the following coordinates in the order stated: [placeholder for the four revised lat/long coordinates that define the seaward boundary of the southern portion of the modification]

Figure 3

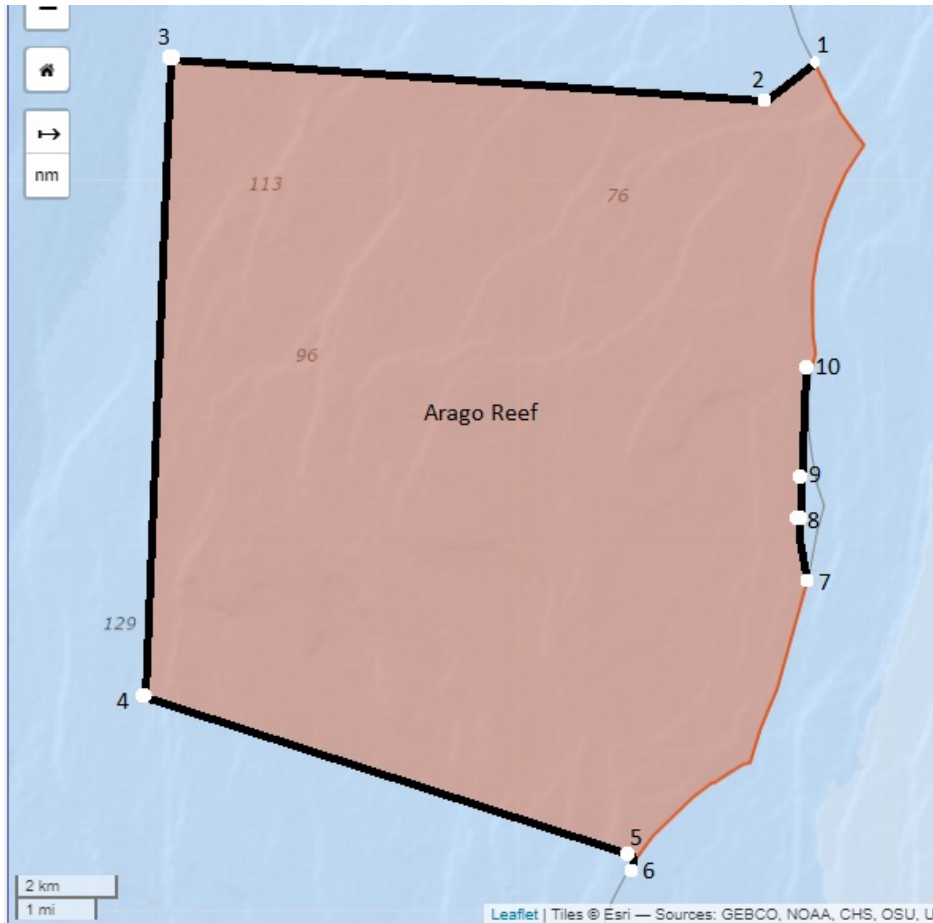


Figure 3. Concept drawing of Arago Reef EFHCA. Latitude and longitude coordinates and resulting lines are approximate and for informational purposes only. A small section of federal water (east of points 7-10 in the above figure) is not part of the EFHCA. This was due to shape of the original proposed polygon and the resulting polygon after clipping at state waters.

Example draft regulatory text for Arago Reef:

§660.78 EFH Conservation Areas off the Coast of Oregon.

Arago Reef EFHCA is defined as the areas within the West Coast EEZ shoreward (east) of a boundary line defined by connecting coordinates (1) through (6) in the order stated and seaward (west) of a boundary line defined by connecting the coordinates (7) through (10) in the order stated: [placeholder for all coordinates]

Figure 4

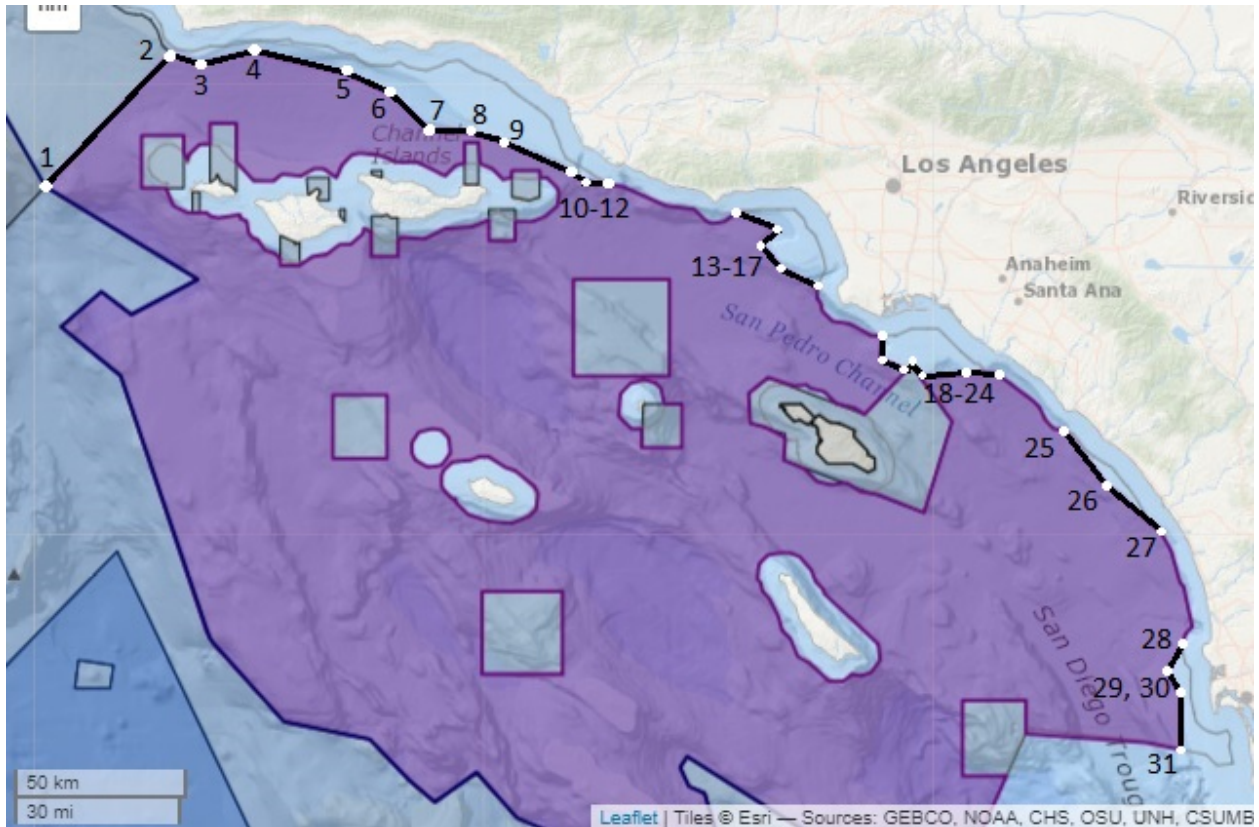


Figure 4. Concept drawing of the shoreward boundary of the Southern California Bight EFHCA. Latitude and longitude coordinates and resulting lines are approximate and for informational purposes only. (Note: image does not depict Potato Bank relocation recommended under Amendment 28; no other changes to these EFHCAs were recommended in Amendment 28)

Figures 5a and 5b

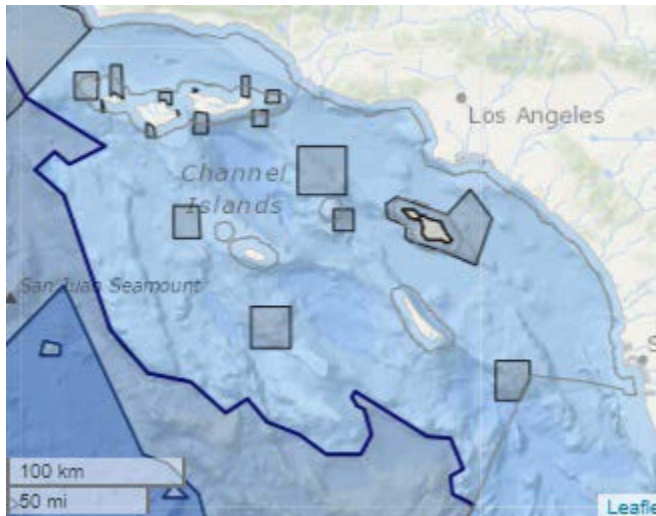


Figure 5a. The area south of Point Conception has over a dozen EFHCAs that were established in Amendment 19 (Note: image does not depict Potato Bank relocation recommended under Amendment 28; no other changes to these EFHCAs were recommended in Amendment 28). Light grey lines around islands and along the shore depict the BOEM state water boundaries.

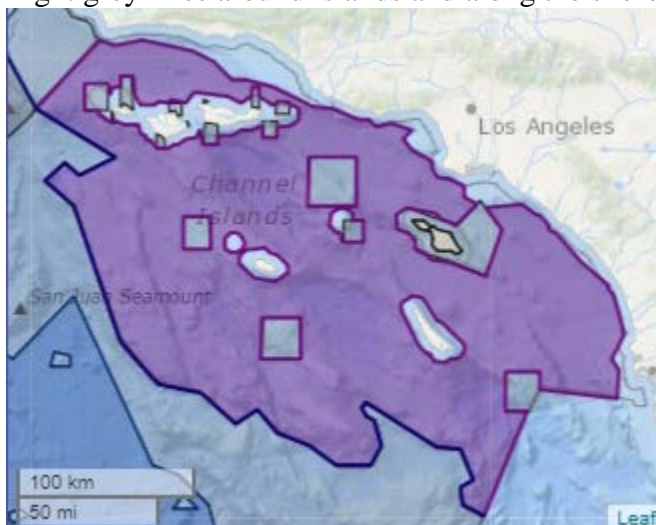


Figure 5b. The new Southern California Bight EFHCA encompasses most of the rest of federal waters in this area. The seaward (southwest) side matches the 700-fm line and matches the EEZ on the south side. Note that state waters around islands would not be included in the EFHCA, per the definition of EEZ.

Example draft regulatory text for Southern California Bight:

§660.79 EFH Conservation Areas off the Coast of California.

Southern California Bight. This area includes all waters within the West Coast EEZ shoreward (northeast) of the boundary line approximating the 700-fm (1280-m) depth contour, defined at 660.76(a)(1) and seaward (southwest) of a line defined by straight lines connecting points (1) through (12), (13) through (17), (18) through (24), (25) through (27), and (28) through (31) in the order stated: [placeholder for all coordinates]