

PACIFIC COAST GROUND FISH FISHERY MANAGEMENT PLAN AMENDMENT 28:  
SUPPORTING MATERIALS FOR COUNCIL DECISION MAKING

This supplemental Project Team Report includes documents intended to assist Council decision making relative to final preferred alternatives (FPA) for groundfish fishery management plan (FMP) 28: essential fish habitat (EFH) and Rockfish Conservation Area modifications; and deep water bottom contact gear closures. In addition, the Council should recommend FPAs for a suite of “administrative alternatives” that do not require National Environmental Protection Act (NEPA) analysis, but may require FMP text changes.

This Project Team Report includes the following sections:

1. Action Item Checklist
2. List of administrative alternatives
3. List of overlapping polygons
4. Fishery management plan text changes
5. Task list and next steps

## 1. Action Item Checklist – Amendment 28 Final Action

Table 1 is intended to assist the Council in crafting an FPA and to provide necessary guidance to the Project Team.

**Table 1. Action Item Checklist**

	<b>Subject</b>	<b>Action</b>	<b>Considerations and Guidance</b>
<b>NEPA Alternatives</b> (See Preliminary Draft EIS: F.3.a, Project Team Report 1)			
1	Subject Area 1 (EFHCAs)	Select FPA from No Action and Alternatives 1.a, 1.b, 1.c, 1.d, 1.e, 1.f, and 1.g, or a combination	If Alt 1.g is selected, provide guidance on boundaries
2	Subject Area 2 (trawl RCA)	Select FPA from No Action and Alternatives 2.a, 2.b, and 2.c	<ul style="list-style-type: none"> <li>• Guidance on determining when (and what mechanism) to turn on/off DACs and BACs.</li> <li>• Guidance on spatial scale for BACs, e.g. more latitudes available for BAC definition than just those called out specifically in the analysis.</li> </ul>
3	Subject Area 3 (Deep water bottom contact gear closure)	Select FPA from No Action and Alternative 3.a	
<b>Non-NEPA Alternatives (“Administrative”)</b> (See Table 2, F.3.a: Supplemental Project Team Report 2)			
4	FMP Appendix B	Select FPA for revising appendix B	Provide guidance as necessary
5	FMP Appendix C	Select FPA for revising appendix C	Provide guidance as necessary
6	FMP Appendix D	Select FPA for revising appendix D	Provide guidance as necessary
7	EFH information and research needs	Select FPA for revising information and research needs, and move to an FMP appendix	Provide guidance as necessary
8	EFH review & revision process	Select FPA for revising EFH review/revision process, and describe elsewhere (e.g., COP or SAFE)	Provide guidance as necessary
9	Clarifications and corrections	Select FPA for clarifications and corrections	Provide guidance as necessary

	<b>Subject</b>	<b>Action</b>	<b>Considerations and Guidance</b>
<b>Additional Guidance</b>			
10	FMP amendment language		Provide guidance on when to review and adopt FMP language changes, e.g., September 2018 Council meeting
11	FMP appendices		Provide guidance on when to review and adopt FMP amendment changes
12	Regulatory deeming		Provide guidance on whether Executive Director or Council will deem the regulations.

## 2. List of administrative alternatives

At its April 2016 meeting, the Council considered a suite of “administrative alternatives” that do not require NEPA analysis. In some cases (i.e., the FMP appendices), an FMP amendment is not required to update them. Two alternatives (8.b and 9.b) would require FMP text changes and therefore are subject to Secretarial approval.

**Table 2. Administrative Alternatives. Alternative numbers are from April 2016**

<b>ADMINISTRATIVE ALTERNATIVES – AMENDMENT 28</b>		
5. Groundfish FMP Appendix B	5.a No Action	5.b Update/revise information in Groundfish FMP Appendix B of the FMP to reflect new information on Pacific Coast Groundfish life history descriptions, text descriptions of groundfish EFH, and major prey items (PPA)
6. Groundfish FMP Appendix C Part 2	6.a No Action	6.b Revise fishing gear effects described in Groundfish FMP Appendix C Part 2 (PPA)
7. Groundfish FMP Appendix D	7.a No Action	7.b Update Groundfish FMP Appendix D with new information and add descriptions and conservation measures for new non-fishing activities that may adversely affect EFH (PPA)

8. Groundfish FMP EFH Information and Research Needs	8.a No Action	8.b Revise groundfish EFH Information and Research Needs section of the FMP and move to an appendix (PPA)
9. Groundfish FMP EFH Review and Revision Process	9.a No Action	9.b Update groundfish EFH review and revision process and describe elsewhere (e.g., COP). Include criteria prior to each review (PPA)
10. Clarifications and Corrections	10.a No Action	10.b Provide clarifications and correct minor errors from Amendment 19 (PPA)

### 3. Overlapping polygons – Amendment 28 Alternatives

The table below provides summary information for individual areas proposed for closure or reopening, in cases where there is overlap or they are in close proximity. The purpose is to assist the Council in making choices between individual polygons.

- Note: This list does NOT include all polygons in all proposals. These metrics do NOT account for overlap of polygons or other trawl closures.
- All polygons are proposed closures unless otherwise noted.
- How to use this table: Use the Amendment 28 web tool (or NWFSC FRAM Data Warehouse viewer) to see how these polygons relate to each other.
  - Amendment 28 web tool: <http://www.soundgis.com/efh/efh2018-metrics/>.
  - NWFSC FRAM viewer: <https://www.nwfsc.noaa.gov/data/map>

**Table 3. Overlapping or adjacent polygons.**

	Polygon (Alternative)	Notes (all are closures unless otherwise indicated)	Notes
1	Nitinat canyon (1a) Olympic footprint (1b)	1a = 82 mi <sup>2</sup> 1b = 97 mi <sup>2</sup>	Substantial overlap; not identical Both are outside UA and inside 700fm line
2	Biogenic 2 northern modification (1a) Quinault canyon (1b)	1a = 44 mi <sup>2</sup> 1b = 45 mi <sup>2</sup>	Substantial overlap; nearly identical

	<b>Polygon (Alternative)</b>	<b>Notes (all are closures unless otherwise indicated)</b>	<b>Notes</b>
3	Gray's canyon – 2 modifications (1a) Gray's canyon (1b)	1a = closes 13 mi <sup>2</sup> ; reopens 9 mi <sup>2</sup> 1b = 20 mi <sup>2</sup>	
4	Willapa deep (1a) and Astoria deep (1a) Astoria footprint (1b)	1a = 102 mi <sup>2</sup> 1b = 379 mi <sup>2</sup>	Both 1a polygons are within the 1b polygon.
5	South Nehalem reef (1b) Garibaldi reef north (1c)	1b = 104 mi <sup>2</sup> 1c = 15 mi <sup>2</sup>	
6	Garibaldi reef south (1c) Garibaldi reef south (1d)	1c = 4 mi <sup>2</sup> 1d = 8 mi <sup>2</sup>	
7	N. Daisy bank (1b) Daisy bank – 4 modifications (1c)	1b = 19 mi <sup>2</sup> 1c = 5 mi <sup>2</sup> closure; 8 mi <sup>2</sup> reopening	
8	N. Stonewall Bank (1b) Stonewall bank – 2 modifications (1c)	1b = 58 mi <sup>2</sup> 1c = 21 mi <sup>2</sup> closure; 8 mi <sup>2</sup> reopening	
9	Heceta bank – 2 modifications (1b) Heceta bank – 3 modifications (1c)	1b = 397 mi <sup>2</sup> 1c = 76 mi <sup>2</sup>	1c closures are almost entirely within 1b closures
10	Arago reef (1a) Cape Arago reef (1b)	1a = 67 mi <sup>2</sup> 1b = 127 mi <sup>2</sup>	1a is entirely within 1b
11	Rogue river reef (1a) Rogue canyonhead (1b)	1a = 63 mi <sup>2</sup> 1b = 26 mi <sup>2</sup>	
12	Brush patch (1a) Crescent City deepwater hotspot (1b)	1a = 46 mi <sup>2</sup> 1b = 52 mi <sup>2</sup>	
13	Trinidad canyon (1a) Eureka footprint modification (1b)	1a = 88 mi <sup>2</sup> 1b = 157 mi <sup>2</sup>	1a is entirely within 1b
14	Mad river rough patch (1a) Somoa reef (1b)	1a = 5 mi <sup>2</sup> 1b = 16 mi <sup>2</sup>	1a is entirely within 1b
15	Eel river canyon modifications (1a) – mix of open and close Eel river canyon closures – north and south (1b)	1a = 13 mi <sup>2</sup> closures; 6 mi <sup>2</sup> reopening  1b = 41 mi <sup>2</sup> closures	1a and 1b have very different footprints for this area
16	Blunts reef modification (1a) Blunt reef expansion (1b)	1a = 9 mi <sup>2</sup> 1b = 9 mi <sup>2</sup>	1a and 1b are nearly identical in shape

	<b>Polygon (Alternative)</b>	<b>Notes (all are closures unless otherwise indicated)</b>	<b>Notes</b>
17	Mendocino ridge – 3 modifications (1a) Mendocino ridge expansion (1b) Spanish canyon (1b)	1a = 22 mi <sup>2</sup> closures, 3 mi <sup>2</sup> reopenings 1b (Mendocino ridge) = 78 mi <sup>2</sup> closure 1b (Spanish canyon) = 28 mi <sup>2</sup> closure	
18	Delgada canyon (1a) Delgada canyon (1b)	1a = 8 mi <sup>2</sup> reopening 1b = 1 mi <sup>2</sup>	1b is entirely within 1a
19	Spanish canyon line #1 (1a) Spanish canyon line #2 (1a) Delgada canyon deep (1b)	1a = 5 mi <sup>2</sup> closure; 5 mi <sup>2</sup> reopening 1b = 69 mi <sup>2</sup> closure	
20	Navarro canyon (1a) Navarro canyon (1b)	1a = 18 mi <sup>2</sup> 1b = 25 mi <sup>2</sup>	
21	Point Arena south modifications (1a) Saunders reef (1b) Pt Arena biogenic modifications (1b)	1a = 12 mi <sup>2</sup> closure; 75 mi <sup>2</sup> reopenings 1b (Saunders r.) = 33 mi <sup>2</sup> closure 1b (Pt Arena biogenic) = 7 mi <sup>2</sup> closure; 42 mi <sup>2</sup> reopening	
22	The football (1a) Russian River (1b)	1a = 2 mi <sup>2</sup> 1b = 20 mi <sup>2</sup>	1a is entirely within 1b
23	Gobblers knob (1a) Gobblers knob (1b)	1a = 2 mi <sup>2</sup> 1b = 18 mi <sup>2</sup>	1a is almost entirely within 1b
24	Cordell bank – 4 modifications (1a) Cordell bank mods (1b)	1a = 16 mi <sup>2</sup> closure; 20 mi <sup>2</sup> reopening 1b = 71 mi <sup>2</sup> closure	1a closures are entirely within 1b closures
25	Rittenburg bank (1a) Rittenburg bank (1b) Fanny Shoals shelf extension (1b) Rittenburg bank (1e)	1a = 10 mi <sup>2</sup> 1b (Rittenburg bank) = 17 mi <sup>2</sup> 1b (Fanny shoals) = 27 mi <sup>2</sup> 1e = 13 mi <sup>2</sup>	
26	Farallon Islands mod (1a) Cochrane bank (1b)	1a = 6 mi <sup>2</sup> 1b = 9 mi <sup>2</sup>	1a is almost entirely within 1b

	<b>Polygon (Alternative)</b>	<b>Notes (all are closures unless otherwise indicated)</b>	<b>Notes</b>
27	Farallon escarpment (1a) Farallon escarpment to pioneer canyon deep (1b)	1a = 126 mi <sup>2</sup> 1b = 173 mi <sup>2</sup>	1a is almost entirely within 1b
28	Pigeon point (1a) Pescadero reef (1b)	1a = 10 mi <sup>2</sup> 1b = 7 mi <sup>2</sup>	1b is almost entirely within 1a
29	Ascension canyonhead (1a) Ascension canyonhead (1b)	1a = 6 mi <sup>2</sup> 1b = 4 mi <sup>2</sup>	
30	MONTEREY BAY AREA Identical 1a and 1b polygons: <ul style="list-style-type: none"> <li>● MBNMS Ascension and Ano Nuevo canyon complex (20 mi<sup>2</sup> closure)</li> <li>● MBNMS lower portion of Cabrillo canyon (17 mi<sup>2</sup> reopening)</li> <li>● MBNMS SW of smooth ridge (6 mi<sup>2</sup> closure)</li> <li>● MBNMS outer Soquel canyon (6 mi<sup>2</sup> closure)</li> <li>● MBNMS south of mars cable (1 mi<sup>2</sup> reopening)</li> <li>● MBNMS west of Carmel canyon (9 mi<sup>2</sup> reopening)</li> <li>● MBNMS west of Sobranes pt (24 mi<sup>2</sup> closure)</li> <li>● MBNMS east of Sur ridge (27 mi<sup>2</sup> reopening)</li> <li>● MBNMS triangle south of surveyors knoll (9 mi<sup>2</sup> closure)</li> <li>● MBNMS Sur canyon slot canyons (45 mi<sup>2</sup> reopening)</li> <li>● MBNMS Point Sur platform (11 mi<sup>2</sup> closure)</li> <li>● MBNMS between Partington pt and Lopez pt (74 mi<sup>2</sup> closure)</li> </ul>		All identical footprints
31	MBNMS La Cruz canyon (1a) West of Piedras Blancas SMCA (1a) La Cruz canyon to Piedras Blancas (1b)	1a (La Cruz) = 9 mi <sup>2</sup> 1a (Piedras Blancas) = 3 mi <sup>2</sup> 1b = 37 mi <sup>2</sup>	The two 1a polygons are entirely within the 1b polygon
32	Southern California bight (1b) Potato bank (1f)	1b = 16,184 mi <sup>2</sup> closure 1f = 111 mi <sup>2</sup> closure; 111 mi <sup>2</sup> reopening	

#### 4. Amendment 28 FMP Text Changes

Based on final Council action on Amendment 28, the Groundfish FMP would need to be updated to reflect the final Preferred Alternatives. Because the Council has not yet taken final action, the specific changes to the text are not available. The Project Team will describe the specific changes at a future meeting. However, FMP sections likely needing changes include the following:

**Table 4. FMP text changes**

<b>Chapter/section</b>	<b>Title</b>	<b>Description</b>
Front matter	Table of Contents, Acronyms, etc.	Routine updates, including adding Amendment 28 to the table “Changes to the FMP since Amendment 4”
1.1	History of FMP	Add a paragraph describing changes from Amendment 28
6.6.1.2	Commercial Fisheries – General Prohibitions regarding trawl gear, including footrope restrictions shoreward of a line approximating the 100fm depth contour	If the Council adopts changes to the trawl RCA (Alternatives 2.a, 2.b, 2.c) this section will be revised to add narrative about Amendment 28.
6.8	Time/area closures	If the Council adopts changes to the EFHCAs (Alternatives 1.a through 1.g), to the trawl RCA (Alternatives 2.a through 2.c), or if the Council adopts deep-sea bottom contact gear restrictions, various sub-sections of 6.8 will need revision.
6.8.2	Description of Rockfish Conservation Areas	<ol style="list-style-type: none"> <li>1. If the Council adopts changes to the trawl RCA, separate discussion about the trawl RCA will be added to describe the actions taken under Amendment 28</li> <li>2. Correct outdated cross references to Federal regulations</li> </ol>
6.8.5	Description of Ecologically Important Habitat Closed Areas	<ol style="list-style-type: none"> <li>1. If the Council adopts EFHCA changes, the June 30, 2006, list of bottom trawl closed areas must be revised, consistent with the Council’s FPA.</li> <li>2. Correct outdated cross references to Federal regulations</li> </ol>
6.8.6	Bottom Trawl Footprint Closure	No substantive change; add cross reference to Federal regulations that define this EFHCA.
6.8.8	New Section titled “Deep Water Bottom Contact Gear Closure”	If the Council adopts Alternative 3.a, a new section will be added describing the prohibition of bottom contact gear in waters deeper than 3500 meters, to protect deep-sea benthic habitats using MSA discretionary authorities. This text



Chapter/section	Title	Description
		would also note that the closure would not be lifted without EFP data to inform the potential impacts to habitat. This text would cross-reference to the EFP considerations and process described in Chapter 8.
7.3.2	Process for Modifying Existing or Designating New HAPCs	The Council selected a PPA in April 2016 to update groundfish EFH review and revision process and describe elsewhere (e.g., COP), and to include criteria prior to each review. If the Council provides guidance, Section 7.3.2 would be eliminated, and a separate review/revision process would be described elsewhere.
7.7	Habitat-Related Research and Monitoring	<ul style="list-style-type: none"> <li>• The Council selected a PPA in April 2016 to revise groundfish EFH Information and Research Needs section of the FMP and move to an appendix.</li> <li>• This could alternatively be included in the Council’s Research and Data Needs document.</li> </ul>
8.0	Experimental Fisheries	If the Council chooses to use EFPs to protect habitat (e.g. as under Alternative 3), edits or additions may be needed in this section.
Appendices	Appendices	Some appendices will be updated with new information, after Council final action. FMP Appendices do not require Secretarial approval: <ul style="list-style-type: none"> <li>• Appendix B.2 – Groundfish life history descriptions</li> <li>• Appendix B.3 – EFH descriptions – updated with new species in FMP, updated information on prey species, etc.</li> <li>• Appendix C.2 – Fishing gear effects</li> <li>• Appendix C.3 – Coordinates for EFHCAs</li> <li>• Appendix C.4 – Map of EFHCAs</li> <li>• Appendix D – Non-fishing effects</li> </ul>

## 5. Tasks and Next Steps

### **Deliverables Required for Completion of the Draft EIS**

Under Agenda Item F.3, the Council is scheduled to choose a final preferred alternative (FPA) for Amendment 28 to the Pacific Coast Groundfish Fishery Management Plan. This action would implement changes to Essential Fish Habitat Conservation Areas (EFHCAs) and the trawl Rockfish Conservation Area (RCA), and close waters deeper than 3,500 meters to bottom contact gear using discretionary authorities under the Magnuson-Stevens Conservation and Management Act (MSA).

Several sections of the preliminary draft Environmental Impact Statement (PDEIS) ([Agenda Item F.3.a, Project Team Report 1](#)) are incomplete. The Project Team's highest priority was to complete the sections of the document that facilitate informed Council decision-making at this meeting. The current version of the document and supplemental materials are sufficient to support Council decision making. However, completion of an EIS to support NMFS rulemaking will require continued engagement and effort from members of the Project Team (Table 1), NMFS, and the Council. Upon completion of the full DEIS, NMFS will file the draft EIS with the Environmental Protection Agency and it will be available for public review. The list below outlines the work necessary to complete a full DEIS that can be published for public comment.

1. Chapter 2 – Alternatives
  - a Add description of the FPA; writing, polishing and review needed from most of Project Team
2. Chapter 3 – Affected Environment
  - a Writing, polishing, and review needed from subgroup of the Project Team
3. Chapters 4 & 5 – Impacts of Alternatives and Impacts of Synthesis Alternatives
  - a Analysis, write up, review of impacts of the FPA; requires engagement from most of Project Team
  - b Writing, polishing, and review of social impacts; requires engagement from a sub-group of the Project Team
  - c Evaluate available new fishery information, update select impact analyses if needed<sup>1</sup>; may require engagement from subgroup of the Project Team
4. Chapter 6 – Cumulative Effects
  - a Analysis, write up, review of impacts of the alternatives; requires engagement from most of the Project Team
5. Chapter 7 – Consistency with other applicable laws, including the Endangered Species Act; requires review by a sub-group of the Project Team

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<sup>1</sup> Updates would likely only be necessitated if there is fishery information since 2014 indicating that the impacts are different than already characterized in the analysis.

6. Chapters 8 & 9 – List of Preparers and References Cited; requires review by a sub-group of the Project Team

Table 1. The Project Team members and other contributors.

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