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RE: Territorial Limits of Federal Law in Federal Waters (MASGP 09-008-08)

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Dear Michael,

Below is the summary of research regarding the questions you posed to the National Sea Grant Law Center on how far into the Exclusive Economic Zone (EEZ), the area extended 12 – 200 nautical miles from shore, relevant federal laws apply. The Aquaculture Program specifically sought information on the Rivers and Harbors Act, the Clean Water Act, the Endangered Species Act, the Magnuson-Stevens Act, and the Marine Mammal Protection Act. I’ve also included information on the National Environmental Policy Act. The attached information is intended as advisory research only and does not constitute legal representation of the NOAA Aquaculture Program or its constituents. It represents our interpretations of the relevant laws and regulations.

**Rivers and Harbors Act**
The Rivers and Harbors Act (RHA) provides the U.S. Army Corps of Engineers (Corps) with the authority to issue permits for obstructions “to the navigable capacity of any of the waters of the United States.”¹ Corps’ regulations state that “the navigable waters of the United States over which Corps of Engineers’ regulatory jurisdiction extends include all ocean and coastal waters within a zone three geographic (nautical) miles seaward from the baseline (the Territorial Seas).”²

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¹ 33 U.S.C. § 403.
² 33 C.F.R. § 329.12(a).
In limited circumstances, the Corps’ jurisdiction extends beyond the territorial sea to the seaward limit of the outer continental shelf (200 nm). Section 4(e) of the Outer Continental Shelf Lands Act (OSCLA), states that “the authority of the Secretary of the Army to prevent obstruction to navigation in the navigable waters of the United States is extended to the artificial islands, installations, and other devices referred to in [§1333(a)].” Navigable waters of the U.S. include the EEZ. Section 1333(a) extends federal jurisdiction to:

all artificial islands, and all installations and other devices permanently or temporarily attached to the seabed, which may be erected thereon for the purpose of exploring for, developing, or producing resources therefrom, or any such installation or other device (other than a ship or vessel) for the purpose of transporting such resources.4

Pursuant to this authority, the Corps regulations require permits “for the construction of artificial islands, installations, and other devices on the seabed, to the seaward limit of the outer continental shelf.”5 In 2002, for example, the Corps issued a § 10 RHA permit to Cape Wind Associates to erect a data tower on the OCS to assess the feasibility of constructing a wind farm. The data tower would be anchored on the seabed.

The Alliance to Protect Nantucket Sound challenged the Corps’ authority, arguing that § 4(e) grants the Corps jurisdiction only over structures erected for the purposes of extracting resources.6 The district court concluded that the OSCLA extended the Corps § 10 authority “to all ‘artificial islands, installations, and other devices located on the seabed, to the seaward limit of the [OCS],’ including, but not limited to, those that ‘may be’ used to explore for, develop, or produce resources.”7 The First Circuit affirmed the district court’s decision in 2005.8

Based on the First Circuit’s opinion, aquaculture net pens anchored to the seabed or structures built to support such operations in the EEZ would be an obstruction to navigation and a permit would need to be obtained from the Corps. Other circuit courts, however, could read § 4(e) more narrowly and limit the Corps jurisdiction to structures erected for resource extraction. Corps regulations currently require a permit “for the construction of artificial islands, installations, and other devices on the seabed, to the seaward limit of the outer continental shelf.”9

A jurisdictional issue could arise if the aquaculture operation utilized self-positioning floating cages that are not anchored to the seabed. While the cages would still pose a hazard to navigation, they might not qualify as an “artificial island, installation, or other device permanently or temporarily attached to the seabed.”

Clean Water Act
The Clean Water Act (CWA) aims “to eliminate the discharge of pollutants into the navigable waters, waters of the contiguous zone, and the oceans”10 by prohibiting the discharge of

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3 43 U.S.C. § 1333(e).
4 Id. § 1333(a).
5 33 C.F.R. § 322.3(d).
7 Id. at 75.
8 See Alliance to Protect Nantucket Sound, Inc. v. U.S. Dept. of Army, 398 F.3d 105 (1st Cir. 2005).
9 33 C.F.R. § 322.3(b).
pollutants into these waters without a permit issued by Environmental Protection Agency or authorized state agency.\textsuperscript{11} The act defines "discharge of a pollutant" as the "addition of any pollutant to navigable waters from any point source,"\textsuperscript{12} such as a pipe, ditch, or other "discernible, confined and discrete conveyance"\textsuperscript{13} and the "any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft."\textsuperscript{14}

The CWA defines navigable waters as "the waters of the United States, including the territorial seas."\textsuperscript{15} The territorial seas are defined as "the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending seaward a distance of three miles."\textsuperscript{16}

The contiguous zone (CZ) is defined as the "entire zone established or to be established by the United States under article 24 of the Convention of the Territorial Sea and the Contiguous Zone."\textsuperscript{17} Article 24 of the Convention of the Territorial Sea and the Contiguous Zone allows coastal nations to claim a twelve-mile CZ, as measured from the baseline or shore.\textsuperscript{18} Following the negotiation of the U.N. Convention on the Law of the Sea (UNCLOS), which allows nations to claim a 24-mile CZ, President Clinton extended the U.S. CZ to 24 nm by presidential proclamation.\textsuperscript{19} Although the CWA has not been amended to reflect this extension of jurisdiction, the disparity has no practical implications due to the CWA’s definition of ocean.

The ocean is defined as "any portion[s] of the high seas beyond the contiguous zone."\textsuperscript{20} While that definition could theoretically apply to all the world’s oceans, nations have limited rights under international law to regulate activities on the high seas, defined in Article 86 of UNCLOS as "all parts of the sea that are not included in the exclusive economic zone, in the territorial sea or in the internal waters of a State."\textsuperscript{21} Although the U.S. has not ratified the treaty, the government does recognize the jurisdictional zones laid out in UNCLOS as customary international law.\textsuperscript{22}

"The most logical construction [of the CWA] is that federal jurisdiction over point source discharges currently extends 200 nautical miles out to sea."\textsuperscript{23} That construction is based on President Ronald Reagan’s assertion of U.S. jurisdiction over a 200-mile Exclusive Economic Zone.

\textsuperscript{11} Id. §§ 1311(a), 1342(a).
\textsuperscript{12} Id. § 1362(12)(A).
\textsuperscript{13} Id. § 1362(14).
\textsuperscript{14} Id. § 1362(12)(B).
\textsuperscript{15} Id. § 1362(7).
\textsuperscript{16} Id. § 1362(8).
\textsuperscript{17} Id. § 1362(9).
\textsuperscript{19} 64 Fed. Reg. 48701 (Sept. 8, 1999).
\textsuperscript{20} 33 U.S.C. § 1362(10).
\textsuperscript{22} See U.S. Oceans Policy, Statement by the President, Mar. 10, 1983, 19 Weekly Comp. Pres. Doc. 384 (1983). (recognizing that UNCLOS "contains provisions with respect to traditional uses of the oceans which generally confirm existing maritime law and practice and fairly balance the interests of all states.")
Zone (EEZ) in 1983. Pursuant to the plain language of the statute and U.S. assertions of ocean jurisdiction through presidential proclamations, the addition of a pollutant from a point source other than a vessel or other floating craft within 200 nm from shore is prohibited by the CWA.

The jurisdictional question that would arise with respect to aquaculture operations is whether a net pen is "a vessel or other floating craft." If it is, the EPA would not have the authority to require a permit for the discharge of pollutants, such as biological wastes, from the pen. Under the CWA, the EPA may only regulate the discharge of pollutants in the CZ and the ocean from point sources other than vessels or other floating craft.

If an aquaculture net pen is not a vessel or other floating craft, the operator would need to obtain a National Pollution Discharge Elimination System (NPDES) permit from the EPA. The EPA is authorized to issue NPDES permits for the discharge of pollutants from approved aquaculture projects. An aquaculture project is defined as "a defined managed water area which uses discharges of pollutants into that designated area for the maintenance or production of harvestable freshwater, estuarine, or marine plants or animals." EPA regulations require that NPDES permits for aquaculture projects located in the territorial sea, the waters of the CZ, or the oceans, comply with EPA's ocean discharge criteria guidelines issued under § 403(c). Pollution discharges are controlled by the incorporation of effluent limitations into the NPDES permits. Effluent limitations are numerical limits set by an authorized State, or the EPA, based on the available pollution control technology.

The EPA has established effluent limitations for Concentrated Aquatic Animal Production Facilities (CAAPF), which are facilities "that produce 100,000 pounds or more of aquatic animals per year in a flow-through, recirculating, net pen or submerged cage system." Permits are not currently required for aquaculture operations that do not meet these criteria.

The CWA also requires states to set water quality standards for bodies of waters located within their respective jurisdictions, including coastal waters. According to the EPA, "Water Quality Standards define the goals for a waterbody by designating its uses, setting criteria to protect those uses, and establishing provisions to protect waterbodies from pollutants." If effluent limitations alone are not sufficient to achieve state water quality standards, NPDES permits must also incorporate pollution limits based upon those state water quality standards.

NPDES permits for point source discharges into federal waters must comply with EPA's ocean discharge criteria, in addition to any applicable effluent limitations. Ocean discharge criteria, unlike state water quality standards, do not designate uses or criteria to protect those uses.

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25 Id. § 1328(a).
26 40 C.F.R. § 122.25(b)(1).
27 Id. § 125.11(c).
30 Id. § 1313.
Rather, the ocean discharge criteria are guidelines the EPA uses to determine whether a particular discharge will degrade the marine environment.

The CWA does not grant the EPA explicit authority to set water quality standards for federal waters. Legal scholars have suggested that Congress implicitly authorized the implementation of ocean water quality standards in § 304.33 Section 304 of the CWA requires EPA to develop and publish “criteria for water quality accurately reflecting the latest scientific knowledge on the kind and extent of all identifiable effects on health and welfare including, but not limited to, plankton, fish, shellfish, wildlife, plant life, shore-lines, beaches, esthetics, and recreation which may be expected from the presence of pollutants in any body of water.”34 Under the existing EPA, framework, however, NPDES permits for aquaculture operations would be subject only to the ocean discharge criteria.

Endangered Species Act
Section 9 of the Endangered Species Act (ESA) makes it unlawful for any person subject to the jurisdiction of the United States to take any endangered species within the U.S. or the territorial sea,35 or upon the high seas.36 The terms “territorial sea” and “high seas” are not defined. In 1973, at the time the ESA’s passage, the U.S. territorial sea extended 3 nm from shore and all waters beyond that line were considered high seas.

In 1998, President Ronald Reagan issued Proclamation 5928 extending the U.S. territorial sea from 3 to 12 nm.37 Today, pursuant to UNCLOS and customary international law, the high seas are generally considered waters beyond 200 nm miles from shore. As mentioned above, under UNCLOS, the “high seas” are those ocean waters that are not part of the exclusive economic zone, territorial sea, or internal waters of another state.

Though the U.S. has not ratified the treaty, the government does recognize the jurisdictional zones laid out in UNCLOS as customary international law.38 The most logical interpretation, therefore, of the ESA jurisdictional provisions is that the Act prohibits the taking of an endangered species by any person within U.S. territorial waters (0 – 200 nm) and the taking of an endangered species by any person subject to the jurisdiction of the U.S. while upon the high seas, as defined by UNCLOS.

Entanglement may be one threat aquaculture net pens pose to endangered species, although aquaculture operations may alter feeding and other management practices in order to mitigate against this threat. Both physical injury and harassment can result in violations of the ESA, as

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36 Id. § 1538(a)(1)(C).
38 See U.S. Oceans Policy, Statement by the President, Mar. 10, 1983, 19 Weekly Comp. Pres. Doc. 384 (1983). (recognizing that UNCLOS “contains provisions with respect to traditional uses of the oceans which generally confirm existing maritime law and practice and fairly balance the interests of all states.”)
take "means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.\textsuperscript{39}

Because the § 9 take provision applies to any person located within U.S. federal waters, offshore aquaculture operations in the EEZ may need to obtain incidental take permits from NOAA Fisheries. The ESA authorizes the Secretary of Commerce to permit takings, otherwise prohibited by § 1538(a)(1)(B) "if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity."\textsuperscript{40} While § 1538(a)(1)(B) only refers to takes in the U.S. and the territorial sea, legal scholars have suggested that "it would be consistent [with Congressional intent to] expand U.S. 'territorial seas' for purposes of the ESA to 200 nm, since this is the extent of U.S. jurisdiction."\textsuperscript{41} To receive a permit, the applicant must develop and submit a conservation plan that specifies, among other things, "what steps the applicant will take to minimize and mitigate such impacts."\textsuperscript{42}

For takings that occur on the high seas, the Secretary's authority to issue permits is more limited. Under § 10, the Secretary may issue permits authorizing takings otherwise prohibited by § 9 "for scientific purposes or to enhance the propagation or survival of the affected species, including, but not limited to, acts necessary for the establishment and maintenance of experimental populations."\textsuperscript{43} A strict reading of the ESA suggests that U.S. commercial aquaculture operators might have difficulty obtaining permits for operations in the high seas.

In addition, § 7 of the ESA requires federal agencies to consult with the NOAA Fisheries or the Fish and Wildlife Service whenever an agency action may "jeopardize the continued existence of any endangered species or threatened species" or harm the species' critical habitat.\textsuperscript{44} Agency actions are defined as "all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies in the United States or upon the high seas."\textsuperscript{45} Pursuant to federal regulations, therefore, the consultation requirement applies to agency actions authorizing activities in federal waters and upon the high seas. Courts have upheld this regulatory interpretation of § 7. In 2003, the Ninth Circuit Court of Appeals held that "[NMFS] issuance of fishing permits to boats to allow fishing on the high seas clearly constitutes 'agency action' sufficient to trigger the protections of the ESA."\textsuperscript{46}

Section 7 would require federal agencies, such as the Corps and the EPA, to consult with NOAA Fisheries when issuing RHA, CWA, and other permits for aquaculture operations. If a federal action may jeopardize a listed species or adversely modify critical habitat, NOAA Fisheries must prepare a Biological Opinion and recommend "Reasonable and Prudent Alternatives" to mitigate harm.\textsuperscript{47}

\textsuperscript{39} 16 U.S.C. § 1532(19).
\textsuperscript{40} Id. § 1539(a)(1)(B).
\textsuperscript{43} Id. § 1539(a)(1)(A).
\textsuperscript{44} Id. § 1536(a)(2).
\textsuperscript{45} 50 C.F.R. § 402.02.
\textsuperscript{46} Turtle Island Restoration Network v. NMFS, 340 F.3d 969 (9th Cir. 2003).
Magnuson-Stevens Act
The jurisdictional limits of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson Act) are clearer than most environmental statutes. The Magnuson Act was passed in 1976 “to take immediate action to conserve and manage the fishery resources found off the coast of the U.S. . . . by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish, within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species and Continental Shelf fishery resources.”48 With respect to anadromous species found beyond the EEZ, Congress was clear “that management authority does not extend to such species during the time they are found within any waters of a foreign nation.”49 This caveat effectively limits U.S. jurisdiction under the Magnuson Act to the U.S. territorial sea, EEZ, and, for anadromous species, the high seas, which are defined as “all waters beyond the territorial sea of the United States and beyond any foreign nation’s territorial sea, to the extent that such sea is recognized by the United States.”50

In addition to setting forth the conservation and management goals for each fishery, Fishery Management Plans prepared by the eight regional councils must “describe and identify essential fish habitat . . ., minimize to the extent practicable adverse effects on such habitat caused by fishing, and identify other actions to encourage the conservation and enhancement of such habitat.”51 Essential Fish Habitat (EFH) is defined as “those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity.”52 The Magnuson Act requires federal agencies to consult with NOAA Fisheries “with respect to any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken, by such agency that may adversely affect any essential fish habitat.”53

NOAA Fisheries regulations limit the geographic scope of EFH to 200 nm from shore, which is consistent with Congress’ assertion of jurisdiction under the Magnuson Act and nation’s territorial limits under international law. 50 C.F.R. § 600.805(b)(2) states that

EFH may be described and identified in waters of the United States, as defined in 33 CFR 328.3, and in the exclusive economic zone, as defined in § 600.10. Councils may describe, identify, and protect habitats of managed species beyond the exclusive economic zone; however, such habitat may not be considered EFH for the purposes of sections 303(a)(7) and 305(b) of the Magnuson-Stevens Act. Activities that may adversely affect such habitat can be addressed through any process conducted in accordance with international agreements between the United States and the foreign nation(s) undertaking or authorizing the action.

If an aquaculture operation is proposed in the EEZ near designated EFH, federal agencies will likely have to consult with NOAA Fisheries before issuing permits under other statutes because the operation could adversely affect EFH through discharges or escapes from the cages. To start the consultation process, federal agencies are required to provide NOAA Fisheries with a written

48 Id. § 1801(b)(1).
49 Id. § 1811(b)(1).
50 Id. § 1802(20).
51 Id. § 1853(a)(7).
52 Id. § 1802(10).
53 Id. § 1855(b)(2).
assessment of the effects of the action on EFH. This assessment can be incorporated into documents prepared for other purposes, such as ESA Biological Opinions and Environmental Assessments and Environmental Impact Statements for the National Environmental Policy Act. Upon receipt and review of an assessment submitted by a federal agency, NOAA Fisheries provides the agency with its EFH Conservation Recommendations, which are measures that can be taken by the agency to mitigate adverse effects to EFH. Federal agencies have 30 days to provide a written response to NOAA Fisheries outlining the “measures proposed by the agency for avoiding, mitigating, or offsetting the impact of the activity on such habitat.” If the agency chooses not to follow the recommendations of NOAA Fisheries, it must explain its reasons for doing so.

Permits for aquaculture operations in the high seas would not be subject to the EFH consultation process unless the proposed operation could adversely affect EFH within the EEZ. This could be a possibility if an operation was proposed close to the 200 nm-line dividing the EEZ from the high sea.

**Marine Mammal Protection Act**
The Marine Mammal Protection Act makes it unlawful for “any person subject to the jurisdiction of the United States or any vessel or other conveyance subject to the jurisdiction of the United States to take any marine mammal on the high seas.” The term high seas is not defined, but is interpreted by NOAA Fisheries Office of Protected Resources to mean “international waters,” waters beyond the jurisdiction of any nation. Additionally, it is unlawful “for any person or vessel or other conveyance to take any marine mammal in waters or on lands under the jurisdiction of the United States.” Waters under the jurisdiction of the U.S. extend 200 nm from shore (territorial sea and EEZ).

The term “take” means to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal. Harassment is defined as “any act of pursuit, torment, or annoyance which” has the potential to injure or disturb a marine mammal. U.S. citizens engaged in activities, other than commercial fishing, may apply to NOAA Fisheries for a permit authorizing “the incidental, but not intentional, taking” of marine mammals. NOAA Fisheries may only issue “Incidental Take Authorizations” (also known as Letters of Authorization) and “Incidental Harassment Authorizations” after finding that “that the total taking by the specified activity during the specified time period will have a negligible impact on species or stock of marine mammal(s) and will not have an unmitigable adverse impact on the availability of those species or stocks of marine mammals intended for subsistence uses.”

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54 50 C.F.R. § 600.920(e)(1).
56 Id. § 1855(b)(4)(B).
60 Id. § 1382(15).
61 Id. § 1382(13).
62 Id. § 1362(18).
63 Id. § 1371(a)(5)(A)(G).
64 50 C.F.R. § 216.102(a).
Due to the potential for entrapment and behavior alterations, U.S. citizens engaged in aquaculture in the EEZ and the high seas, would need to apply to NOAA Fisheries for an Incidental Harassment Authorizations. Although aquaculture is considered "fishing" for the purposes of the Magnuson Act, it is unclear whether aquaculture would be considered "commercial fishing" under the MMPA and therefore exempt from the IHA requirements. Letters of Authorizations are only needed if the potential for serious injury or death exists and there are no mitigating measurements that could be taken to prevent this from occurring. Non-U.S. citizens wishing to conduct aquaculture operations in U.S. waters would also need to secure a permit from NOAA Fisheries.

**National Environmental Policy Act**

Pursuant to the National Environmental Policy Act, federal agencies must prepare environmental impact statements (EIS) before undertaking "major Federal actions significantly affecting the quality of the human environment." "Major federal actions" include funding, licensing, and permitting projects. NEPA does not expressly state the jurisdictional limits of the statute, although it clearly applies to federal actions occurring within the United States.

In certain situations, NEPA may also be triggered by federal actions occurring entirely outside U.S. boundaries, courts have reached this conclusion by reasoning that NEPA governs the planning process, not the substantive action. Regardless of where the activity will actually take place, the planning usually occurs within the U.S., in Washington, D.C. or a regional office. Because NEPA is governing the planning process within the U.S., not the federal action outside, courts have reasoned that the presumption against the extraterritorial application of U.S. laws does not apply.

In *Environmental Defense Fund v. Massey*, for example, environmental groups argued that the National Science Foundation was required to prepare an EIS before moving ahead with plans to incinerate food wastes at McMurdo Station in Antarctica. The D.C. Circuit agreed, stating "since NEPA is designed to regulate conduct occurring within the territory of the United States, and imposes no substantive requirements which could be interpreted to govern conduct abroad, the presumption against extraterritoriality does not apply to this case." Following similar reasoning, in a challenge to the Navy's failure to prepare an EIS for its Littoral Warfare Advanced Development Program, a California district court more recently held that "NEPA applies to federal actions which may affect the environment in the EEZ."

Taken to its logical conclusion, this "location of decision-making" theory could require federal agencies to prepare EIS for "major Federal actions" occurring anywhere in the world, even in foreign countries. Courts, however, have generally limited *Massey* to cases involving "global commons," such as the oceans. This limitation is supported by Executive Order 12114 issued by

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68 Id. at 533.


President Carter in 1979. E.O. 12114 requires federal agencies to prepare environmental analyses for "major Federal actions significantly affecting the environment of the global commons outside the jurisdiction of any nation (e.g., the oceans or Antarctica)."\textsuperscript{71}

Because NEPA applies in the EEZ and global commons, such as the high seas, federal agencies issuing permits for offshore aquaculture operations would have to, at a minimum, prepare an Environmental Assessment. If the aquaculture operation would "significant affect the quality of the human environment," an EIS would need to be prepared.

I hope you find this information useful. Please contact me if you have follow-up questions or need additional information.

Sincerely,

Stephanie Showalter
Director, National Sea Grant Law Center