

2.7 MARINE PLANNING

2.7.1 Introduction

Marine planning is a science-based management tool being utilized regionally, nationally, and globally to identify and address issues of multiple human uses, ecosystem health, and cumulative impacts in the coastal and ocean environment. Efforts by the Western Pacific Regional Fishery Management Council (the Council) to formalize incorporation of marine planning in its actions began in response to Executive Order (EO) 13547, *Stewardship of the Ocean, Our Coasts, and the Great Lakes*. EO 13158, *Marine Protected Areas*, proposes that agencies strengthen the management, protection, and conservation of existing marine protected areas (MPAs), develop a national system of MPAs representing diverse ecosystems, and avoid causing harm to MPAs through federal activities. MPAs, or marine managed areas (MMAs), are one tool used in fisheries management and marine planning.

At its 165th meeting in March 2016, in Honolulu, Hawaii, the Council approved the following objective for the FEPs: To consider the implications of spatial management arrangements in Council decision-making. The following sub-objectives apply:

- Identify and prioritize research that examines the positive and negative consequences of areas that restrict or prohibit fishing to fisheries, fishery ecosystems, and fishermen, such as the Bottomfish Fishing Restricted Areas (BRFAs), military installations, NWHI restrictions, and Marine Life Conservation Districts (MLCDs).
- Establish effective spatially based fishing zones.
- Consider modifying or removing spatial-based fishing restrictions that are no longer necessary or effective in meeting their management objectives.
- As needed, periodically evaluate the management effectiveness of existing spatial-based fishing zones in Federal waters.

To monitor implementation of this objective, this annual report includes the Council's spatially based fishing restrictions and MMAs, the goals associated with those, and the most recent evaluation. Council research needs are not tracked in this report.

To meet the EFH and National Environmental Policy Act (NEPA) mandates, this annual report tracks activities that occur in the ocean that are of interest to the Council and incidents and facilities that may contribute to cumulative impact. The National Marine Fisheries Service (NMFS) is responsible for NEPA compliance, and the Council must assess the environmental effects of ocean activities for the EFH cumulative impacts section of the FEP.

2.7.2 Response to Previous Council Recommendations

There are no standing Council recommendations indicating review deadlines for Hawaii MMAs.

2.7.3 Marine Managed Areas Established Under FEPs

Council-established MMAs were compiled in Table 63 from 50 CFR § 665, Western Pacific Fisheries, the Federal Register, and Council amendment documents. Regulated fishing areas of Hawaii, including the Papahānaumokuākea Marine National Monument, are shown in Figure 43.

Table 1. MMAs established under FEP from 50 CFR § 665

Name	FEP	Island	50 CFR /FR /Amendment Reference	Marine Area (km ²)	Fishing Restriction	Goals	Most Recent Evaluation	Review Deadline
Pelagic Restrictions								
NWHI Longline Protected Species Zone	Pelagic (Hawaii)	NWHI	665.806(a)(1) 56 FR 52214 76 FR 37288 Pelagic FMP Am. 3	351,514.00	Longline fishing prohibited	Prevent longline interaction with monk seals	1991	-
MHI Longline Prohibited Area	Pelagic (Hawaii)	MHI	665.806(a)(2) 57 FR 7661 77 FR 71286 Pelagic FMP Am. 5	248,682.38	Longline fishing prohibited	Prevent gear conflicts between longline vessels and troll/handline vessels	1992	-
Bottomfish Restrictions								
Hancock Seamounts Ecosystem Management Area (HSEMA)	Hawaii Archipelago	NW of Midway Island	HSEMA: 665.209 75 FR 52921 84 FR 2772 Moratorium: 51 FR 27413 Bottomfish FMP	60,826.75	Moratorium	The intent of the continued moratorium is to facilitate rebuilding of the armorhead stock, and the intent of the ecosystem management area is to facilitate research on armorhead and other seamount groundfish	2010	-
Precious Coral Permit Areas								
Keahole Point	Hawaii Archipelago	Hawaii Island	665.261(2)(i) 73 FR 47098 84 FR 2773 Precious Corals FMP Am. 7	2.7	Fishing by permit only	Manage harvest	2008	-
Kaena Point	Hawaii Archipelago	Oahu	665.261(2)(ii) 73 FR 47098 84 FR 2773 Precious Corals FMP Am. 7	2.7	Fishing by permit only	Manage harvest	2008	-
Makapuu	Hawaii Archipelago	Oahu	665.261(1)(i) 73 FR 47098 84 FR 2773 Precious Corals FMP Am. 7	43.15	Fishing by permit only	Manage harvest	2008	-
Brooks Bank	Hawaii Archipelago	NWHI	665.261(2)(iii) 73 FR 47098 84 FR 2773 Precious Corals FMP Am. 7	43.15	Fishing by permit only	Manage harvest	2008	-
180 Fathom Bank	Hawaii Archipelago	NWHI	665.261(2)(iv) 73 FR 47098 84 FR 2773 Precious Corals FMP Am. 7	43.15	Fishing by permit only	Manage harvest	2008	-

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Name	FEP	Island	50 CFR /FR /Amendment Reference	Marine Area (km ²)	Fishing Restriction	Goals	Most Recent Evaluation	Review Deadline
Westpac Bed	Hawaii Archipelago	NWHI	665.261(3) 73 FR 47098 84 FR 2773 Precious Corals FMP Am. 7	43.15	Fishing prohibited	Manage harvest	2008	-
Auau Channel	Hawaii Archipelago	Maui Nui	665.261(1)(ii) 73 FR 47098 84 FR 2773 Precious Corals FMP Am. 7	728.42	Fishing by permit only	Harvest quota for black coral of 5,000 kg every two years for federal and state waters	2008	-

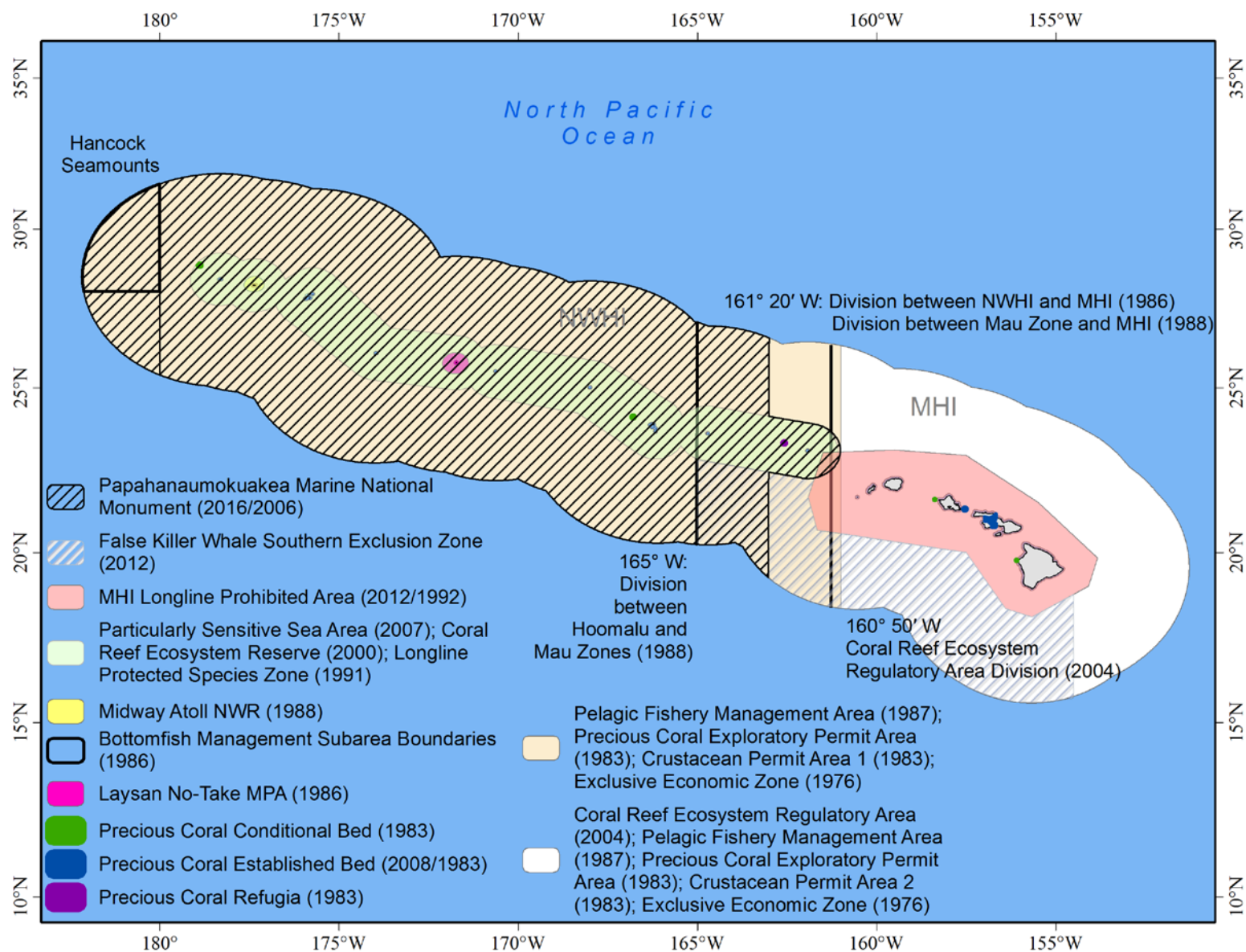


Figure 1. Regulated fishing areas of the Hawaii Archipelago

2.7.4 Fishing Activities and Facilities

2.7.4.1 Aquaculture Facilities

Hawaii has one offshore aquaculture facility operating in Federal waters that was owned by Ocean Era (formerly Kampachi Farms), but the associated Special Coral Reef Ecosystem Fishing Permit (SCREFP) been transferred to Forever Oceans (see Table 64).

There is one permitted offshore aquaculture facility currently operational in Hawaii State waters located off Unualoha Point, North Kona and owned by Blue Ocean Mariculture, which is cultivating *Seriola rivoliana*. Ocean Era is also researching the feasibility of a macro algae array off the Kona coast to produce four native Hawaiian limu species that would be located one mile south of Keahuolo Point in approximately 400 feet of water. Ocean Era received funding for this research through the Department of Energy's Advanced Research Projects Agency - Energy grant program and could begin operation in 2020. Another permit for a separate nearshore aquaculture facility has been approved for Māmāla Bay Seafood located in the Reef Runway Borrow Pit at Ke'ehi Lagoon, Honolulu to cultivate moi (*Polydactylus sexifilis*), but the permit holder is currently in lease negotiations for the site.

Table 2. Offshore aquaculture facilities in Hawaii

Name	Size	Location	Species	Status
Forever Oceans, transferred from Ocean Era (formerly Kampachi Farms)	Shape: Cylindrical Height: 33 ft. Diameter: 39 ft. Volume: 36,600 ft ³	5.5 nautical miles (nm) west of Keauhou Bay and 7 nm south-southwest of Kailua Bay, off the west coast of Hawaii Island 19° 33' N, 156° 04' W. Mooring scope is 10,400-foot radius.	<i>Seriola rivoliana</i>	On July 6, 2016, NMFS authorized SCREFP for culture and harvest of 30,000 kampachi over two years on July 6, 2016. Array broke loose from mooring and net pen sank in 12,000 feet of water on Dec. 12, 2016. The mooring was redeployed under guidance from the U.S. Army Corps of Engineers (USACE) in late 2018 and stocked with a cohort of 10,000 fish in early 2019. On March 30, 2017, NMFS authorized transfer of the two-year SCREFP from Ocean Era to Forever Oceans. Forever Oceans is currently in the process of renewing the SCREFP cooperatively with NMFS in order to harvest of two cohorts of fish, and the final determination on the renewal is expected in early 2020.

2.7.5 Non-Fishing Activities and Facilities

The following section includes activities or facilities associated with known uses and predicted future uses. The Plan Team will update this section as new facilities are proposed and/or built. Due to the sheer volume of ocean activities and the annual frequency of this report, only major activities on multi-year planning cycles are tracked. Activities which are no longer reasonably foreseeable or have been replaced with another planning activity are removed from the report, though may occur in previous reports.

2.7.5.1 Alternative Energy Facilities

Hawaii previously had four proposed wind energy facilities of commercial interest nominated by the Bureau of Ocean Energy Management (BOEM) in its Call Areas northwest and south of Oahu, all of which were in the area identification and environmental assessment stage of the leasing process, but these projects have been disengaged. There are, however, several alternative energy facilities already existing or in development (Table 65).

Table 3. Alternative energy facilities and development offshore of Hawaii

Name	Type	Location	Impact to Fisheries	Stage of Development	Source
Makai Ocean Engineering, Inc., Natural Energy Laboratory of Hawaii Authority (NELHA)	120 kW Ocean Thermal Energy Conversion (OTEC) Test Site/ 1 MW OTEC Test Site	Ke‘ahole, North Kona, West Hawaii	Intake	120 kW OTEC operational; Final EA for 1 MW OTEC Site using existing infrastructure submitted July 2012 and finalizing lease negotiations currently; HEPA Exemption List memo Dec. 27, 2016.	NELHA Energy Projects Final Environmental Assessment, NELHA, July 2012
Honolulu Sea Water Air Conditioning (SWAC)	SWAC	4 miles S of Kaka‘ako, Oahu	Benthic impacts; intake	USACE Record of Decision (ROD) signed in 2015. In October 2018, HSWAC and the State of Hawaii finalized an agreement to provide seawater air conditioning for eight state buildings. Construction to start in late 2019 or early 2020 and planned to take an estimated 18-22 months.	Honolulu SWAC Press Room Final Environmental Assessment, June 2014
Marine Corps Base Hawaii Wave Energy Test Site (WETS)	Shallow- and Deep-Water Wave Energy	1, 2 and 2.5 km N of Mokapu, Oahu	Hazard to navigation	Shallow and Deep-water wave energy units operational in mid-2015. 1.25 MW OE 35 Buoy planned to be connected in early 2020.	Final Environmental Assessment, NAVFAC PAC, January 2014 E&E News Hawaii Natural Energy Institute

2.7.5.2 Military Training and Testing Activities and Impacts

The Department of Defense major planning activities in the region are summarized in Table 66.

Table 4. Military training and testing activities offshore of Hawaii

Action	Description	Phase	Impacts
Rim of the Pacific (RIMPAC) Exercise	Multinational, sea control/power projection fleet exercise that has been performed biennially for	RIMPAC Programmatic EA developed in 2002 and a Supplemental Programmatic EA was finalized in 2006 (71)	Programmatic Environmental Assessment, June 2002

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	currently headquartered in Pearl Harbor, Hawaii. RIMPAC exercise locations are present throughout the State of Hawaii.	FR 31170 . Biennial exercises continue through the present, with the next RIMPAC scheduled for summer 2020.	
Hawaii-Southern California Training and Testing (HSTT)	Increased naval testing and training activities, including the use of active sonar and explosives	Record of Decision (ROD) available in December 2018 to conduct training and testing activities as identified in Alternative 1 of the HSTT Final Environmental Impact Statement (EIS)/Overseas EIS (OEIS) published in October 2018 (83 FR 66255).	The 2018 HSTT EIS/OEIS predicts impacts to access and habitat impact similar to previous analysis in the 2013 HSTT EIS/OEIS .
Long Range Strike Weapon Systems Evaluation Program (WSEP)	Conduct operational evaluations of Long-Range Strike weapons and other munitions as part of Long-Range Strike WSEP operations at the Pacific Missile Range Facility at Kauai, Hawaii.	Comment period closed Feb. 6, 2017, and final rule on Aug. 22, 2017, for NMFS authorization to take marine mammals incidental to conducting munitions testing for their Long-Range Strike Weapons Systems Evaluation Program (LRS WSEP) over the course of five years, from August 21, 2017 through August 22, 2022 (82 FR 1702 ; 82 FR 39684).	Access – closures during training. Final Environmental Assessment, October 2016 NMFS Biological Opinion, August 2017

2.7.6 Pacific Islands Regional Planning Body Report

In June 2018, President Trump signed the EO 13840 *Regarding the Ocean Policy to Advance Economic, Security, and Environmental Interests of the United States*, which revoked EO 13547. The new EO eliminated the mandate for the federal government to participate in ocean planning at a regional level and eliminated the regional planning bodies. As such, the Pacific Islands Regional Planning Body (RPB) no longer exists and ocean planning will now occur at a local level led by Hawaii and the territories.

EO 13840 established a policy focused on public access to marine data and information and requires federal agencies to 1) coordinate activities regarding ocean-related matters and 2) facilitate the coordination and collaboration of ocean-related matters with governments and ocean stakeholders. To that end, the [American Samoa Coastal and Marine Spatial Planning Data Portal](#) was created by [Marine Cadastre](#). The intent is for it to be expanded to include the Marianas, the Pacific Remote Island Areas, and Hawaii and be titled the Pacific Islands Regional Marine Planner.

Hawaii has several initiatives ongoing, including its [30x30 Plan](#) and update of its [Ocean Resource Management Plan](#). Interested parties are encouraged to provide input to and track the progress of the development of these plans