

UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF LOUISIANA

GULF FISHERMEN’S ASSOCIATION;)
GULF RESTORATION NETWORK; GULF)
OF MEXICO REEF FISH)
SHAREHOLDERS’ ALLIANCE; CHARTER)
FISHERMAN’S ASSOCIATION; DESTIN)
CHARTER BOAT ASSOCIATION;)
CLEARWATER MARINE ASSOCIATION;)
ALABAMA CHARTER FISHING)
ASSOCIATION; FISH FOR AMERICA USA,)
INC.; FLORIDA WILDLIFE FEDERATION;)
RECIRCULATING FARMS COALITION;)
FOOD & WATER WATCH, INC; and)
CENTER FOR FOOD SAFETY,)

CIVIL ACTION NO. 2:16-cv-01271

Plaintiffs,

v.

NATIONAL MARINE FISHERIES)
SERVICE; EILEEN SOBECK, in her official)
capacity as Assistant Administrator for)
Fisheries; DR. ROY CRABTREE, in his)
official capacity as Regional Administrator,)
Southeast Region; NATIONAL OCEANIC)
AND ATMOSPHERIC ADMINISTRATION;)
DR. KATHRYN SULLIVAN, in her official)
capacity as Under Secretary of Commerce for)
Oceans and Atmosphere and Administrator for)
National Oceanic and Atmospheric)
Administration; and PENNY PRITZKER, in)
her official capacity as United States Secretary)
of Commerce,)

Defendants.

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TABLE OF FREQUENTLY USED ACRONYMS / ABBREVIATIONS

APA	Administrative Procedure Act
EEZ	Exclusive Economic Zone
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FMP	Fishery Management Plan
FWS	United States Fish and Wildlife Service
Gulf Council	Gulf of Mexico Fishery Management Council
MSA	Magnuson-Stevens Fishery Conservation and Management Act
MSY	Maximum Sustainable Yield
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
OY	Optimum Yield
PEIS	Programmatic Environmental Impact Statement
SPEIS	Supplemental Programmatic Environmental Impact Statement
ROD	Record of Decision

COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF

INTRODUCTION

1. This is a civil action for injunctive and declaratory relief. Plaintiffs Gulf Fishermen's Association; Gulf Restoration Network; Gulf of Mexico Reef Fish Shareholders' Alliance; Charter Fisherman's Association; Destin Charter Boat Association; Clearwater Marine Association; Alabama Charter Fishing Association; Fish for America USA, Inc.; Florida Wildlife Federation; Recirculating Farms Coalition; Food & Water Watch, Inc.; and Center for Food Safety (collectively Plaintiffs), on behalf of their adversely affected members, challenge the January 13, 2016 decision of Defendants National Marine Fisheries Service (NMFS), a division of Defendant National Oceanic and Atmospheric Administration (NOAA); Eileen Sobeck, in her official capacity as Assistant Administrator for Fisheries; Dr. Roy Crabtree, in his official capacity as Regional Administrator for NMFS, Southeast Region; Dr. Kathryn Sullivan, in her official capacity as Undersecretary of Commerce for Oceans and Atmosphere and Administrator of NOAA (collectively NMFS or Defendants), to establish an unprecedented regulatory permitting scheme that, for the first time, will allow industrial aquaculture facilities to be licensed and sited in U.S. federal waters in the Gulf of Mexico. Specifically, NMFS, an agency within NOAA of the United States Department of Commerce (collectively Defendants), promulgated regulations creating and establishing a new permitting scheme for the commercial propagation, rearing, and production of farmed fish in federal waters of the Gulf of Mexico (the Gulf Industrial Aquaculture Regulations or the Regulations). *See* NOAA, Fisheries of the Caribbean, Gulf and South Atlantic; Aquaculture, 81 Fed. Reg. 1762 (Jan. 13, 2016) (to be codified at 50 C.F.R. pts. 600 and 622). This decision marks the first time in the United States that a permitting scheme has been established to allow commercial industrial aquaculture

development in U.S. waters, in the U.S. Exclusive Economic Zone (EEZ).

2. Industrial aquaculture remains a subject of great controversy in the United States and abroad. This is because it carries with it a plethora of well-known adverse environmental and intertwined socioeconomic consequences. These adverse impacts include but are not limited to: the escape of farmed fish from their containment; the spread of potentially deadly diseases and parasites from aquaculture facilities to wild fish and other marine wildlife; the pollution of ocean ecosystems from the inputs (e.g., drugs, pesticides, fungicides, algacides) and outputs (wastes) of industrial aquaculture; the privatization of public ocean resources; threats to marine life and marine ecosystems from aquaculture systems; market displacement and price competition from cheaply produced farmed fish; adverse economic effects on fishing businesses; and trickle-down effects to communities and families that depend on healthy wild fish stocks and ocean ecosystems for their livelihoods. Defendants' challenged decision now threatens to bring these adverse impacts to U.S. waters for the first time. The establishment of industrial aquaculture in the Gulf of Mexico creates novel and significant short- and long-term risks to the Gulf's fisheries, ocean environments, and coastal communities. Further, this action will serve as a precedent for the future siting and regulation of offshore aquaculture in all other regions of U.S. federal waters.

3. The challenged decision and Regulations are the culmination of an extended rulemaking process and convoluted procedural history that began more than ten years ago. As part of the rulemaking process, Defendants, acting under their assumed authority under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), and working with the Gulf of Mexico Regional Fishery Management Council (the Gulf Council) implemented a Fishery Management Plan for Regulating Offshore Aquaculture in the Gulf of Mexico (the

Aquaculture FMP).¹

4. Plaintiffs bring this action pursuant to the MSA, 16 U.S.C. §§ 1801-1891(d); the Endangered Species Act (ESA), 16 U.S.C. §§ 1531-1544; the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321-4370h; and the Administrative Procedure Act (APA), 5 U.S.C. §§ 701-706. The challenged decision violates these statutes for a multitude of reasons.

5. First and foremost, Defendants' decision is unlawful because they do not have statutory authority to undertake it. Namely, industrial aquaculture is not "fishing," an action over which Defendants have jurisdiction under the MSA. Permitting floating netpens of confined fish in open federal waters is not the same as permitting fishing vessels. It is a fundamentally different, and much more novel, activity with a different set of economic and ecological considerations. Congress knew this, and on numerous occasions considered passing laws creating new statutory authority for NMFS to regulate aquaculture. When these bills failed, Defendants decided to try and extend their existing MSA fishing authority to cover this new activity. That overextension is contrary to the MSA's plain language, legislative history, and statutory scheme, and to common sense. For these reasons Plaintiffs seek declaratory and equitable relief, declaring that Defendants' attempted regulatory scheme for offshore aquaculture is *ultra vires* and should be set aside absent further Congressional authority to permit aquaculture in the EEZ via federal regulations.

6. Second and alternatively, Defendants violated numerous fundamental procedural

¹ The contents and analysis of the Aquaculture FMP also include a Programmatic Environmental Impact Statement (PEIS) completed pursuant to the National Environmental Policy Act; the FMP and PEIS were published as one document, collectively referred to throughout as "Aquaculture FMP/PEIS."

and statutory MSA mandates and standards. In finalizing the permitting scheme for offshore aquaculture, Defendants violated the procedural mandates and timeframes articulated in the MSA, 16 U.S.C. §§ 1853-54, for review and finalization of a fishery management plan and its implementing regulations, in contravention of the MSA's procedural safeguards to ensure timely and comprehensive review of any fishery management plans and associated regulations. Because its objective and actions are entirely economically motivated, the finalized Aquaculture FMP lacks a legitimate conservation purpose, in violation of the MSA's mandate to conserve and manage fisheries. The Aquaculture FMP is also legally deficient, in violation of the MSA's substantive requirements and National Standards. The Aquaculture FMP was not based on the best scientific information available, and its measures fail to: (1) prevent overfishing and conserve or protect wild fisheries and essential fish habitats; (2) ensure fair allocation of fishing privileges and the sustained participation of fishing communities; and (3) prevent and minimize bycatch. These failings render Defendants' decision arbitrary and capricious, and contrary to law, in violation of MSA and the APA.

7. Third, Defendants violated NEPA by failing to take the required "hard look" at the significant adverse direct, indirect, and cumulative impacts of their decision in both the final Programmatic Environmental Impact Statement (PEIS) and Supplemental PEIS (SPEIS). Defendants impermissibly confined the scope of their NEPA analysis to actions and alternatives that would promote commercial aquaculture in the Gulf, precluding analysis of potential environmental impacts and reasonable alternatives; failed to sufficiently consider the full range of cumulative impacts, and in some cases failed to address certain impacts at all; improperly deferred consideration of reasonable foreseeable impacts to other agencies or to later stages of the permitting process; made numerous conclusions that directly contradicted or ignored the

evidence before them; and failed to adequately consider and respond to public comments. These failings render Defendants' decision arbitrary and capricious, and contrary to law, in violation of NEPA and the APA.

8. Fourth, Defendants violated the ESA by failing to ensure that the challenged action establishing aquaculture in the Gulf of Mexico is not likely to jeopardize the continued existence of any threatened or endangered species and also is not likely to result in the destruction or adverse modification of the critical habitat of any protected species. Despite twice acknowledging that opening the Gulf EEZ to offshore aquaculture facilities may affect numerous endangered species and designated critical habitat in the Gulf in numerous ways, Defendants violated the ESA by nonetheless failing to engage in formal self-consultation under ESA Section 7, including failing to undertake the preparation of a comprehensive Biological Opinion analyzing the impacts to protected species and critical habitat. Defendants' ESA decisions failed to use the best available science and commercial data; failed to lawfully consider and analyze all direct, indirect, interrelated, and interconnected effects of its action on protected species and their habitat; and unlawfully relied on later, case-by-case permitting decisions to purportedly fulfill the agency's duties to ensure no jeopardy to endangered species or adverse modification of critical habitat from this action. These failings render Defendants' decision arbitrary and capricious, and contrary to law, in violation of the ESA and APA.

9. Collectively, these failings render Defendants' decision arbitrary and capricious, and contrary to law, in violation of the MSA, NEPA, ESA, and the APA.

10. For these reasons, Plaintiffs seek declaratory and equitable relief, declaring that Defendants violated the MSA, NEPA, ESA, and APA, vacating the challenged regulations and its underlying actions as unlawful, arbitrary and capricious agency actions; and ordering

Defendants to comply with these statutes' mandates before proposing any new related action regarding aquaculture in the Gulf of Mexico; as well as any other injunctive, declaratory, and other relief this Court deems appropriate.

JURISDICTION AND VENUE

11. This Court has jurisdiction pursuant to 28 U.S.C. § 1331 (federal question); 28 U.S.C. § 1346 (United States as defendant); 28 U.S.C. §§ 2201-2202 (declaratory and injunctive relief); 5 U.S.C. §§ 702, 704 (APA); 16 U.S.C. § 1855(f) (MSA); 42 U.S.C. §§ 4321-4370h (NEPA); and 16 U.S.C. § 1540 (ESA).

12. An actual controversy exists between the parties within the meaning of 28 U.S.C. § 2201 (declaratory judgment).

13. Venue properly lies in this Court pursuant to 28 U.S.C. § 1391(e)(1)(C) because one or more Plaintiffs reside in this district, and pursuant to 28 U.S.C. § 1391(e)(1)(B) because a substantial part of the events or omissions giving rise to the claim occurred, or a substantial part of property that is the subject of the action is situated, in this district.

PARTIES

14. Plaintiff Gulf Fishermen's Association is the largest organization of offshore fishermen in the Southeastern United States. A nonprofit organization based in Clearwater, Florida, the Gulf Fishermen's Association's mission is to ensure the fishing future of all fishermen and to "put healthy, sustainable seafood on America's table."

15. Plaintiff Gulf Restoration Network is a nonprofit Louisiana corporation with its principal place of business in New Orleans, Louisiana. Gulf Restoration Network is a network of environmental, social justice, and citizen's groups and individuals committed to uniting and empowering people to protect and restore the natural resources of the Gulf of Mexico region for

future generations. Gulf Restoration Network has thousands of members who live in the Gulf of Mexico region. Gulf Restoration Network and its individual members are closely involved in protecting endangered and threatened species in the Gulf Region, and advocating for sound conservation and management of the Gulf's fisheries and natural resources, including the need to prevent harm to the Gulf's natural resources from industrial aquaculture development.

16. Plaintiff Gulf of Mexico Reef Fish Shareholders' Alliance is a nonprofit advocacy organization in Galveston, Texas that represents the interests of commercial fishermen and other stakeholders that want to bring sustainability and accountability to fisheries management. The Gulf of Mexico Reef Fish Shareholders' Alliance works closely with local fishing communities, regional managers, and federal representatives to improve fishery regulations and ensure a continued, sustainable source of domestically caught seafood from the Gulf of Mexico.

17. Plaintiff Charter Fisherman's Association is a nonprofit organization in Corpus Christi, Texas. Charter Fisherman's Association is dedicated to ensuring public access to fishing, engaging and representing the charter-for-hire industry, and ensuring long-term sustainability of fisheries. Charter Fisherman's Association's board and membership are actively involved in development of regulations, policies, and management ideas that increase fishery access while protecting the Gulf Fishery over the long term for future generations. Charter Fisherman's Association works diligently with regulators, policymakers, and stakeholders to promote sound, science-based management practices that protect fishery resources while allowing for an enjoyable fishing experience for generations to come.

18. Plaintiff Destin Charter Boat Association is a Florida nonprofit organization made up of the Destin Charter Boat captains, crew and their families, who represent the fishing heritage that helped found Destin and support its families. Destin Charter Boat Association is

actively involved in fishery management on both the state and federal levels, playing an active role in the management decisions that affect its members. The Destin Charter Boat Association was formed in 1954, and is the largest charter boat fleet membership in the Gulf of Mexico.

19. Plaintiff Clearwater Marine Association is a nonprofit organization in Clearwater, Florida. The membership represents charter and headboat captains, crew, and other tourism based industries in Clearwater Marina. It is one of the largest working waterfronts in the Gulf of Mexico.

20. Plaintiff Alabama Charter Fishing Association is an organization made up of guides to the waters that have been attracting people year round to the northern Gulf Coast for decades. Members include captains and crews on a broad spectrum of charter boats. Members engage in both inshore and offshore fishing and nature watching charters, fishing and navigating the backwaters, bayous and bays or offshore waters of the Gulf of Mexico.

21. Plaintiff Fish for America USA, Inc., is dedicated to promoting continued availability of wild-caught domestic seafood to American citizens. The organization is firmly committed to providing information to the consumer about the role of accountability and sustainability in preserving our seafood industry for all Americans' enjoyment.

22. Plaintiff Florida Wildlife Federation is a private, statewide, nonprofit citizens' conservation education organization composed of thousands of concerned Floridians and other citizens from all walks of life who have a common interest in preserving, managing, and improving Florida's fish, wildlife, soil, water, and plant life. As the state affiliate of the National Wildlife Federation, Florida Wildlife Federation has been improving Florida's wildlife since 1936.

23. Plaintiff Center for Food Safety is a national nonprofit organization with offices in the District of Columbia; San Francisco, California; Portland, Oregon; and Honolulu, Hawai'i. Center for Food Safety works to protect public health and the environment by curbing the proliferation of harmful food production technologies, such as industrial aquaculture practices, and by promoting sustainable forms of food production. Center for Food Safety utilizes regulatory actions, citizen engagement, legislation, and when necessary, litigation, to promote transparency and accountability in food production. Center for Food Safety also acts as a watchdog by ensuring that federal agencies with regulatory authority over aspects of food production, such as NMFS, comply with their statutory mandates as well as other federal laws. Center for Food Safety has long had a program dedicated to addressing the adverse environmental and public health impacts of industrial aquaculture. Center for Food Safety strives to ensure and improve aquaculture oversight, furthering policy and cultural dialogue with regulatory agencies, consumers, chef, grocers, fish retailers and legislators on the critical need to protect public health and the environment from industrial aquaculture. Center for Food Safety represents more than 750,000 members across the country, including tens of thousands of members in the Gulf Coast, who support safe, sustainable food production.

24. Plaintiff Food & Water Watch, Inc., is a national nonprofit public interest consumer advocacy organization with offices throughout the United States. Food & Water Watch members include commercial and recreational fishermen and women, conservationists, and consumers. Food & Water Watch advocates for common-sense policies that will result in healthy, safe food and access to safe and affordable drinking water. To that end, Food & Water Watch advocates on issues related to aquaculture, food safety standards, and other environmental and food policy issues. Food & Water Watch staff have tracked developments in the aquaculture

field, submitted comments to federal agencies, and communicated with legislators and agency officials on aquaculture issues since the organization's inception.

25. Plaintiff Recirculating Farms Coalition is a national nonprofit organization focused on sustainable food and farming with its headquarters in New Orleans, Louisiana. Recirculating Farms Coalition is a collaborative group of farmers, fishermen, educators, scientists, nonprofit organizations and many others committed to advocating for and building local sources of healthy, accessible food. Through research, education, and advocacy, Recirculating Farms Coalition's members work together to support the development of eco-efficient, unique farms that use clean recycled water as the basis to grow food. These systems include recirculating hydroponics (growing plants in nutrient-rich recycled water), land-based aquaculture (raising fish in tanks on land that reuse and recycle water and waste), and aquaponics (a combination of recirculating hydroponics and recirculating aquaculture, where fish and plants are raised together in a single connected system). Recirculating Farms Coalition has approximately 5800 members, supporters, and activists in the Gulf states.

26. Together, the Plaintiff organizations encompass a broad array of significant interests in the Gulf of Mexico, for commercial, economic, recreational, and conservation purposes. A core part of each organization's mission includes protecting the Gulf of Mexico and its fisheries from adverse impacts, including those that would occur from industrial aquaculture production in the EEZ. Many of the Plaintiff organizations economically depend on the Gulf and its fisheries for their very livelihood. Other Plaintiffs focus on protecting the Gulf habitat and its wildlife, and/or ensuring that methods of fishing, if undertaken, are not done in a manner that is harmful to the environment, public health, wild fisheries, and other wildlife.

27. Plaintiffs' members also include commercial and recreational fishermen and others engaged in fishing-related commercial activities in and around the Gulf—activities that would be adversely affected by industrial aquaculture authorized by the challenged Regulations. Those members who fish for wild species managed by the Gulf Council under other fishery management plans are likely to be harmed, and their fishing grounds, fishing yields, health and quality of the fish harvested, and fish market prices are likely to be significantly modified and reduced, by the new stationary aquaculture operations authorized by Defendants' actions.

28. Plaintiffs' members include individuals who enjoy and rely on the waters of the Gulf of Mexico for commercial, recreational, and aesthetic purposes, including boating, fishing, scuba diving, swimming, and wildlife observation. Plaintiffs' members regularly engage in and enjoy observing and studying wildlife in and around the Gulf of Mexico, including marine mammals, wild fish, migratory birds, and other species likely to be harmed by offshore industrial aquaculture. Plaintiffs' members use and enjoy the Gulf of Mexico and will be directly harmed by the industrial aquaculture operations now authorized and permitted by Defendants' challenged Regulations, due to harm caused to the wildlife of the Gulf and its natural resources, and their exclusion from certain areas to be enclosed for commercial aquaculture purposes.

29. Many of Plaintiffs' members also enjoy eating wild fish managed sustainably under existing fishery management plans in the Gulf of Mexico. The health of available fish on the market, both wild and farmed, would be harmed both directly and indirectly by aquaculture operations via negative environmental impacts on wild fish and reduced quality of farmed fish through diseases, and use of drugs and other chemicals. Plaintiffs' members who are Gulf fish consumers would also be harmed if farmed fish were sold on the market and supplanted wild fish

or undermined their ability to identify, purchase, and enjoy sustainably managed wild fish from their local region.

30. Defendants estimate that between five and twenty facilities will be permitted under the Regulations over the next ten years, with an initial cap of 64 million pounds of fish produced annually. Many of Plaintiffs' organizations and their members are very involved in ensuring that activities in the Gulf do not harm the marine environment and the long-term economic and biological sustainability of wild fish. Plaintiffs' organizations and their members regularly attend Gulf Council meetings and submit comments, and have actively participated in the long and twisted rulemaking process at issue in this case. The Gulf Industrial Aquaculture Regulations and the subsequent individual permitting process will increase the amount of time that they spend tracking the activities of the Gulf Council and Regional Administrator; analyzing the myriad of complex environmental, human health, and economic impacts of individual aquaculture permit proposal; and monitoring the direct and indirect impacts of such facilities. The Gulf Industrial Aquaculture Regulations and the subsequent individual permitting process will also increase the amount of time Plaintiffs' and their members will have to spend on submitting testimony and attending public meetings, causing them financial harm. In sum, the Regulations and the permitting scheme authorized by Defendants have resulted, and will continue to result in, Plaintiff organizations and members' diverting time and resources to safeguard the environment and the traditional fishing economy from the dangers of offshore aquaculture, which Defendants failed to examine.

31. Defendant Penny Pritzker is the Secretary of the United States Department of Commerce and has ultimate responsibility for the duties and programs of NOAA and NMFS under the MSA. Secretary Pritzker is sued in her official capacity.

32. Defendant NOAA is the agency within the United States Department of Commerce to which the Secretary of Commerce has delegated authority and stewardship duties of fisheries management under the MSA.

33. Defendant NMFS is the agency within NOAA to which NOAA has delegated authority and stewardship duties of fisheries management under the MSA.

34. Defendant Eileen Sobeck is the Assistant Administrator for Fisheries at NMFS and is responsible for implementing and fulfilling that agency's duties. Assistant Administrator Sobeck is sued in her official capacity.

35. Defendant Dr. Kathryn Sullivan is the Under Secretary of Commerce for Oceans and Atmosphere and Administrator of NOAA, and is responsible for implementing and fulfilling NOAA's duties. Under Secretary Sullivan is sued in her official capacity.

36. Defendant Dr. Roy Crabtree is the Regional Administrator for NMFS, Southeast Region, which includes the Gulf of Mexico. He is responsible for implementing and fulfilling NMFS's duties in the Southeast Region. Southeast Regional Administrator Crabtree is sued in his official capacity.

STATUTORY FRAMEWORK

Magnuson-Stevens Conservation and Management Act

37. The MSA, 16 U.S.C. §§ 1801-1891(d), governs fisheries management in U.S. federal waters, referred to under the MSA as the Exclusive Economic Zone (EEZ), including the federal waters of the Gulf of Mexico. The EEZ generally covers an area extending from three nautical miles from the boundary of each of the coastal states out to two hundred nautical miles. *See* 16 U.S.C. § 1802(11).

38. The MSA establishes eight Fishery Management Councils, including the Gulf of Mexico Fishery Management Council, to “exercise sound judgment in the stewardship of fishery resources through the preparation, monitoring, and revision of [fishery management plans].” *Id.* §§ 1801(b)(5); 1852. Fishery management plans govern the conservation and management of fisheries within the EEZ. *Id.* §§ 1801(b)(1), (5). Each Fishery Management Council is charged with “prepar[ing] and submit[ting] to the Secretary [of Commerce] . . . a fishery management plan” (FMP) to manage and conserve the fishery under its authority. *Id.* § 1852(h).

39. In enacting the MSA, Congress knew the survival of wild fish off the coasts of the United States was threatened by “increased fishing pressure . . . inadequacy of fishery resource conservation . . . [or] direct and indirect habitat losses which have resulted in diminished capacity to support existing fishing levels.” *Id.* § 1801(a)(1)-(2).

40. Congress enacted the MSA to “conserve and manage the fishery resources” and “to promote domestic commercial and recreational fishing under sound conservation and management principles,” as well as to encourage the development of underutilized fisheries. *Id.* § 1801(b)(1), (3), (6). The MSA defines a “fishery” as “one or more stocks of fish which can be treated as a unit for purposes of conservation and management,” and requires Fishery Management Councils to prepare an FMP “for each fishery under [their] authority that requires conservation and management.” *Flaherty v. Bryson*, 850 F. Supp. 2d 38, 51 (D.D.C. 2012) (quoting 16 U.S.C. §§ 1802(13), 1852(h)(1)). The MSA defines “fishing” to mean “(A) the catching, taking, or harvesting of fish; (B) the attempted catching, taking, or harvesting of fish; (C) any other activity which can reasonably be expected to result in the catching, taking, or harvesting of fish; or (D) any operations at sea in support of, or in preparation for, any activity described [above].” 16 U.S.C. § 1802(16). The MSA only allows the issuance of permits under a

fishery management plan for “(A) any fishing vessel of the United States fishing, or wishing to fish, in the exclusive economic zone, or for anadromous species or Continental Shelf fishery resources beyond such zone; (B) the operator of any such vessel; or (C) any United States fish processor who first receives fish that are subject to the plan.” *Id.* §1853(b)(1).

41. The MSA does not contemplate aquaculture as “fishing” under its statutory definition, either expressly or indirectly. Nor does the statutory scheme it creates: As explained below, the MSA’s terms, definitions, thresholds, and requirements for fishery conservation and management all focus on standards applicable to fishing regulation, not aquaculture regulation. The use of the word “harvesting” throughout the MSA and its legislative history is only logical in the context of the traditional fishing of wild fish. *See, e.g., id.* § 1821(h)(2)(A) (discussing a fleet of “harvesting” vessels transferring its “catch”).

42. Nor does the MSA contemplate as permitted “fishing vessels” the netpens, cages, and other submerged structures used in industrial aquaculture. *See id.* § 1802(18) (defining “fishing vessel” as “vessel, boat, ship, or other craft which is used for, equipped to be used for, or of a type which is normally used for—(A) fishing; or (B) aiding or assisting one or more vessels at sea in the performance of any activity relating to fishing, including, but not limited to, preparation, supply, storage, refrigeration, transportation, or processing”). Indeed, these submerged structures are not even vessels under maritime law. *See* 1 U.S.C. § 3; *Lozman v. City of Riviera Beach, Fla.*, 133 S. Ct. 735, 740-41 (2013).

43. In fact the only mentions of the term “aquaculture” in the MSA occur in describing specific hatchery training programs for education and restoration purposes of specific regional fisheries. *See* 16 U.S.C. §§ 1855(j)(2), 1863(a)(1)(E). Overall there is no evidence, legislative history, or other language showing that Congress understood and approved NMFS’s

authority to regulate fishing under the MSA to include the permitting of offshore aquaculture facilities as “fishing” in the EEZ.

44. The MSA has an unequivocal mandate “to conserve and manage . . . fishery resources” and to “achieve and maintain, on a continuing basis, the optimum yield from each fishery.” *Id.* § 1801(b)(1), (4). The MSA defines “optimum yield” to mean the amount of fish “from a fishery” which “will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems.” *Id.* § 1802(33)(A). The statute makes clear that an optimum yield must be “prescribed on the basis of the maximum sustainable yield from the fishery, as reduced by any relevant economic, social, or ecological factor.” *Id.* § 1802(33)(B).

Substantive Requirements of Fishery Management Plans

45. FMPs must “contain the conservation and management measures . . . which are . . . necessary and appropriate for the conservation and management of the fishery, to prevent overfishing and rebuild overfished stocks, and to protect, restore, and promote the long-term health and stability of the fishery.” *Id.* § 1853(a)(1); *see id.* § 1801(a)(6). Further, the MSA requires NMFS to ensure that in so doing, “the national fishery conservation and management program utilizes, and is based upon, the best scientific information available.” *Id.* § 1801(c)(3).

46. FMPs must include a fishery impact statement that analyzes the FMP’s likely “cumulative conservation, economic, and social impacts” of its conservation and management measures, as well as possible measures for mitigating these effects. *Id.* § 1853(a)(9).

47. In addition, the MSA requires FMPs to “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.” *Id.* § 1853(a)(7).

The MSA requires NMFS to complete an essential fish habitat consultation for federal actions which may adversely affect essential fish habitats. *See id.* § 1855(b)(2). “Essential fish habitat” includes “waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity.” *Id.* § 1802(10). The definition of “adverse effects” to such habitat is broad and includes “any impact that reduces quality and/or quantity of [essential fish habitat],” such as “direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat, and other ecosystem components,” as well as impacts from “individual, cumulative, or synergistic consequences of actions.” 50 C.F.R. § 600.810(a).

48. The MSA also provides NMFS with the authority to promulgate regulations to implement FMPs. *See* 16 U.S.C. § 1854. Under the MSA, conservation and management measures and the regulations implementing these measures must ensure that “irreversible or long-term adverse effects on fishery resources and the marine environment are avoided,” and that multiple options will be “available with respect to future uses of these resources.” *Id.* § 1802(5)(ii)-(iii).

49. FMPs, as well as regulations implementing FMPs, must also conform to ten “national standards for fishery conservation and management.” *Id.* § 1851(a)(1)-(10).

50. National Standard One requires that “[c]onservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.” *Id.* § 1851 (a)(1); *accord* 50 C.F.R. § 600.310(a). Where a fish species is already “overfished,” National Standard One requires that fishery management plans contain measures “for rebuilding to a level consistent with producing the maximum sustainable yield in such fishery.” 16 U.S.C. § 1802(33)(C). “The [maximum

sustainable yield] for a stock is influenced by its interactions with other stocks in its ecosystem and these interactions may shift as multiple stocks in an ecosystem are fished.” 50 C.F.R. § 600.310(e)(1)(iv).

51. NMFS’s guidelines for National Standard One explain that “[t]he most important limitation on the specification of [Optimal Yield (OY)] is that the choice of OY and the conservation and management measures proposed to achieve it must prevent overfishing.” *Id.* § 600.310. “In general, when specifying limits and accountability measures intended to avoid overfishing and achieve sustainable fisheries, Councils must take an approach that considers uncertainty in scientific information and management control of the fishery.” *Id.* § 600.310(b)(3).

52. National Standard Two requires that conservation and management measures be based upon the best scientific information available. *See* 16 U.S.C. § 1851(a)(2).

53. National Standard Four requires that “[c]onservation and management measures shall not discriminate If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.” *Id.* § 1851(a)(4); *accord* 50 C.F.R. § 600.325(a).

54. NMFS’s guidelines on National Standard Four further explain that for an allocation to be “fair and equitable,” it must be “rationally connected to the achievement of the OY or with the furtherance of a legitimate FMP objective.” 50 C.F.R. § 600.325(c)(3)(i)(A). It “must be designed to deter any person or other entity from acquiring an excessive share of fishing privileges, and to avoid creating conditions fostering inordinate control, by buyers or sellers, that would not otherwise exist.” *Id.* § 600.325(c)(3)(iii). In considering allocation of

fishing privileges, an FMP should consider, amongst other factors, the “economic and social consequences of the scheme, food production, consumer interest, [and] the dependence on the fishery by present participants and coastal communities” *Id.* § 600.325(c)(3)(iv).

55. National Standard Five requires that no “[c]onservation and management measures shall . . . have economic allocation as [their] sole purpose.” 16 U.S.C. § 1851(a)(5); *accord* 50 C.F.R. § 600.330(a). NMFS’s guidelines explain that National Standard Five prohibits “those measures that distribute fishery resources among fishermen on the basis of economic factors alone, and that have economic allocation as their only purpose.” 50 C.F.R. § 600.330(e). Accordingly, “[w]here conservation and management measures are recommended that would change the economic structure of the industry or the economic conditions under which the industry operates, the need for such measures must be justified in light of the biological, ecological, and social objectives of the FMP, as well as the economic objectives.” *Id.* § 600.330(e).

56. National Standard Eight requires that “[c]onservation and management measures shall, consistent with the conservation requirements of this chapter (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities . . . in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities.” 16 U.S.C. § 1851(a)(8); *accord* 50 C.F.R. § 600.345(a). NMFS’s guidelines define “sustained participation” to mean “continued access to the fishery within the constraints of the condition of the resource.” 50 C.F.R. § 600.345(b)(4). They further instruct that “[w]here the preferred alternative negatively affects the sustained participation of fishing communities, the

FMP should discuss the rationale for selecting this alternative over another with a lesser impact on fishing communities.” *Id.* § 600.345(b)(1), (c)(5).

57. National Standard Nine requires “[c]onservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.” 16 U.S.C. § 1851(a)(9); *accord* 50 C.F.R. § 600.350. Bycatch is defined as “the discard of whole fish at sea or elsewhere, including economic discards and regulatory discards, and fishing mortality due to an encounter with fishing gear that does not result in capture of fish.” 50 C.F.R. § 600.350(c)(1).

58. NMFS’s guidelines on National Standard Nine explain that it “requires Councils to consider the bycatch effects of existing and planned conservation and management measures.” *Id.* § 600.350(b). “[B]ycatch can increase substantially the uncertainty concerning total fishing-related mortality, which makes it more difficult to assess the status of stocks, to set the appropriate OY and define overfishing levels, and to ensure that OYs are attained and overfishing levels are not exceeded.” *Id.* § 600.350(b). The guidelines also instruct that a FMP must consider its management measures in terms of “net benefits to the Nation,” which include “[n]egative impacts on affected stocks,” “environmental consequences,” and “impacts on other marine organisms.” *Id.* § 600.350(d).

59. Under National Standard Nine, an FMP must also “assess the effects on the amount and type of bycatch and bycatch mortality” for “each management measure.” *Id.* § 600.350(d)(2). “The benefits of minimizing bycatch to the extent practicable should be identified and an assessment of the impact of the selected measure on bycatch and bycatch mortality provided.” *Id.* § 600.350(d)(2). NMFS requires an FMP to “[s]elect measures that, to the extent practicable, will minimize bycatch and bycatch mortality.” *Id.* § 600.350(d)(3).

Finally, NMFS explains that Fishery Management Councils “should adhere to the precautionary approach found in the Food and Agriculture Organization of the United Nations (FAO) Code of Conduct for Responsible Fisheries (Article 6.5)” in considering the potential effects on bycatch. *Id.* § 600.350(d)(3)(ii).

60. In reviewing an FMP, NMFS also recognizes that “[o]ther applicable laws, such as the [Marine Mammal Protection Act], the ESA, and the Migratory Bird Treaty Act, require that Councils consider the impact of conservation and management measures on living marine resources other than fish; i.e., marine mammals and birds.” *Id.* § 600.350(e).

Procedural Requirements Related to Fishery Management Plans

61. After a Fishery Management Council has prepared an FMP, NMFS, by delegation from the Secretary of Commerce and NOAA, must review the FMP to ensure “it is consistent with the national standards, the other provisions of [the MSA], and any other applicable law.” 16 U.S.C. § 1854(a)(1)(A).

62. The MSA requires the Secretary to follow specific statutorily mandated guidelines to review both fishery management plans and their implementing regulations submitted by Fishery Management Councils. *See id.* § 1854.

63. The MSA requires that “proposed regulations which the Council deems necessary or appropriate for the purposes of . . . implementing a fishery management plan or plan amendment shall be submitted to the Secretary *simultaneously* with the plan or amendment under [16 U.S.C. § 1854].” *Id.* § 1853(c)(1) (emphasis added). “Proposed regulations which the Council deems necessary or appropriate for the purposes of . . . making modifications to regulations implementing a fishery management plan or plan amendment may be submitted to

the Secretary at any time after the plan or amendment is approved under [16 U.S.C. § 1854].” *Id.* § 1853(c).

64. “Upon transmittal by the Council to the Secretary of a fishery management plan or plan amendment, the Secretary shall (A) immediately commence a review of the plan or amendment to determine whether it is consistent with the national standards, the other provisions of this chapter, and any other applicable law; and (B) immediately publish in the Federal Register a notice stating that the plan or amendment is available and that written information, views, or comments of interested persons on the plan or amendment may be submitted to the Secretary during the 60-day period beginning on the date the notice is published.” *Id.* § 1854(a)(1)(A)-(B).

65. Once an FMP and its proposed regulations are submitted to the Secretary under 16 U.S.C. § 1853(c), the Secretary shall: “(1) immediately initiate an evaluation of the proposed regulations to determine whether they are consistent with the fishery management plan, plan amendment, [the MSA] and other applicable law” and make a determination within fifteen days. *Id.* § 1854(b). “[I]f that determination is affirmative, the Secretary shall publish such regulations in the Federal Register, with such technical changes as may be necessary for clarity and an explanation of those changes, for a public comment period of 15 to 60 days.” *Id.* If the determination is negative, “the Secretary shall notify the Council in writing of the inconsistencies and provide recommendations on revisions that would make the proposed regulations consistent with the fishery management plan, plan amendment, [the MSA], and other applicable law.” *Id.* The Council may then revise the proposed regulations and resubmit them for the Secretary’s review and evaluation under 16 U.S.C. § 1854(b).

National Environmental Policy Act

66. NEPA is “our basic national charter for protection of the environment.” 40 C.F.R. § 1500.1(a). NEPA requires all federal agencies to assess the environmental and intertwined socioeconomic consequences of their actions before those actions are undertaken, to ensure that their decisions are fully informed. It also ensures that the public is made aware of the environmental effects of agencies’ decisions and is allowed to participate in the process of preparing environmental reviews. *See* 42 U.S.C. §§ 4321-4332; 40 C.F.R. §§ 1502.1, 1503.1.

67. An Environmental Impact Statement (EIS) is required under NEPA for all “major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C).

68. “The primary purpose of an environmental impact statement is to serve as an action-forcing device to insure that the policies and goals defined in [NEPA] are infused into the ongoing programs and actions of the Federal Government.” 40 C.F.R. § 1502.1. As such, an EIS must “provide full and fair discussion of significant environmental impacts and [must] inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.” *Id.* § 1502.1.

69. The “human environment” to be analyzed “shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. . . . When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment.” *Id.* § 1508.14.

70. Accordingly, an EIS must analyze: “(i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be

implemented, (iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented." 42 U.S.C. § 4332(2)(C).

71. In preparing an EIS, an agency must take a "hard look" at all reasonably foreseeable impacts of the proposed agency action, *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 374 (1989), so that the agency may "make decisions that are based on understanding of environmental consequences," 40 C.F.R. § 1500.1(c). The EIS ensures that the agency will take actions that "protect, restore, and enhance the environment." *Id.* § 1500.1(c). NEPA further requires agencies to use high quality, accurate scientific information and to ensure the scientific integrity of their analysis. *Id.* §§ 1500.1(b), 1502.24.

72. The effects that must be discussed in an EIS include, in part, the direct environmental impacts of the proposed action, the indirect effects of the proposed action, and the cumulative impacts of the proposed action. Direct effects are those "which are caused by the action and occur at the same time and place." *Id.* § 1508.8(a). Indirect effects are those "which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." *Id.* § 1508.8(b). A cumulative impact constitutes the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency . . . or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." *Id.* § 1508.7.

73. An EIS must analyze the ecological effects, including "the effects on natural resources and on the components, structures, and functioning of affected ecosystems," of the

proposed agency action. *Id.* § 1508.8. An EIS must also analyze potential adverse economic and commercial effects that are interrelated with natural or physical environmental effects. *Id.*

§ 1508.14.

74. An adequate EIS must analyze the proposed agency action in different contexts. *See id.* § 1508.27. Specifically, “context” means that “the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality Both short- and long-term effects are relevant.” *Id.* § 1508.27(a).

75. An EIS must also analyze the intensity, or the “severity” of the impacts of the proposed agency action. *Id.* § 1508.27(b). This requires an agency to consider “[t]he degree to which the effects on the quality of the human environment are likely to be highly controversial.” *Id.* § 1508.27(b)(4). An agency must also discuss “[t]he degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks,” *id.* § 1508.27(b)(5), and “the degree to which the proposed agency action is related to other actions of “individually insignificant but cumulatively significant impacts,” *id.* § 1508.27(b)(7). Analysis of the intensity of the proposed action must also discuss the extent to which the proposed agency action “may cause loss or destruction of significant scientific, cultural or historical resources,” *id.* § 1508.27(b)(8), and “[t]he degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973,” *id.* § 1508.27(b)(9).

76. NEPA also requires agencies to disclose and analyze measures to mitigate the impacts of proposed actions. *Id.* §§ 1502.14(f), 1502.16(h). Mitigation must “be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated.”

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 352 (1989).

77. Finally, NEPA requires that an EIS contain a thorough discussion of the “alternatives to the proposed action.” 42 U.S.C. § 4332(2)(C)(iii), (E). The discussion of alternatives is “the heart” of the NEPA process, and is intended to provide a “clear basis for choice among options by the decisionmaker and the public.” 40 C.F.R. § 1502.14; *see also* 42 U.S.C. § 4332(2)(C)(iii), (E). The agency must “[r]igorously explore and objectively evaluate all reasonable alternatives.” 40 C.F.R. § 1502.14(a). As such, “[a]n agency may not define the objectives of its action in terms so unreasonably narrow that only one alternative from among the environmentally benign ones in the agency’s power would accomplish the goals of the agency’s action, and the EIS would become a foreordained formality.” *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 196 (D.C. Cir.1991) (citation omitted).

78. In preparing a final EIS, an agency must assess, consider, and respond to comments submitted by other agencies or the public. 40 C.F.R. § 1503.4(a). After preparation of an EIS and at the time of its final decision, an agency prepares a concise, public record of decision (ROD). Among other things, the ROD describes and explains the basis for the agency’s ultimate decision, discusses all alternatives considered, and states whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why. *Id.* § 1505.2.

79. Under certain circumstances, an agency should prepare a programmatic EIS (PEIS), which “assess[es] the environmental impacts of proposed policies, plans, programs, or projects for which subsequent actions will be implemented. . . .” Exec. Office of the President,

Council on Env'tl. Quality, *Memorandum for Heads of Federal Departments and Agencies, Effective Use of Programmatic NEPA Reviews* 7 (2014)²; see also 40 C.F.R. § 1508.28.

80. A Programmatic EIS “reflects the broad environmental consequences attendant upon a wide-ranging federal program . . . that . . . is likely to generate disparate yet related impacts. . . .” *Nevada v. Dep’t of Energy*, 457 F.3d 78, 92 (D.C. Cir. 2006) (quoting *Found. on Econ. Trends v. Heckler*, 756 F.2d 143, 159 (D.C. Cir. 1985)). An agency should prepare a Programmatic EIS if the actions at issue “are connected, cumulative, or sufficiently similar that a Programmatic EIS is the best way to assess adequately the combined impacts of similar actions or reasonable alternatives to such actions.” *Id.* (citing 40 C.F.R. § 1508.25(a)) (internal quotation marks omitted). Programmatic NEPA reviews “are governed by the same regulations and guidance that apply to non-programmatic NEPA reviews.” Exec. Office of the President, Council on Env'tl. Quality, *supra*, at 7.

81. An agency may not defer analysis of reasonably foreseeable, site-specific environmental consequences of a larger program merely by saying that the consequences might be analyzed later. See *Scientists’ Inst. for Pub. Info., Inc. v. Atomic Energy Comm’n*, 481 F.2d 1079, 1092 (D.C. Cir. 1973). Indeed, such procrastination is antithetical to NEPA’s basic charge to undertake analysis and integrate it into agency decision-making as early as possible. See 40 C.F.R. §§ 1501.2, 1502.2(g), 1502.5.

82. After preparing an EIS, an agency must remain alert to “new information that may alter the results of its original environmental analysis.” *Friends of Clearwater v. Dombeck*, 222

² Available at https://www.whitehouse.gov/sites/default/files/docs/effective_use_of_programmatic_nepa_reviews_18dec2014.pdf.

F.3d 552, 557 (9th Cir. 2000). An agency must supplement an EIS when “[t]he agency makes substantial changes in the proposed action that are relevant to environmental concerns,” 40 C.F.R. § 1502.9(c)(1)(i), or when “[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.” *Id.* § 1502.9(c)(1)(ii). The same “hard look” standards that apply to an EIS apply to a Supplemental EIS. *See Miss. River Basin All. v. Westphal*, 230 F.3d 170, 174 (5th Cir. 2000).

83. Finally, cooperating agencies must be consulted during the NEPA process and their input taken into account. 42 U.S.C. § 4332(2)(C). The agency with overall responsibility for the proposed federal action is the agency charged with NEPA compliance and analysis of the impacts of its own action, a responsibility that the agency may not attempt to abdicate to any other agency. *See Calvert Cliffs’ Coordinating Comm., Inc. v. U.S. Atomic Energy Comm’n*, 449 F.2d 1109, 1123 (D.C. Cir. 1971).

Endangered Species Act

84. The ESA is “the most comprehensive legislation for the preservation of endangered species ever enacted by any nation.” *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 180 (1978). In enacting the ESA, “Congress has spoken in the plainest of words, making it abundantly clear that the balance has been struck in favor of affording endangered species the highest of priorities.” *Id.* at 194. “[T]he plain language of the [ESA] . . . shows clearly that Congress viewed the value of endangered species as ‘incalculable.’” *Id.* at 187 (citation omitted).

85. The ESA contains a variety of protections designed to save species from extinction. *See Babbitt v. Sweet Home Chapter of Communities for a Great Or.*, 515 U.S. 687, 690 (1995). Section 4 of the ESA prescribes two mechanisms by which the two expert wildlife agencies—NMFS or the U.S. Fish and Wildlife Service (FWS), depending on the species at

issue—determines whether a species should be listed as threatened or endangered under the ESA. 16 U.S.C. § 1533. Section 9 makes it unlawful for any person to “take” a listed species. *Id.* “Take” is defined broadly to include harass, harm, wound, or kill. *Id.* § 1532(19). “Harass” is defined to include acts that create the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns. 50 C.F.R. § 17.3. “Harm” includes significant habitat modification or degradation that actually kills or injures wildlife by significantly impairing essential behavioral patterns. *Id.* § 17.3; *see also Sweet Home Chapter of Communities for a Great Or.*, 515 U.S. at 696-97.

86. Section 7 of the ESA mandates that each federal agency, in consultation with NMFS or FWS, “insure” that any action carried out by the agency is not likely to jeopardize the continued existence of protected species. 16 U.S.C. § 1536(a)(2). An action is considered to result in jeopardy where it would reasonably be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species. 50 C.F.R. § 402.02.

87. Agencies also must “insure” their action will not adversely modify any habitat designated as “critical.” 16 U.S.C. § 1536(a)(2). Critical habitat consists of “the specific areas within the geographical area occupied by the species, at the time it is listed . . . on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection.” *Id.* § 1532(5)(A).

88. To carry out these substantive mandates, the ESA and its implementing regulations require federal agencies to consult with the wildlife agencies on the effects of their proposed actions. *Id.* § 1536(a)(2); 50 C.F.R. §§ 402.12-.16. “Action” triggering ESA consultation duties is broadly defined, to include “all activities or programs of any kind

authorized, funded, or carried out, in whole or in part, by Federal agencies,” including “actions directly or indirectly causing modifications to the land, water, or air.” 50 C.F.R. § 402.02. The consultation process begins with the requirement that the “action” agency ask the expert agencies whether any listed or proposed species may be present in the area of the agency action. 16 U.S.C. § 1536(c)(1); 50 C.F.R. § 402.12. In the case of marine species, NMFS is both the action agency and the consulting agency. If listed or proposed species may be present, the action agency must prepare a “Biological Assessment” to determine whether the species is likely to be affected by the proposed action. 16 U.S.C. § 1536(c)(1).

89. If the agency determines the action “may affect” a listed species or critical habitat, the agency must consult with NMFS and/or FWS (or in NMFS’s case, self-consult) to “insure” that the action is “not likely to jeopardize the continued existence” of that species, or “result in the destruction or adverse modification of habitat . . . determined . . . to be critical . . .” *Id.* § 1536(a)(2); 50 C.F.R. § 402.14(h).³

90. The threshold for a finding of “may affect” is extremely low. A triggering effect need not be significant; rather “[a]ny possible effect, whether beneficial, benign, adverse, or of an undetermined character, triggers the formal consultation requirement. . . .” Interagency Cooperation—Endangered Species Act of 1973, as Amended; Final Rule, 51 Fed. Reg. 19,926, 19,949 (June 3, 1986).

³ “Jeopardize” means taking action that “reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.” 50 C.F.R. § 402.02. A species’ “critical habitat” includes those areas identified as “essential to the conservation of the species” and “which may require special management considerations or protection.” 16 U.S.C. § 1532(5)(A).

91. If a proposed action “may affect” a listed species or designated critical habitat, formal consultation is required, unless the expert agency concurs in writing with an action agency’s finding that the proposed action “is not likely to adversely affect” listed species or designated critical habitat. 50 C.F.R. §§ 402.02, 402.13(a), 402.14 (a).

92. Formal consultation is concluded with the issuance of a Biological Opinion determining whether the proposed agency action is likely to jeopardize the continued existence of ESA-protected species. *Id.* § 402.14(h)(3). If NMFS concludes that the proposed action “will jeopardize the continued existence” of a listed species, the Biological Opinion must outline “reasonable and prudent alternatives.” 16 U.S.C. § 1536(b)(3)(A). If the Biological Opinion concludes that the action is not likely to jeopardize the continued existence of a listed species, and will not result in the destruction or adverse modification of critical habitat, NMFS must provide an “incidental take statement,” specifying the amount or extent of such incidental taking on the listed species, any “reasonable and prudent measures” that they consider necessary or appropriate to minimize such impact, and setting forth the “terms and conditions” that must be complied with to implement those measures. *Id.* § 1536(b)(4); 50 C.F.R. § 402.14(i). In order to monitor the impacts of incidental take, NMFS must monitor and report the impact of its action on the listed species as specified in the incidental take statement. 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i)(1)(iv), (i)(3). “If during the course of the action the amount or extent of incidental taking . . . is exceeded,” NMFS “must reinitiate consultation immediately.” 50 C.F.R. § 402.14(i)(4).

93. “Informal consultation,” what NMFS undertook in this case, is an exception to the requirement that a comprehensive Biological Opinion be prepared in formal consultation once the initial “may affect” threshold is triggered. Invocation of this exception is permissible only

where an action is “not likely to adversely affect listed species or critical habitat.” *Id.*

§§ 402.13(a), 402.02. Informal consultation includes all discussions between NMFS and the action agency prior to formal consultation. *Id.* § 402.13(a). If, through this process, an agency determines that a proposed action is “not likely to adversely affect” ESA-protected species, and NMFS issues a written concurrence in that determination, the consultation requirements of Section 7 of the ESA are fulfilled and formal consultation is not required. *Id.* § 402.13(a).

94. “Effects” of an action are defined broadly to include “the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline.” *Id.* § 402.02. “Indirect effects are those that are caused by the proposed action and are later in time, but still are reasonably certain to occur. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration.” *Id.* § 402.02.

95. Critical habitat is designated to preserve specific features known as “primary constituent elements.” Primary constituent elements are the “physical or biological features” that are “essential to the conservation of the species” and “which may require special management considerations or protection.” 16 U.S.C. § 1532(5)(A)(i); *accord* 50 C.F.R § 424.12(b). An area may be designated because it provides shelter, prey, or many other features. If an action impairs any primary constituent element, this “may affect” the critical habitat, triggering the need for consultation. U.S. Fish and Wildlife Serv. & Nat’l Marine Fisheries Serv., *Endangered Species*

Consultation Handbook 4-24 (1998) (assessing effects of an action should consider “primary constituent elements of the critical habitat, including direct and indirect effects”)⁴; *see also, e.g., Miccosukee Tribe of Indians of Florida v. U.S.*, 566 F.3d 1257, 1272-73 (11th Cir. 2009) (granting “*Chevron* deference” to the ESA Consultation Handbook).

96. ESA Section 7 Consultation Handbook explains that a finding of “not likely to adversely affect . . . can be made only if ALL of the reasonably expected effects of the proposed action will be beneficial, insignificant, or discountable.” *Id.* at 4-1 (emphasis in original). “Beneficial effects are contemporaneous positive effects without any adverse effects to the species or habitat.” *Id.* at B-55. “Insignificant effects relate to the size of the impact (and should never reach the scale where take occurs), while discountable effects are those that are extremely unlikely to occur.” *Id.* “Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur.” *Id.*; *see also id.* at xv-xvi. Thus, an action is “likely to adversely affect” protected species, and formal consultation is required, if “any adverse effect to listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not: discountable, insignificant, or beneficial.” *Id.* at xv.

97. In fulfilling Section 7 consultation duties, the ESA also mandates that agencies use the best scientific and commercial data available. 16 U.S.C. § 1536(a)(2).

98. Until the consulting agency issues a comprehensive Biological Opinion, the action agency may not commence the action. 16 U.S.C. § 1536(d). During consultation, NMFS is prohibited from making any irreversible or irretrievable commitment of resources with respect to

⁴ Available at <http://endangered.fws.gov/consultations/s7hndbk/s7hndbk.htm>.

the agency action that may foreclose the formulation or implementation of any reasonable and prudent alternative measures. 16 U.S.C. § 1536(d).

99. Federal agencies also have a continuing duty under Section 7 of the ESA to reinitiate consultation whenever “new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered,” where the action in question is “subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion,” or where “a new species is listed or critical habitat designated that may be affected by the identified action.” 50 C.F.R. § 402.16(b)-(d).

100. In all of these analyses, agencies are required to “give the benefit of the doubt to the species.” *See Conner v. Burford*, 848 F.2d 1441, 1454 (9th Cir. 1988) (quoting H. R. Conf. Rep. No. 96-697, 96th Cong., 1st Sess. 12 (1979), *reprinted in* 1979 U.S.C.C.A.N. 2572, 2576).

Administrative Procedure Act

101. The APA provides for judicial review of final agency actions. 5 U.S.C. § 702. “Agency action” encompasses “the whole or a part of an agency rule, order, license, sanction, relief, or the equivalent or denial thereof, or failure to act.” *Id.* § 551(13).

102. The APA requires reviewing courts to “compel agency action unlawfully withheld or unreasonably delayed” and “hold unlawful and set aside agency action, findings, and conclusions” it finds “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law” or “without observance of procedure required by law.” *Id.* § 706(2)(A), (D).

103. Courts review claims concerning NMFS’s compliance with the MSA, NEPA, and the ESA under the APA’s standard of review, 5 U.S.C. § 706. *See, e.g., Pac. Coast Fed’n of*

Fishermen's Ass'ns v. Blank, 693 F.3d 1084, 1091 (9th Cir. 2012); *Sierra Club v. Glickman*, 67 F.3d 90, 95 (5th Cir. 1995) (“[T]he appropriate standard of review of federal administrative agency action under both § 7 and § 9 of the ESA is the arbitrary and capricious standard prescribed by the [APA] § 706(2)(A).”); *id.* at 95 n.5 (gathering cases from other jurisdictions that support this standard of review).

104. The APA charges courts to conduct a thorough review of the record to determine whether the agency decision was based on consideration of the relevant factors and whether there has been a clear error of judgment. *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 415-16 (1971).

105. Pursuant to the APA, agency actions should be overturned where the agency has relied on factors that Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise. *See, e.g., Motor Vehicle Mfrs. Ass'n v. State Farm Mutual Auto. Ins. Co.*, 463 U.S. 29, 43-44 (1983). Courts should also overturn an agency's decision if there is no “rational connection between the facts found and the choice made.” *Id.* at 52 (citation omitted). Agency action can only be upheld on the basis articulated by the agency itself in its decision. *Id.* at 43-44, 57.

FACTUAL BACKGROUND

General Background on Industrial Aquaculture

106. Industrial aquaculture has a plethora of well-known, documented adverse environmental and intertwined socioeconomic consequences. These adverse impacts include but are not limited to: the escape of farmed fish into the wild from their containment; the spread of

deadly diseases and parasites from aquaculture facilities to wild fish and marine wildlife; the pollution of ocean ecosystems from the inputs (e.g., drugs, pesticides, fungicides, algacides) and outputs (wastes) of industrial aquaculture; the privatization of ocean resources; threats to marine life and marine ecosystems from aquaculture systems; and market displacement and price competition from cheaply produced farmed fish. Those significant adverse impacts are some of the major reasons why the challenges to the action here—allowing the permitting of industrial aquaculture in U.S. federal waters for the first time—have been so controversial.

107. It is well accepted that fish grown in netpens and cages regularly escape into surrounding waters. The number of fish escapes from industrial aquaculture is immense: over 24 million worldwide in just over two decades. Escaped fish threaten already-depleted wild fish populations in the open ocean environment in many ways. They compete for food and habitat. They displace other marine species from habitats and cause genetic pollution of wild fish. Such frequent farmed fish escapes have negatively impacted wild fish populations. Studies have shown that when farmed and wild fish interbreed their offspring have diminished survival skills, reduced fitness, and potentially altered characteristics such as changes in the timing of critical development factors. Due to the practice of genetic selection in fish farming—constantly inbreeding related fish, for example to increase growth rates over time—escape and interbreeding of farmed fish with wild fish ultimately reduces genetic diversity, decreasing the resiliency of our invaluable marine resources.

108. Industrial aquaculture also increases the risk of pathogens and diseases that are transferable between farmed and wild fish. The farming of a single stock of fish in densely packed systems elevates concentrations of diseases and parasites, inducing faster evolutions toward more resistant strains. This leads to disease and parasite outbreaks that are difficult to

control, which can spread to wild fish, as with sea lice in farmed Atlantic salmon.

109. Consequently, many industrial aquaculture facilities use large doses of pharmaceuticals, antibiotics, pesticides, fungicides, and algacides, attempting to protect their investment from diseases, parasites, and various other detrimental organisms. The majority of these chemicals are applied directly into the water, yet little is known about how this significant new form and method of pollution release may affect marine ecosystems, other aquatic organisms, or human health. Indeed, studies have concluded that reliance on antibiotic applications in fish farming has fostered the development of bacterial antibiotic resistance in our waters.

110. Also, contrary to claims that farmed fish production will replace wild fish consumption or alleviate fishing pressure on wild fish stocks, industrial aquaculture has actually exacerbated the diminishing populations of wild fish. This will be especially true in offshore aquaculture operations in federal waters that farm carnivorous fish species, which require a diet high in fishmeal and/or fish oil that is often derived from wild-caught fish stocks such as mackerel, herring, menhaden, and anchovies. Many more forage fish must be caught in order to grow carnivorous fish, pressuring those fisheries. For instance, in the Gulf of Mexico, menhaden is known to function as a filter feeder, as well as serve as a significant source of prey for a variety of predator species. Many of the native and migratory fish species that utilize the Gulf of Mexico, including king mackerel, Spanish mackerel, dorado, crevalle jack, tarpon, bonito, red snapper, and red drum all prey on menhaden. Several known species of shark (blacktip, spinner, finetooth, dusky, and Atlantic sharpnose) as well as coastal bottlenose and spotted dolphins feed heavily on menhaden during all or part of their life cycles. Similarly, the diet of Louisiana's state bird, the brown pelican, has been found to consist of over ninety-five percent menhaden in some

studies. The industry's ever-growing demand for aquaculture feed jeopardizes the survival of wild fish stocks, such as Gulf menhaden, and disrupts the balance of the marine ecosystem.

111. In addition to the depletion of wild fisheries for fish feed, the necessary inputs in aquaculture fish production carry other significant environmental harms. The industry has turned to land-based ingredients such as soy—never before found in marine fishes' natural diets—as substitutes for fishmeal. However, soy substitution has its own problems, including unknown impacts from its introduction into the marine environment, and soil erosion, carbon emissions from agricultural and manufacturing operations, deforestation, and reduction in tropical biodiversity that results from increased soy production.

112. Industrial aquaculture also unloads massive amounts of pollution and wastes directly into the ocean environment, including excess fish feed, dead fish, and fish feces, resulting in nutrient pollution and eutrophication (the over-enrichment of waters with organic material). Nutrient pollution decreases oxygen levels in our waters, killing off aquatic life and creating low-oxygen “dead zones” and harmful algae blooms. Despite the industrial aquaculture industry's assertion that pollution from offshore aquaculture would be diluted in deeper waters, existing studies show that “dilution is not the solution to pollution”—it all goes somewhere and has effects. Accumulation of pollutants continues to occur and has been found to affect a larger area due to the unpredictability of ocean currents.

113. Industrial aquaculture facilities also directly threaten marine animals, including endangered and threatened species. Naturally, a densely stocked cage full of captive fish attracts predators, marine mammals, and other wildlife. These marine animals can become entangled in the netting, or harassed and killed by fish farmers protecting their farmed fish stock. In offshore aquaculture facilities, these containment structures may also block migratory paths or alter

essential habitats of endangered species and wild fisheries. Finally, the aquaculture cages and the ready supply of fish feed inputs attract other wild fish. These fish-attractant devices cause fish to congregate by the cages and structures, and in turn reduce catch for fishermen whose access to waters surrounding aquaculture structures may be restricted, as is the case here.

114. Industrial aquaculture also raises significant human health and food safety concerns. The antibiotics and other chemicals that are used in fish farming to prevent disease and parasites can accumulate in the fish. The consumption of fish feed made from wild-caught fish may also be heavily contaminated with dioxins and Polychlorinated Biphenyls (PCBs). The potential spread of diseases and parasites from wild fish to farmed fish raised exclusively for human consumption adds another threat to public health. In addition to the accumulation of toxic chemicals, studies have found farmed fish to be less healthful than their wild counterparts, negating the perceived advantages of eating seafood.

115. In addition to the adverse environmental and public health impacts of industrial aquaculture, the activity also brings significant intertwined socioeconomic costs. The history of farmed salmon illustrated that aquaculture and its resulting supply of farmed salmon in the global market immediately drastically reduced the price of both farmed and wild varieties of salmon. Those fishing for salmon in Alaska saw their livelihoods destroyed. From the late 1980s to 2004, the value of wild Alaskan salmon plummeted from \$800 million to \$300 million per year. By the time the wild salmon industry rebranded itself as a high-quality niche product, many traditional salmon fishermen had declared bankruptcy and gone out of business. As aquaculture operations expanded through consolidation, local jobs were eliminated, to the detriment of local fishing communities. For example, while Norwegian salmon and trout aquaculture production more than quadrupled between 1992 and 2003, the employment rate fell dramatically—from 24.4 to 5.7

jobs per thousand metric tons of production. Experts predict that open ocean aquaculture will require a similar scale to be profitable, while being farther out at sea will require automated systems with minimum human input. Thus rather than reinvigorating local economies, open ocean aquaculture will only flood the market with an abundance of farmed finfish—resulting in net loss to local fishermen.

116. These negative economic impacts fundamentally injure the cultural heritage of traditional fishing communities. Offshore aquaculture creates competition that drives down the price of wild fish, and results in the loss of fishing and fishing-related employment and income. In the Gulf of Mexico region, commercial and recreational fishing is an economic engine, and contributes greatly to the quality of life for thousands of recreational enthusiasts. Businesses and families up and down the Gulf Coast depend on healthy wild fish stocks for their livelihoods. Adverse impacts on fish from the introduction of commercial industrial aquaculture could further strain already imperiled fish, affecting fishing communities' abilities to maintain themselves long-term. As Defendants acknowledged in the Aquaculture FMP, the loss of livelihood as a fisherman "is a loss of personal and social identity." Aquaculture FMP/PEIS at 38.

The Development of Offshore Industrial Aquaculture in the Gulf EEZ

117. On January 13, 2016, Defendants issued the Gulf Industrial Aquaculture Regulations implementing the Fishery Management Plan for commercial offshore aquaculture in the Gulf of Mexico. Fisheries of the Caribbean, Gulf, and South Atlantic; Aquaculture, 81 Fed. Reg. 1762, 1762 (Jan. 13, 2016). The Aquaculture FMP and its implementing Regulations is the first-ever permit program for commercial offshore aquaculture in federal waters. 81 Fed. Reg. at 1762.

118. There is no U.S. law authorizing offshore aquaculture in the U.S. EEZ, or

allowing NMFS to set up a regulatory regime that establishes an aquaculture permitting scheme under its MSA “fishing” authority. Instead, Congress believed new statutory authority—a statute specifically focused on the different risks of industrial aquaculture, rather than traditional fishing—was first required in order for the U.S. to undertake that activity. Consequently Congress, on at least three separate occasions, introduced legislation with the support and at the behest of the Department of Commerce that would have established a permitting regime for offshore aquaculture operations in federal waters, including federal waters in the Gulf. *See* National Offshore Aquaculture Act of 2005, S. 1195, 109th Cong. (2005) (stating the legislation’s purpose was “[t]o provide the necessary authority to the Secretary of Commerce for the establishment and implementation of a regulatory system for offshore aquaculture in the United States Exclusive Economic Zone”); National Offshore Aquaculture Act of 2007, H.R. 2010, 110th Cong. (2007) (same); National Sustainable Offshore Aquaculture Act of 2011, H.R. 2373, 112th Cong. (2011) (stating the legislation’s purpose was “[t]o establish a regulatory system and research program for sustainable offshore aquaculture in the United States exclusive economic zone”). These bills have all failed to pass.

119. Lacking Congressional authorization for this new activity, Defendants decided to proceed anyway by attempting to extend their existing MSA fishing authority, which has now culminated in the challenged Regulations. As Defendants acknowledge, the Aquaculture FMP and its implementing regulations “would set a precedent,” as it would be implemented “before [any] national legislation is approved by Congress.” Aquaculture FMP/PEIS at 377.

120. Defendants’ decision to move ahead without congressional legal authority was highly controversial and questioned by, *inter alia*, members of Congress; numerous consumer and public interest organizations, including many of the Plaintiffs and their members; and other

governmental agencies. For example, in October 2008, Representative Nick Rahall, Chairperson of the U.S. House of Representatives Natural Resources Committee, sent a letter to the Gulf Council stating the Council should not move forward with finalizing the Aquaculture FMP because it lacked the legal authority to do so under the MSA.

121. In conducting its statutorily mandated NEPA review of the final PEIS, the U.S. Environmental Protection Agency (EPA) raised the same concern, emphasizing that the establishment of commercial offshore aquaculture in the Gulf EEZ is “controversial,” stating that “*Congress did not intend for the [MSA] to grant authority to NOAA and the Council to regulate offshore aquaculture as fishing under the [MSA],*” and pointing out that Defendants received critical comments from over one hundred different groups expressing concerns about potential harmful environmental effects. U.S. Env’tl. Protection Agency, EPA NEPA Comments on NOAA PFEIS for the “Fishery Management Plan for Regulating Offshore Marine Aquaculture in the Gulf of Mexico” (EPA 2009 Comments) 3 (2009) (emphasis in original).⁵

The Aquaculture FMP’s Twisted Procedural History

122. The challenged decision and final regulations are the culmination of an extended rulemaking and convoluted procedural history that began about twelve years ago, when in 2002, Joseph Hendrix, an aquaculture entrepreneur from Texas, was appointed to the Gulf Council. At his urging, the Gulf Council began developing a means to permit industrial aquaculture in federal waters, and gave notice in 2004 of its intent to develop an offshore aquaculture program for the Gulf of Mexico. Fisheries of the Caribbean, Gulf of Mexico, and South Atlantic; Draft Generic

⁵ Available at <https://cdxnodengn.epa.gov/cdx-enepa-II/public/action/eis/details/downloadCommentLetters?eisId=80939>.

Amendment to Gulf of Mexico Fishery Management Plans for Offshore Aquaculture, 69 Fed. Reg. 53,682 (Sept. 2, 2004).

123. After Congress did not pass national legislation pushed by the Defendants in 2005 that would authorize these agencies to issue industrial aquaculture permits, Defendants began an end-run around Congress, by supporting the development of a permitting scheme through the regional Gulf Council, made possible by overextending the Council's authority to manage "fishing" under the MSA.

124. In 2006, Defendants provided the Gulf Council with funding to hire contractors to rewrite the Council's fishery management draft development for an industrial aquaculture permitting program, so that the regional program would reflect NMFS's nationwide intentions. Defendants made clear that the Gulf Council permitting scheme was intended to be a blueprint for the rest of the country and ideally would be replicated by other regional councils nationwide in the future.

125. Instead of the Gulf Council determining how to best develop and implement an aquaculture permitting scheme in its region, as mandated under the MSA, contractors funded by Defendants, with input from Defendants, created an entirely new draft offshore aquaculture plan to allow industrial aquaculture permits in the federal waters of the Gulf of Mexico.

126. Defendants' draft offshore aquaculture plan was presented to the Gulf Council and the public for the first time in January 2007. There had been no public scoping process or public input at all.

127. The new offshore aquaculture plan was fast-tracked by the Gulf Council and slated for final approval in October 2007.

128. When the Gulf Council finally held public meetings, they were poorly publicized in the local communities; the meetings were sandwiched between public hearings on importance issues related to wild fish management, such as re-allocation of catch limits of popular fish species between commercial and recreational sectors and the development of the Gulf's first Individual Fishing Quota system. Not surprisingly, the initial public meetings were poorly attended with little public input. Meanwhile, Defendants appointed those with private interests in industrial aquaculture to the Gulf Council.

129. Defendants took over writing and editing of the Gulf Council's aquaculture plan. Significant additions and edits to the plan were made between Council meetings without Council input or discussion and outside public venues, by a randomly formed new body, the "Offshore Aquaculture Interdisciplinary Planning Team," which consisted of some Gulf Council members, NMFS staff, and others. Meetings of the Offshore Aquaculture Interdisciplinary Planning Team happened entirely without public notice or public access to meetings.

130. Defendants repeatedly interfered with the Gulf Council's involvement with the aquaculture plan. Defendants twice postponed the Gulf Council's vote on the aquaculture plan to allow themselves more time to edit and rewrite the new permitting program document.

131. Defendants then transformed the so-called Gulf Council's aquaculture plan into a fishery management plan (the Aquaculture FMP), in an effort to make it fit better with existing law, and to allow Defendants and the Gulf Council complete control over its development, rather than having to allow input from the South Atlantic Fishery Management Council, which jointly managed some of the same fish. Edits were hastily made for the new fishery management plan to attempt to meet the legal requirements in the MSA and other laws.

132. A full year later, at the January 2009 Council meeting, the new draft of the Aquaculture FMP was finally presented to and then approved by the Gulf Council, despite widespread public opposition and concerns regarding legal authority. Pursuant to MSA's procedural requirements, the Aquaculture FMP was then submitted to the Secretary of Commerce for review.

133. Upon information and belief, the Council did not simultaneously submit proposed regulations to the Secretary with the Aquaculture FMP following its January 27, 2009 approval.

134. On June 4, 2009, NMFS published in the Federal Register a Notice of Availability of the Council's proposed Aquaculture FMP. On information and belief, Defendants made numerous changes to the published Aquaculture FMP without further review by the Gulf Council.

135. The public comment period on the Aquaculture FMP ended on August 3, 2009. Then, in an unusual move, the Secretary did not approve, disapprove, or partially approve the Council's Aquaculture FMP within thirty days of the end of the comment period, as required under the MSA. Instead, the Secretary sent a letter to the Chairman of the Gulf Council on September 3, 2009, indicating that the statutory period had passed without Secretarial action and that the FMP had entered into effect by operation of law. The Secretary also indicated in this letter that she would not take action on the proposed Aquaculture FMP until NOAA completed development of a national aquaculture policy.

136. On information and belief, neither Defendants nor the Gulf Council took any action on the Aquaculture FMP until February 2013, when the Gulf Council voted to deem the implementing regulations for the 2009 FMP "necessary and appropriate," and submitted them to the Secretary for the already final FMP.

137. Over eighteen months later, in violation of the timeframe required in MSA § 1854(b)(1)(A), Defendants then published the proposed rule to implement the aquaculture FMP in the Federal Register on August 28, 2014. The 2014 publication in the Federal Register had several significant changes from the FMP approved in 2009, none of which the Secretary accounted for in the public notice.

First ESA Determination

138. Because NMFS concluded that the establishment of industrial aquaculture facilities in the Gulf might affect species protected under the ESA, it initiated ESA Section 7 consultation procedures. Specifically, in an April 2, 2009 memorandum, NMFS's Sustainable Fisheries Division requested initiation of Section 7 ESA consultation on the Aquaculture FMP from NMFS's Protected Resources Division. That memo explained that ESA-listed species that may occur in the area encompassed by the agency action, including several types of sea turtles (hawksbill, Kemp's ridley, leatherback, green, and loggerhead), marine mammals (blue whale, finback whale, humpback whale, sei whale, and sperm whale), the smalltooth sawfish, and corals (elkhorn and staghorn corals), and that "[t]here is no designated critical habitat in the action area." Memorandum from Phil Steele, Assistant Reg'l Admin., Sustainable Fisheries Div. to David Bernhart, Assistant Reg'l Admin., Protected Res. Div. at 2 (Apr. 2, 2009). According to NMFS, "potential routes of effect with listed species involve entanglement and/or capture via physical interaction with aquaculture structures and behavior disruption in habitats used as feeding or breeding grounds." *Id.* However the memo concluded with the Sustainable Fisheries Division's determination that, while the aquaculture facilities might impact protected species, the "proposed actions under the FMP are not likely to adversely affect any endangered or threatened species," and thus formal consultation should not be required. *Id.* NMFS could forego formal

consultation and the completion of a comprehensive Biological Opinion. The rationale given was that the “location and systems” of the proposed facilities would themselves be “subject to review and additional ESA consultation,” and that NMFS “may deny” any permit that is determined to potentially adversely affect listed species. *Id.* NMFS did not prepare a Biological Assessment in support of its two-page “not likely to adversely affect” determination memo.

139. A memo dated May 5, 2009 from the Regional Administrator for the NOAA Southeast Regional Office responded. The Regional Administrator agreed with the Sustainable Fisheries Division’s assessment, stating “we believe the proposed action is not likely to adversely affect any listed species under NMFS’ purview” and that this memorandum “conclude[d] consultation responsibilities under section 7 of the ESA for the proposed FMP.” Memorandum from Roy E. Crabtree, Reg’l Admin., Nat’l Marine Fisheries Serv. at 2-3 (May 5, 2009).

The Aquaculture FMP/PEIS Process

140. In 2007, the Gulf Council began efforts to prepare the Aquaculture FMP authorizing commercial aquaculture in the Gulf waters. *See* Gulf of Mexico Fishery Management Council; Public Meeting, 72 Fed. Reg. 56,059 (Oct. 2, 2007). On September 12, 2008, a notice of availability of the draft PEIS for the proposed commercial aquaculture scheme set forth in the Aquaculture FMP, was issued in the Federal Register as required under NEPA. Environmental Impact Statements; Notice of Availability, 73 Fed. Reg. 53,001 (Sept. 12, 2008). On June 4, 2009, NMFS published a notice announcing the availability of the Aquaculture FMP and called for public comments. Fisheries of the Caribbean, Gulf, and South Atlantic; Aquaculture, 78 Fed.

Reg. 5403, 5404 (Jan. 25, 2013). Later that same month, a notice of availability of the final PEIS for the Aquaculture FMP was issued.⁶ Environmental Impact Statements; Notice of Availability, 74 Fed. Reg. 30,569 (June 26, 2009).

141. Prior to the Aquaculture FMP, there had been no successful experimental offshore aquaculture, commercial or otherwise, in the Gulf. There were three applications for individual permits for experimental offshore aquaculture operations in the Gulf of Mexico EEZ.

Aquaculture FMP/PEIS at 142. Of the three applications for experimental offshore aquaculture operations in the Gulf, two were denied for lacking sufficient information regarding the proposed design or expertise to carry out the proposed operation. *Id.* at 142-45. The third application for an exempted fishing permit was approved, only to result in the destruction of fish cages and numerous fish escapes due to tropical storms and hurricanes, which are commonplace in the Gulf. *Id.* at 143. Fish were also lost during an attempt to move one of the cages. *Id.* In the end, the applicant voluntarily terminated the operation. *Id.*

142. Although the Notice of Availability of the Aquaculture FMP declared that NMFS would “publish a notice of agency action . . . announcing the Agency’s decision to approve, partially approve, or disapprove the FMP, and the associated rationale,” 74 Fed. Reg. at 26,830, NMFS did not take any such action. Instead, as a result, on September 3, 2009, the Aquaculture FMP “entered into effect by operation of law.” 81 Fed. Reg. at 1762.

143. On October 2, 2009, two of the Plaintiffs in this case, Gulf Restoration Network and Food & Water Watch, Inc., filed a complaint in the United States District Court for the District of Columbia challenging the Aquaculture FMP under the MSA, NEPA, and the APA,

⁶ The Aquaculture FMP and the PEIS were published as one document. *See supra* note 1.

asking the court to vacate the Aquaculture FMP. Complaint, *Gulf Restoration Network, Inc. v. NMFS*, 730 F. Supp. 2d 157 (D.D.C. 2010) (No. 1:09-cv-01833-GK). The district court granted the defendants' motion to dismiss, finding, amongst other reasons, that the claims were not yet ripe for adjudication and that there was no final challengeable agency action at that time, since Defendants had not promulgated any rules to implement the proposed actions in the Aquaculture FMP. *Gulf Restoration Network, Inc.*, 730 F. Supp. 2d at 174. Those regulations, which had not yet been promulgated, are the same regulations that now have been promulgated and are being challenged in this case.

The Deepwater Horizon Oil Spill and Supplemental PEIS

144. On April 20, 2010, an explosion occurred on the Deepwater Horizon oil platform that poured millions of barrels of oil into the Gulf of Mexico, making it the “biggest offshore oil spill in American history.”⁷ Additionally, millions of gallons of Corexit, a chemical with toxic properties, was used in an effort to control the spill both on top and under Gulf waters, despite direction from EPA to stop its usage.

145. Even several years after the explosion, biologists have found lingering—and perhaps growing—damage throughout the Gulf of Mexico related to both the oil from the Deepwater Horizon blowout and the dispersants used in an attempt to dissipate this oil. These effects include: persistent oil-and-dispersant globs; zooplankton that have accumulated toxic compounds from coming in contact with the Deepwater Horizon oil; undersea oil plumes; DNA fragmentation and lesions in wild fish; heart abnormalities in wild fish populations; and an

⁷ Campbell Robertson & Clifford Krauss, *BP May Be Fined Up to \$18 Billion for Spill in Gulf*, N.Y. Times (Sept. 4, 2014), <http://www.nytimes.com/2014/09/05/business/bp-negligent-in-2010-oil-spill-us-judge-rules.html>.

increase in bottlenose dolphins washing ashore sick or dead across the Gulf, from Texas to Florida. These effects could have serious ramifications for the cultured fish that would be placed in fish farms and, correspondingly, the health of humans who eat these fish.

146. On January 25, 2013, NMFS published a Notice of Intent to prepare a supplement to the PEIS for the Aquaculture FMP “in order to consider potential changes to the environment linked to the Deepwater Horizon blowout and determine if and how such changes may affect the actions and alternatives analyzed in the FMP” and called for public comments. Supplemental Notice of Intent to Prepare a Supplement to the Final Programmatic Environmental Impact Statement, 78 Fed. Reg. 5404 (Jan. 25, 2013).

147. In February 2013, before any public notice and comment on the Supplemental PEIS (SEIS) examining the impacts of the Deepwater Horizon oil spill on the marine ecosystem and any subsequent effects on the suitability of offshore aquaculture in the Gulf waters, NMFS moved forward by sending the proposed regulations implementing the Aquaculture FMP to the Gulf Council for review. *See* 81 Fed. Reg. at 1769. However, NMFS did not make the SPEIS available for public comment until a year later. Environmental Impact Statements; Notice of Availability, 79 Fed. Reg. 11,428, 11,428 (Feb. 28, 2014).

The FMP Regulations

148. On August 28, 2014, NMFS published the proposed regulations for implementing the Aquaculture FMP and requested public comments. Fisheries of the Caribbean, Gulf, and South Atlantic; Aquaculture, 79 Fed. Reg. 51,424 (Aug. 28, 2014). NMFS also sought public comments on a draft Supplemental Information Report, which NMFS prepared to assess the necessity of further supplementing its NEPA analysis on the FMP in light of how much time had passed since the preparation of the PEIS for the Aquaculture FMP back in 2009. 79 Fed. Reg. at

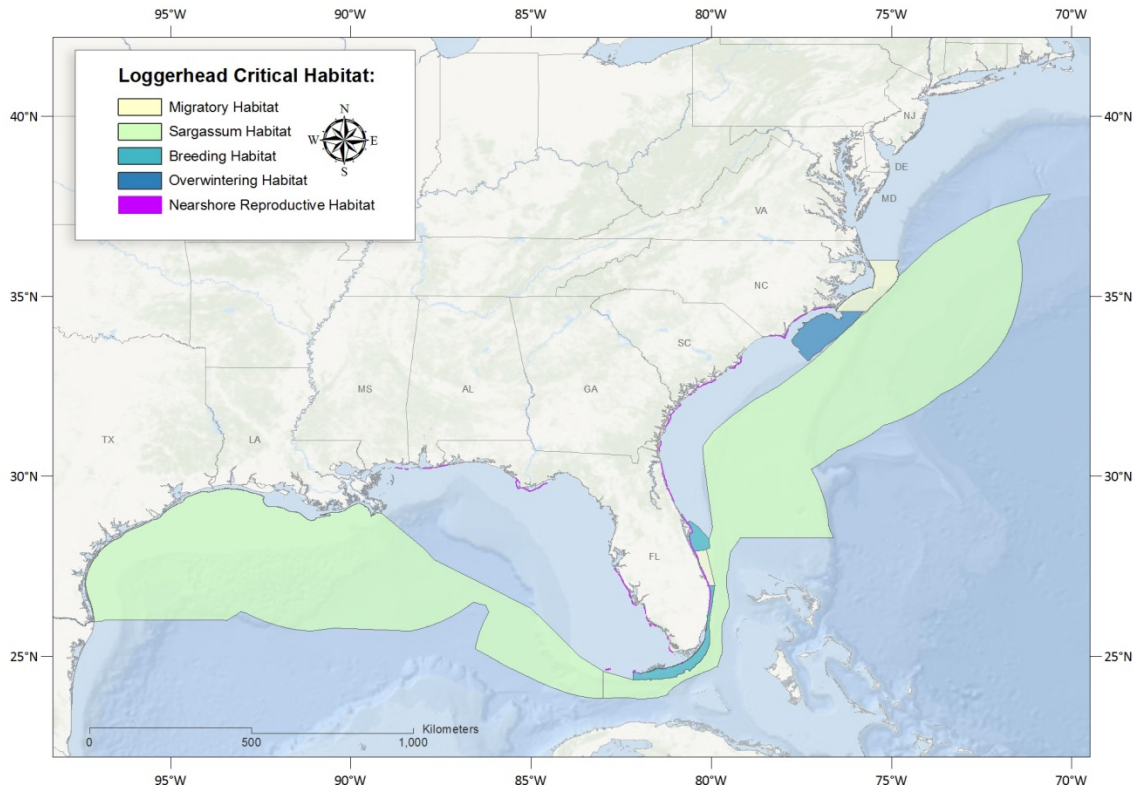
51,434. The draft Supplemental Information Report “conclude[d] that there [we]re no substantial changes to the proposed action or significant new circumstances or information that require the preparation of an additional supplement to the [Final PEIS] for the FMP.” 79 Fed. Reg. at 51,434.

Second ESA Determination

149. In a June 11, 2015 memo, Defendants determined they needed to “reinitiate” Section 7 ESA consultation, because of several new ESA actions in the Gulf since their 2009 informal consultation and prior “not likely to adversely affect” determination. Memorandum from Jack McGovern, Assistant Reg’l Admin., Sustainable Fisheries Div. to David Bernhart, Assistant Reg’l Admin., Protected Res. Div. (June 11, 2015). According to NMFS, these new actions were: the July 10, 2014, designation of critical habitat for loggerhead sea turtles, 79 Fed. Reg. 39,856; the September 10, 2014, listing of five coral reef species as threatened, 79 Fed. Reg. 53,852; and the March 23, 2015, proposed listing of green sea turtle distinct population segments, 80 Fed. Reg. 15,271.

150. Prior to the loggerhead sea turtle critical habitat designation, and at the time of the 2009 decision, there had been no critical habitat designated in the action area. The 2014 loggerhead turtle critical habitat designation established huge swaths of the Gulf of Mexico as newly designated critical habitat, particularly the turtles’ *Sargassum* habitat, a floating grass the turtle hatchlings use for food and shelter⁸:

⁸ Map available at http://www.nmfs.noaa.gov/pr/species/turtles/images/loggerhead_critical_habitat_map.jpg.



On information and belief, the designated critical habitat encompasses approximately fifty-five percent of the total Gulf EEZ.

151. Defendants determined that, despite these significant new issues that triggered the need to reinitiate the consultation process, it could still forego formal consultation and the completion of a Biological Opinion, because the Aquaculture FMP still was not “likely to adversely affect any ESA-listed species or their designated critical habitat.” Memorandum from Jack McGovern, Assistant Reg’l Admin., Sustainable Fisheries Div. to David Bernhart, Assistant Reg’l Admin., Protected Res. Div. at 4 (June 11, 2015). NMFS continued to conclude that the risk of entanglement with marine mammals was “extremely unlikely” in part because it would review each facility individually at the permitting stage for its siting and construction specifications. *Id.* NMFS acknowledged that the Gulf now included *Sargassum* habitat for loggerhead turtles offshore, where aquaculture facilities could be sited under the FMP. Again it

found adverse impacts to not be sufficiently likely to require formal consultation at this stage because it could later “deny an application for an offshore aquaculture permit if the proposed location and/or use of a proposed system would adversely affect ESA-listed species or their critical habitat.” *Id.*

152. NOAA’s Southeast Regional Office concurred in that determination less than two weeks later, on June 24, 2015, again ending the ESA Section 7 process without any formal consultation, nor a Biological Opinion analyzing whether the new aquaculture program is likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. Memorandum from Roy E. Crabtree, Nat’l Marine Fisheries Serv., to John C. McGovern, Assistant Reg’l Admin., Sustainable Fisheries Div. (June 24, 2015). Instead, again NMFS noted that ESA-protected marine mammals “maybe attracted to aquaculture facilities as a potential source of food, shelter, and rest,” but again found such potential impacts to be nonetheless “insignificant” because each facility will “be reviewed individually” as to their specifications and siting. *Id.* at 2. It similarly found it “unlikely” that aquaculture facilities would impact the newly designated offshore *Sargassum* loggerhead turtle habitat, again relying on the fact that NMFS retained the authority at the permit stage to engage in Section 7 consultation and deny a permit application if it “would adversely affect ESA-listed species or their critical habitat.” *Id.* at 3.

153. As in their original determination to forego formal consultation and a comprehensive biological opinion, Defendants did not prepare a Biological Assessment analyzing the species and their habitat and the potential effects of the action on such species and habitat, *see* 50 C.F.R. § 402.02, in support of their exchange of letters.

154. On July 2, 2015, nearly a year after the publication of the draft Gulf Industrial

Aquaculture Regulations, NMFS published the final SPEIS. Environmental Impact Statements; Notice of Availability, 80 Fed. Reg. 38,199, 38,199 (July 2, 2015). The SPEIS concluded that “[a]lthough there is incomplete or unavailable information related to the short- and long-term effects of the Deepwater Horizon blowout, based on the information known at this time, there is no indication that the conclusions related to the impacts of implementing the actions in the Aquaculture FMP/PEIS have been changed due to the Deepwater Horizon blowout.” *See Nat’l Marine Fisheries Serv., Final Supplement to the Final Programmatic Environmental Impact Statement for the Fishery Management Plan for Regulating Offshore Marine Aquaculture in the Gulf of Mexico* (SPEIS) 14 (2015).

155. Days later, on July 6, 2015, NMFS also finalized the Supplemental Information Report, concluding that no additional NEPA analysis was necessary for the actions proposed in the Aquaculture FMP. 81 Fed. Reg. at 1762. NMFS issued the ROD for offshore aquaculture operations in the Gulf on August 6, 2015, but refrained from making it available to the public until after finalizing the Gulf Industrial Aquaculture Regulations. About six months later, NMFS finalized the Gulf Industrial Aquaculture Regulations. 81 Fed. Reg. at 1762.

Relevant Specifics of the Aquaculture FMP/PEIS

156. In the Aquaculture FMP/PEIS, Defendants defined the “purpose and need” of NMFS’s action as “establishing a regional permitting process to manage the development of an environmentally sound and economically sustainable aquaculture industry in federal waters of the Gulf” in order to “supplement[] the harvest of wild caught species with cultured product.” Aquaculture FMP/PEIS at 22. Thus, by its own terms, the Aquaculture FMP/PEIS’s express sole purpose is economic or commercial, rather than for the conservation and management of existing fishery resources.

157. The Aquaculture FMP/PEIS proposed ten actions. The first action, Action 1, considered and established as the preferred alternative: “establishing a permit(s) for conducting aquaculture in federal waters of the Gulf EEZ” under NMFS’s regulatory authority over fishing in federal waters. Aquaculture FMP/PEIS at 2. The other nine actions considered in the Aquaculture FMP/PEIS are all predicated upon the implementation of the permit system proposed under Action 1, and include:

permit application and operation requirements (Action 2); duration of the permit (Action 3); species allowed for aquaculture (Action 4); allowable marine aquaculture systems (Action 5); marine aquaculture siting requirements and conditions (Action 6); restricted access zones for marine aquaculture facilities (Action 7); recordkeeping and recording requirements (Action 8); biological reference points and status determination criteria for aquaculture (Action 9); and framework procedures for modifying biological reference point and management measures for offshore marine aquaculture (Action 10).

Aquaculture FMP/PEIS at 10-13. Taken together, the Actions would establish a permanent industrial offshore aquaculture permitting scheme whereby aquaculture operators would be authorized, under permits issued under NMFS’s authority to regulate fishing, to set up permanent structures in federal waters for ten years or more to farm all managed fish species that are native to the Gulf, excluding shrimp and coral. Aquaculture FMP/PEIS 1-9. All the farmed fish would be propagated by collecting wild broodstock and rearing them in captivity in hatcheries. *Id.* The Aquaculture FMP would restrict fishermen and local communities from accessing areas surrounding the aquaculture facilities. *Id.* The Aquaculture FMP/PEIS estimated that if the FMP were implemented, between five and twenty offshore aquaculture operations would be permitted in the Gulf over the following ten years. *Id.* at 36.

158. The Aquaculture FMP/PEIS acknowledged the diverse ecosystems and varied species that exist in the Gulf waters. According to the FMP/PEIS, the Gulf of Mexico and its

waters are home to some forty-two species of reef fish, coastal migratory pelagic species such as the king mackerel, Spanish mackerel, dolphin, cobia, cero, bluefish, little tunny; stone crab; spiny lobster; red drum; highly migratory species such as swordfish, tuna (including the Western Atlantic bluefin tuna), billfish, sharks; twenty-eight species of marine mammals protected under the Marine Mammal Protection Act, including six endangered species (sperm, sei, fin, blue, humpback, and North Atlantic right whale); a number of species of baitfish, including menhaden, Spanish sardines, round scad, bigeye scad, and Atlantic thread herring. Aquaculture FMP/PEIS at 120-33. The Gulf waters also provide habitat for several other species protected under the ESA, including “five sea turtle species (Kemp’s Ridley, loggerhead, green, leatherback, and hawksbill); two fish species (Gulf sturgeon and smalltooth sawfish); and two coral species (elkhorn *Acropora palmate* and staghorn *A. cervicornis*).” Aquaculture FMP/PEIS at 130.

159. Pursuant to the MSA, the Aquaculture FMP/PEIS identifies 64 million pounds whole weight as a proxy for the maximum sustainable yield (MSY). FMP at 87-89. The Aquaculture FMP/PEIS sets the proxy for optimum yield (OY) to equal to the MSY, also at 64 million pounds whole weight. Aquaculture FMP/PEIS at 87-89. According to NMFS, 64 million pounds whole weight represents the “average landings of all marine species in the Gulf, except menhaden and shrimp, during 2000-2006.” Aquaculture FMP/PEIS at 89. Thus, the initial production cap set by Defendants would flood the fish market by doubling the amount of fish that can be produced in the Gulf annually. Aquaculture FMP/PEIS at 89.

160. The Aquaculture FMP/PEIS repeatedly acknowledges the uncertainty and lack of data/information needed to set up these proxies. The FMP recognized that the MSA was “not explicitly written for managing at sea fish farming or aquaculture operations,” and that “[m]any

of the principles and concepts that guide wild stock management under the [Act] are either of little utility or are not generally applicable to the management of aquaculture operations.”

Aquaculture FMP/PEIS at 331. The Aquaculture FMP/PEIS emphasized that “[t]his is particularly true for yield target and stock status parameters around which management of wild fisheries is based.” *Id.* at 331.

161. The Aquaculture FMP/PEIS also recognized that “[t]he higher that OY is set, the greater the risk of impacts to the physical and biological environments.” *Id.* at 333. Nonetheless, the selected OY proxy ranks the second highest in potential risks to the physical and biological environment. Aquaculture FMP/PEIS at 333. Finally, the FMP set the proxies for maximum fishing mortality threshold (MFMT) and minimum stock size threshold (MSST) to be the same as those contained in specific fishery management plans for the specific wild stocks, even though those fishery management plans and the biological reference points contained therein were prepared prior to Aquaculture FMP, and thus did not analyze the impacts of offshore aquaculture on the survival of wild stocks. Aquaculture FMP/PEIS at 88-89, 211.

162. NMFS predicted that the following seven species were the most likely to be first cultured as part of offshore aquaculture in the Gulf: cobia, red drum, red snapper, mutton snapper, Almaco jack, greater amberjack, and mahi mahi. Aquaculture FMP/PEIS at 145. The Aquaculture FMP/PEIS also listed several species “with potential for Gulf aquaculture production,” including schoolmaster snapper, cubera snapper, gray snapper, dog snapper, lane snapper, yellowtail snapper, yellowedge grouper, red grouper, Warsaw grouper, yellowfin grouper, king mackerel, Spanish mackerel, cero, little tunny tuna, and bluefish. *Id.* Significantly, of the reef fish species that can be farmed under the Gulf Industrial Aquaculture Regulations, the health of most of the wild fisheries is unknown to NMFS. *Id.* at 125. Two reef fish species are

listed as “overfished”: gray triggerfish and greater amberjack. *Id.* Nonetheless, the Aquaculture FMP/PEIS did not analyze how offshore aquaculture operations may impact these overfished fisheries. Similarly, the Aquaculture FMP/PEIS did not analyze difficulties in farming pelagic, migratory species—fish like mahi mahi and tuna—that swim great distances and have a wide-ranging habitat over their lifecycles, and could be especially problematic in industrial aquaculture’s captive environments.

163. The Aquaculture FMP/PEIS also recognized the recreational and economic significance of the Gulf and its natural resources to the local communities. The Aquaculture FMP/PEIS recognized that the Gulf of Mexico is utilized by commercial fishermen, recreational fishermen, private anglers, and charter boats. *Id.* at 224-29. The Gulf is home to several “fishing-dependent communities,” where community members are “substantially dependent on or substantially engaged in the harvesting or processing of fishery resources to meet social and economic needs.” *Id.* at 227. According to the Aquaculture FMP/PEIS, total dockside value from existing commercial fishing in Gulf waters ranges from \$600 to \$900 million annually. *Id.* at 211. Total expenditures for recreational fishing in the Gulf waters were estimated at \$2 to \$4 billion, *id.* at 224, while charter boats were also estimated to generate millions of dollars in terms of output and income. *Id.* at 226.

164. The Aquaculture FMP/PEIS acknowledged that commercial offshore aquaculture may lead to numerous direct and indirect impacts on the physical, biological, economic, social, and administrative environments of the Gulf. *See* Aquaculture FMP/PEIS at 408-409. For example, as EPA pointed out in its comments on the Aquaculture FMP/PEIS, NMFS acknowledged that “[a]n indirect effect of culturing native fishes is the harvest of wild broodstock for use in aquaculture,” since a significant harvest would put pressure on the survival

of the wild stock. *Id.* at 59. Nonetheless, the Aquaculture FMP/PEIS did not quantify, or offer any further analysis of, the relationship between the size of broodstock collection and its potential impacts on the particular wild fish species, instead deferring any such analysis to the individual permit level, to be conducted prior to broodstock collection. Aquaculture FMP/PEIS at 86; EPA 2009 Comments at 2-3 (pointing out that the final PEIS lacked sufficient analysis of “impacts . . . associated with harvesting native brood stock for aquaculture operations”).

165. The Aquaculture FMP/PEIS also failed to take a hard look at the impact on wild fisheries from the potential loss of menhaden in the Gulf in order to feed farmed fish. The Aquaculture FMP/PEIS recognized that Gulf menhaden is essential to the diet of managed fish species in the Gulf, the local economy, and the ecological well-being of the Gulf’s marine environment. The Gulf menhaden fishery is already the second largest by weight in the United States. Gulf menhaden account for greater than ninety-nine percent of the Gulf baitfish landings. Aquaculture FMP/PEIS at 132. As NMFS recognized, the Gulf menhaden fish population provides multiple ecological services to the overall ecological well-being of the Gulf of Mexico. The Aquaculture FMP/PEIS recognized that menhaden functions as a filter feeder, and serves as a significant source of prey for a variety of predator species, such that menhaden meaningfully contribute to the Gulf’s long-term environmental sustainability. *Id.* at 133.

166. The Aquaculture FMP/PEIS also acknowledged, but dismissed out-of-hand, that there is a risk of infectious diseases that may transfer and spread from farmed fish to wild fish. *Id.* at 257. It also recognized, and again disregarded, that farming fish in the Gulf of Mexico would introduce additional chemicals (including antibiotics and pesticides) and increase nutrient loading, potentially affecting water quality and the marine environment. *Id.* at 263. NMFS reduced any such harms to problems associated with nearshore aquaculture, and concluded that

any such impacts would be reduced from water currents in the deep ocean. Yet as EPA pointed out in its critique of the draft Aquaculture FMP/PEIS, “most of the Gulf EEZ areas considered suitable [for offshore aquaculture in the Gulf] are located closer to 3 miles rather than 200 miles offshore.” U.S. Env’tl. Protection Agency, *EPA NEPA Comments on NOAA PDEIS for the “Fishery Management Plan for Regulating Offshore Marine Aquaculture in the Gulf of Mexico”* (EPA 2008 Comments) 3 (2008).⁹

167. The Aquaculture FMP/PEIS recognizes that fish escapes are an inevitable part of fish farming, yet the Regulations allow for escape of up to ten percent of the fish from “all approved aquaculture systems combined” to go unreported. 81 Fed. Reg. at 1782. This means more than one million pounds of fish could escape before being reported. Based on the Aquaculture FMP’s ideal number of operations, largest cage, and highest density estimates, in real numbers this translates to more than eight million escapes in pounds per year that could go unreported. The FMP/PEIS recognizes that hybridization between escaped farmed fish and closely-related natural species should be avoided, but only has very minimal discussion of the effects of competition between escaped farmed fish and wild fish. It also lacks analysis of literature showing that the escape of farmed organisms into the ecosystem can result in competition for food and space and predation on native species by escaped fish, and ignores scientific literature indicating that there are harmful effects from native farm-raised fish if they have certain traits that are valuable to the industry (e.g., accelerated growth rate, disease resistance, and delayed maturity), and if, due to inadvertent selection by the novel environment

⁹ Available at <https://cdxnodengn.epa.gov/cdx-enepa-II/public/action/eis/details/downloadCommentLetters?eisId=80849>.

(e.g., reduced fright response, disease resistance, and altered aggressive behaviors), they are not adaptive. *See* EPA 2009 Comments at 2-3 (stating that NMFS failed to adequately assess “ecological conflicts associated with the potential displacement of native marine inhabitants from areas sited for aquaculture operations”).

168. The Aquaculture FMP/PEIS recognizes, but similarly fails to adequately analyze, the potential harm to marine wildlife and birds from entanglement with aquaculture structures, predator control methods utilized by aquaculture operations, or disruptions to the natural patterns of the species’ migratory paths and displacement from their natural habitats. *Id.* at 266. As EPA pointed out in its comments, the final Aquaculture FMP/PEIS lacks sufficient analysis on “impacts to predator species attracted to the aquaculture operations’ contained concentrations of aquatic organisms,” which could in turn lead to the decline of the species to the extent of requiring protection under the ESA. EPA 2009 Comments at 2-3, 9.

169. The Aquaculture FMP/PEIS also does not adequately address the likelihood of new “dead zones” that aquaculture and resulting ocean pollution could affect or create, or the likely impacts on forage wild fish, such as sardines, menhaden, and anchovies that could be used as feed for farmed fish. As comments on the Aquaculture FMP and its proposed regulations estimated, the offshore aquaculture operations under the FMP would require from 291 million to 1164 million pounds of feed, annually. Based on a typical cobia diet, this means that Gulf aquaculture operations could end up consuming an amount of fishmeal equal to eleven percent of all the fishmeal used worldwide for aquaculture in 2005. This will likely require an increased take of prey/bait fish, adding pressure to already stressed wild fish populations, including Gulf menhaden.

170. The Aquaculture FMP/PEIS also wholly fails to consider the direct, indirect, and

cumulative climate change effects from the proposed federal action, including upstream emissions. There is no quantitative or qualitative emissions analysis in the Aquaculture FMP/PEIS.

171. The Aquaculture FMP/PEIS also recognizes, but fails to adequately analyze, the significant socioeconomic impacts of authorizing offshore aquaculture to the existing wild fish commercial and recreational industries in the Gulf. The Aquaculture FMP/PEIS identifies as impacts from offshore aquaculture: competition for use of fishing grounds and market price for fish, associated decline in employment and income of fishing-related industries, and the loss of fishing and fishing-related incomes that is often detrimental to the personal and social identity of residents of affected fishing communities. *Id.* at 285-86. The Aquaculture FMP/PEIS also recognizes that the proposed aquaculture permitting scheme would harm commercial and recreational fishermen by banning their access to zones “at least twice as large as the total area encompassed by the allowable aquaculture system” around aquaculture facilities. *Id.* at 325-27. Yet the Aquaculture FMP/PEIS fails to analyze or assess the likely magnitude of such socioeconomic harms, summarily concluding that any such impacts can be considered and addressed at the individual permit level. *Id.* at 271, 320.

172. Similarly, the Aquaculture FMP would allow aquaculture of most species native to the Gulf, including many fished by existing recreational and commercial fisheries, yet fails to adequately address or consider the best available data on the importance of the Gulf’s wild fish resources to fishing communities or the likely economic impact of aquacultured fish creating market competition with wild fish.

173. Instead, the Aquaculture FMP/PEIS repeatedly defers and relies on the regulatory and enforcement authority of other administrative agencies—namely, the U.S. Department of

Agriculture (USDA), the Food and Drug Administration (FDA), and the EPA—to dismiss the significant environmental impacts of offshore aquaculture in the Gulf waters. For instance, in its discussion of the direct and indirect effects of implementing the Aquaculture FMP on the physical, biological, and ecological environments, the Aquaculture FMP/PEIS recognizes that fish feeds and waste may affect benthic communities, *id.* at 34, but does not address these effects because “[t]he FDA, EPA, and USDA regulate drugs, pesticides, and biologics. Permittees would be required to comply with the existing regulations of these agencies.” Aquaculture FMP/PEIS at 298; *accord* 81 Fed. Reg. at 1778. The Aquaculture FMP/PEIS does not identify how these other federal regulations apply, what they require, or how they would minimize the noted effects. Further, rather than address the fact that aquaculture systems will contribute waste in the Gulf, the Aquaculture FMP/PEIS dismisses concerns by noting that aquaculture sites can be selected in a way that maximizes waste dispersal.

174. The Aquaculture FMP/PEIS also fails to adequately analyze the environmental and socioeconomic impacts of the locations of offshore aquaculture facilities. As EPA explained in its comments, the proposed permitting scheme places the burden upon permit applicants to identify suitable project areas and potential multiple use conflicts, “rais[ing] the potential for uses to be overlooked.” EPA 2009 Comments at 7. This creates the potential for use conflicts. For example, EPA’s comments highlight that the Aquaculture FMP/PEIS fails to analyze impacts from the potential siting of aquaculture facilities in upwelling zones, which “could be highly desirable for the fish farmer but possibly inappropriate . . . [as] the farmed fish would compete with wild stocks for food.” *Id.* EPA also pointed out that the PEIS does not discuss the Department of Interior’s decision to carry out an oil and gas lease sale in the Gulf of Mexico in August 2009, and highlighted the potential negative interactions between aquaculture and oil and

gas exploration, construction, and oil spills. *Id.* at 7-8. EPA's comments also explain the eastern portion of the Gulf of Mexico encompasses U.S. Navy testing and training ranges, and state the PEIS was "silent as to the suitability of investing in aquatic operations within a military research and training area." *Id.* at 8. Anticipated offshore energy development could pose another multiple-use conflict, according to EPA, and was not properly analyzed in the PEIS. *Id.* at 7.

175. In their analysis of the "magnitude and significance of cumulative effects" of implementing the Aquaculture FMP/PEIS, Defendants admit that "[i]t is difficult to predict the magnitude and significance of cumulative effects at this time because," among other things, "it is unknown how many aquaculture operations will apply for permits in the near future." Aquaculture FMP/PEIS at 368-69. The Aquaculture FMP/PEIS also includes numerous instances of uncertainty in analyzing the environmental impacts of offshore aquaculture. For instance, the Aquaculture FMP/PEIS states it is unknown whether offshore aquaculture will produce optimum yield, Aquaculture FMP/PEIS at 350, as is the "extent to which cultured fish will compete with domestic, wild fisheries," Aquaculture FMP at 371. It also states the "effects of potentially permitting numerous large scale [aquaculture] operations are less known." Aquaculture FMP/PEIS at 377. As EPA concluded in its comments, the Aquaculture FMP/PEIS "represents another piecemeal use to be added to the mix of existing and anticipated uses without a thorough consideration of the impacts of all these uses to the sustainability of the Gulf of Mexico's diverse, complex, and increasingly stressed and increasingly fragile ecosystems." EPA 2009 Comments at 2.

176. Despite recognizing numerous potential environmental and socioeconomic impacts and uncertainties that will result from offshore aquaculture operations in the Gulf waters, as well as the vast and diverse ecosystems, waters, and species present in the Gulf, the

Aquaculture FMP/PEIS fails to analyze these impacts at the programmatic level. Instead, Defendants dismissed the impacts and/or deferred analysis and any consideration of these significant impacts to the permit stage, where they might be addressed, albeit on a case-by-case basis.

177. Yet despite NMFS's repeated reliance on the permit approval process, the final Regulations do not require NMFS or permit holders to comply with NEPA at the site-specific permit stage. *See* 81 Fed. Reg. 1773. The Regulations also misapply the NEPA standard for determining whether further NEPA analysis will be necessary. 81 Fed. Reg. at 1773 (utilizing the standard for supplementing an EIS rather than conducting site-specific NEPA analysis). Accordingly, NMFS has failed to conduct significant analysis of foreseeable impacts in the PEIS, improperly deferring analysis to later permits, and has then compounded that error by not requiring that NEPA compliance and analysis be conducted at the permit stage. NMFS's decision not to mandate site-specific analysis at the permit stage nearly guarantees that the significant gaps in the PEIS identified herein will never be filled.

178. The Aquaculture FMP/PEIS's overly narrow purpose and need, which assumes the establishment of commercial offshore aquaculture in the Gulf of Mexico, also foreclosed sufficient consideration of reasonable alternatives. The Aquaculture FMP/PEIS does not adequately consider whether the best alternative would be to take no action and/or allow limited aquaculture facilities only under special permits. Among other things, the alternatives also fail to consider additional permitting options that would be more protective of the Gulf ecosystem, such as limiting the fish species that may be cultured, including criteria for siting aquaculture facilities to avoid harm to Essential Fish Habitats, and imposing requirements on the sale of farmed fish in ways to reduce price competition with wild fish.

179. The mitigating measures considered in the Aquaculture FMP/PEIS for minimizing negative cumulative effects are similarly cabined by the narrow purpose of establishing offshore aquaculture in the Gulf. For instance, the Aquaculture FMP/PEIS lists mitigating measures for potential harm to other marine life from entanglement and entrapment with aquaculture systems by requiring recordkeeping and reporting of any such encounters. Aquaculture FMP/PEIS at 371. Yet, mere reporting and recordkeeping have no effect on reducing the risk to other marine life. Similarly, the Aquaculture FMP/PEIS fails to analyze in detail how NMFS will approve the specific locations for offshore aquaculture operations in order to reduce ecological and potential socioeconomic impacts. As EPA recognized, despite the fact that the “[v]ast portions of the Gulf of Mexico have been designated as [Essential Fish Habitat] for various aquatic species,” the “potential cumulative impacts to existing designated [Essential Fish Habitat] remain unaddressed” in the Aquaculture FMP/PEIS. EPA 2009 Comments at 9-10.

180. As EPA stated, the Aquaculture FMP/PEIS “unfortunately exemplifies the absence of a federal Gulf of Mexico spatial analysis, planning, and an ecosystem-based approach for determining the appropriate balance between conservation, economic activity, user conflict, sustainable use, and determining which kind of activity should be allowed where and whether certain areas of the Gulf should be designated single or multiple use areas.” *Id.* at 2; *see also id.* at 5 (describing “important issues” that are “absent” from the PEIS, namely that the “Gulf of Mexico consists of a diversity of complex, little understood ecosystems having unique natural and anthropomorphic characteristics with associated stressors subject to competing uses without an ecosystem-based approach to facilitate the Gulf’s future sustainability”). EPA underscored the potential future effects of implementing the Aquaculture FMP by stating the “legal and regulatory framework for open ocean aquaculture will significantly influence the economic

success of commercial aquaculture operations and the continued sustainability of the Gulf's ecosystems." *Id.* at 5-6.

The Supplemental EIS

181. Defendants defined the "purpose and need" of the final SPEIS as "to take into account new circumstances or information resulting from the [Deepwater Horizon] blowout. . . . in order to consider potential changes to the environment linked to the [Deepwater Horizon] blowout and determine if and how such changes may affect the actions analyzed" in the Aquaculture FMP/PEIS. SPEIS at 14. Despite this, the SPEIS makes plain that NMFS assessed whether the blowout would change industrial aquaculture's effects on the Gulf, rather than whether the oil spill changed the baseline environment of the Gulf, such that the FMP/PEIS analysis might now be inadequate or lead to different conclusions.

182. The SPEIS acknowledges that the Deepwater Horizon oil spill changed the physical, biological, economic, social, and administrative environments of the Gulf, and may yet lead to numerous direct and indirect impacts on each. With regard to the physical environment, it concludes that the impacts are likely to be "significant and long-term." *See id.* at 36. The impacts on the biological environment are similarly "widespread": the oil spill could lead to more unhealthy fish and changes in the distribution and abundance of populations throughout the Gulf, including federally managed species, which could impact other prey species or those that might benefit from a reduced stock; may have resulted in adverse effects to protected species; and likely increased disease in some Gulf species. *See id.* at 39-40. The spill's effects on the economic and social environments were so significant that then-Secretary of Commerce, Gary Locke, declared a fishery disaster in the Gulf due to the economic impact on commercial and recreational fisheries. *See id.* at 40.

183. The SPEIS repeatedly recognizes the need for more information, yet at the same time in all respects concludes that “the direct and indirect effects of the alternatives are anticipated to remain the same as those previously identified.” *Id.* at 44. For example, the SPEIS states that “[t]he economic impacts of the Deepwater Horizon blowout are still being examined,” *id.* at 40, and “[i]nformation on the full range of social and economic impacts to the Gulf as a result of the Deepwater Horizon blowout is not available at this time,” *id.*, in addition to reiterating that there may be incomplete or unavailable information related to the short- and long-term effects of the Deepwater Horizon blowout, *see, e.g., id.* at 48. However, NOAA is one of the lead agencies managing the collection of science and information on the effects of the Deepwater Horizon blowout.¹⁰ As one of the co-trustees of the Natural Resource Damage Assessment, NOAA is helping to quantify how much damage the blowout caused with respect to natural resources and related recreational uses.

184. Still, for each proposed action the SPEIS found that either the “impacts from the Deepwater Horizon blowout are not expected to change the direct and indirect effects of the alternatives considered . . . in the Aquaculture FMP/PEIS,” *see id.* at 44 (Action 1), 45 (Action 2), 46 (Action 3), 49 (Action 5), 51 (Action 6), 52 (Action 7), 53 (Action 8), 56 (Action 10), or that “there is no indication that the conclusions related to the impacts of implementing the actions in the Aquaculture FMP/PEIS have been changed due to the Deepwater Horizon blowout,” *id.* at 48 (Action 4), 54 (Action 9). The SPEIS further concludes with regard to mitigation measures that “the impacts from the Deepwater Horizon blowout are not expected to

¹⁰ *See* Office of Response and Restoration, *Where to Find NOAA Information on the Deepwater Horizon Oil Spill*, NOAA, <http://response.restoration.noaa.gov/about/media/where-find-noaa-information-deepwater-horizon-oil-spill.html> (last visited Feb. 12, 2016).

alter the conclusions contained in the Aquaculture FMP/PEIS,” *id.* at 56, and that “there is no reason to believe that the conclusions reached in the Aquaculture FMP/PEIS have been altered or changed due to the Deepwater Horizon blowout” with regard to cumulative impacts analysis, *id.* at 65.

185. The SPEIS also states that the Deepwater Horizon blowout would not change the direct and indirect effects of the alternatives considered in Actions 1, 2, and 6 of the Aquaculture FMP/PEIS because the actions are primarily administrative or not related to the current status of the affected environment. *See id.* at 44-45, 51. As explained *supra*, Action 1 establishes the benchmark permitting regime for Actions 2 through 10. Actions 1, 2, and 6 respectively address permitting requirements, eligibility, and transferability; application and operational requirements and restrictions; and siting requirements and conditions. Yet NMFS summarily dismissed the importance of these actions, which are the heart of the Aquaculture FMP, without taking a hard look at their impacts in the post-Deepwater Horizon-blowout Gulf environment.

186. Finally, the SEIS, like the PEIS, fails to address the compounding effects of climate change on the Gulf environment, despite acknowledging that aquaculture may be affected by and contribute to climate change. *Id.* at 65. The SEIS puts forth a lengthy list of the effects that climate change is likely to have on the Gulf that are directly relevant to the sustainability and suitability of aquaculture. *See id.* It acknowledges that aquaculture contributes to greenhouse gas emissions, but dismisses this concern on the basis that “the extent to which this occurs depends on the species, size and location of facilities.” *Id.* Similarly, it fails to address its own acknowledgment that obtaining fish feed from land-based sources may impact other resources that are already directly affected by climate change. *Id.* at 66. The study cited in the SEIS for the conclusion that aquaculture minimally impacts the climate actually presents

additional data that supports a different position, i.e. that the total energy costs for carnivorous fish “are rather high and results in relatively low protein output compared to the energy inputs.” Food and Agric. Org. of the United Nations, *Climate change implications for fisheries and aquaculture: overview of current scientific knowledge* 192 (2009).¹¹

The Final Gulf Industrial Offshore Aquaculture Regulations

187. The final Gulf Industrial Aquaculture Regulations, published on January 13, 2016, and to be codified at 50 C.F.R. Parts 600 and 622, implement the ten actions contemplated in the Aquaculture FMP/PEIS, thereby authorizing an unprecedented permitting scheme pursuant to which industrial aquaculture will be regulated as “fishing” activities in federal waters in the Gulf, in order to “increase the yield of Federal fisheries in the Gulf by supplementing the harvest of wild caught species with cultured product.” 81 Fed. Reg. at 1762.

188. Pursuant to the Regulations, potential aquaculture investors could set up permanent structures in the Gulf EEZ to produce farmed fish by applying for and obtaining a Gulf Aquaculture Permit. 81 Fed. Reg. at 1762. The Regulations defined the term “aquaculture” to mean “all activities, including the operation of an aquaculture facility, involved in the propagation or rearing, or attempted propagation or rearing, of allowable aquaculture species in the Gulf EEZ.” 81 Fed. Reg. at 1792. Applicants who are granted Gulf Aquaculture Permits may operate offshore aquaculture facilities and conduct related activities in the Gulf EEZ, from collecting and harvesting wild broodstock, to farming fish in aquaculture systems, to transporting and selling farmed fish. 81 Fed. Reg. at 1762. The Regulations authorize industrial production of all managed wild fish species native to the Gulf, except for shrimp and coral. *See* 81 Fed. Reg. at

¹¹ Available at http://www.fao.org/fileadmin/user_upload/newsroom/docs/FTP530.pdf.

1765. Once granted, the permits are effective for ten years, and then can be renewed every five years after the initial ten-year period. 81 Fed. Reg. at 1762.

189. The Regulations require an applicant to provide a “baseline environmental survey” of the proposed site of aquaculture operations, but decline to set any specific guidelines as to the types of aquaculture structures that may be employed, or the stocking density of the farmed fish operations. 81 Fed. Reg. at 1793. Under the Regulations, the Regional Administrator will publish a notice of receipt of a complete application in the Federal Register with “a brief description of the proposal and specifying the intent of NMFS to issue a Gulf aquaculture permit.” 81 Fed. Reg. at 1794. The notice of receipts of permit applications will be subject to public comment for up to forty-five days. 81 Fed. Reg. at 1794. NMFS will notify the applicant of a final decision on the application “as soon as practicable” after the public comment period. 81 Fed. Reg. at 1795. The Regulations do not require NMFS to perform any additional environmental assessment or NEPA analysis, but merely provides that the agency may evaluate the locations and specifications of any proposed aquaculture operators “on a case-by-case basis.” 81 Fed. Reg. at 1797.

190. The Regulations do not specify requirements for mandatory effluent and benthic monitoring, nor place any limits on the use of pesticides, drugs, or other chemicals used in aquaculture. Similarly, the Regulations have no caps on fishmeal and fish oil use, nor requirements to use fishmeal or oil alternatives. Rather, these inputs and discharges are authorized so long as they “comply with all applicable [USDA], EPA and FDA requirements.” 81 Fed. Reg. at 1764.

191. The Regulations do not include binding siting criteria to ensure facilities will not harm the marine environment. Aquaculture facility siting and location will be determined at the

permit stage, on a “case-by-case basis,” except that they are prohibited in “Gulf EEZ marine protected areas, marine reserves, habitat areas of particular concern (HAPCs), Special Management Zones, permitted artificial reef areas, and coral areas specified in 50 CFR part 622.” 81 Fed. Reg. at 1765. However, facilities are not prohibited from any endangered species’ critical habitat. Instead, NMFS has complete discretion to evaluate proposed sites, on a case-by-case basis; factors such as the depth of the site, current speeds, substrate type, hypoxia, and location to important fish habitats or fishing grounds are completely optional. The Regulations do not even require NMFS to deny permits if it finds that they will threaten the marine environment or interfere with fishing grounds. Yet, the Regulations set up restricted access zones around offshore aquaculture facilities where no recreational or commercial fishing may take place, and where “no fishing vessel may operate in or transit through.” 81 Fed. Reg. at 1797.

192. The Regulations have recordkeeping and reporting requirements, but only require reports of “major escapements” of farmed fish. 81 Fed. Reg. at 1796. The Regulations have no binding criteria to ensure that NMFS uses the best system for limiting escapes. The Regulations have no tracking and tagging requirements to mitigate the harms posed by escaped fish, and no required assurance bonds or fines to cover damages other than those from failing to decommission the aquaculture facility. Similarly, there is no required assurance bond or any other requirements on potential outbreaks of diseases or injury to marine wildlife. Instead, the Regulations only state that diagnosed reportable pathogens must be reported, as are all incidences of “entanglement or interaction with marine mammals, endangered species, or migratory birds.” *Id.* 81 Fed. Reg. at 1796. NMFS may take remedial actions to address specific incidents. 81 Fed. Reg. at 1799.

193. Contrary to EPA's recommendations, the Regulations fail to establish factors for determining cause for the revocation or suspension of permits, nor specify whether harm to Essential Fish Habitats or critical habitats, regular reports of escapes, entanglement, or disease outbreaks may trigger permit revocation or suspension. Instead, the Regulations simply leave such actions entirely to the discretion of Defendants. *See* EPA 2008 Comments at 10.

CAUSES OF ACTION

FIRST CAUSE OF ACTION

VIOLATION OF THE MSA AND APA

***ULTRA VIRES* ACTIONS OF THE REGULATIONS AND FISHERY MANAGEMENT PLAN FOR OFFSHORE AQUACULTURE**

194. Plaintiffs re-allege and incorporate by reference the allegations set forth in Paragraphs 1-193 in the Complaint as if fully set forth herein.

195. The MSA does not grant aquaculture permitting authority to the Defendants explicitly or implicitly. There is no evidence that Congress intended for Defendants to attempt to use the MSA to establish and regulate aquaculture using the MSA's authority over fishing in federal waters, without further Congressional authorization.

196. Industrial aquaculture production is not fishing. Aquaculture and fishing are distinct, novel, separate activities, with separate impacts on the environment, marine wildlife, fisheries, and fishing communities. Defendants have misinterpreted and overextended their MSA fishing authority, to purportedly encompass aquaculture activities.

197. The MSA's definition of fishing does not encompass aquaculture, based on the common meaning of the terms, as well as legislative intent. The MSA's definition of "fishing" as "the catching, taking, or harvesting of fish" plainly contemplates the act of gaining possession and control of wild fish. *See* 16 U.S.C. § 1802(16). Even if the MSA covers cultured fish, the definition of "fishing" does not include aquaculture, as the agency defines it, as the vast amount

of permitted activities do not simply involve the catching, taking, or harvesting of such fish or even activities supporting such actions. The definition of “fishing” does not include aquaculture, and the term is not defined elsewhere in the MSA. In issuing the Aquaculture FMP/PEIS and Gulf Industrial Aquaculture Regulations, Defendants rely on a dictionary definition of the noun “harvest” to extend to itself the authority to regulate industrial fish-farming as fishing. *See* 81 Fed. Reg. at 1768. Yet, the use of the term “harvesting” throughout the MSA and its legislative history is only logical in the context of traditional fishing for wild fish, its proper statutory context. *See, e.g.*, 16 U.S.C. § 1821(h)(2)(A) (discussing a fleet of “harvesting” vessels transfer its “catch”). Defendants’ strained interpretation of the word “harvest,” a word that is not used in the statutory definition of fishing, to grant itself authority to regulate aquaculture as “fishing” is wholly unreasonable, and contrary to the MSA’s statutory scheme. Thus, the implementation of the Gulf Industrial Aquaculture Regulations authorizing aquaculture operations as fishing is *ultra vires*.

198. Nor does aquaculture facilities fit under the definition of “fishing vessels,” as the term is defined under the MSA and understood in the context of maritime law. The MSA’s statutory requirements for fishery management and conservation similarly do not apply. The MSA’s terms, definitions, and requirements for fishery conservation and management all contemplate actions regarding wild fish, and by Defendants’ own admission, are inapplicable in the context of industrial aquaculture operations. *See* Aquaculture FMP/PEIS at 331 (recognizing that “many of the principles and concepts that guide wild stock management under the [MSA] are either of little utility or are not generally applicable to the management of aquaculture operations”). For example, Defendants admit that the statutory definition of establishing optimum yield, one of the main purposes of the MSA, is particularly unsuited for aquaculture

management. *Id.* at 331. Defendants’ admission that there is a need for “additional legal authority specifically suited for management of open ocean aquaculture” further demonstrates that its existing attempt to regulate aquaculture as fishing is not supported by the MSA’s plain language or statutory scheme, and is therefore *ultra vires*.

199. Because these activities fall beyond the ambit of the agency’s statutory authority, Defendants have no regulatory authority to authorize commercial aquaculture or issue commercial aquaculture permits in federal waters, including permits that enclose or limit activities within areas of the EEZ solely for aquaculture. If Defendants wish to attempt to permit offshore aquaculture facilities in the Gulf of Mexico or elsewhere in federal waters, the agency needs to request such new authority from Congress, as suggested by the several failed attempts to pass Congressional bills to authorize the very activity NMFS now wishes to regulate.

200. It is a cardinal principle of administrative law that an agency may act only pursuant to authority delegated to it by Congress. *See, e.g., Lyng v. Payne*, 476 U.S. 926, 937 (1986) (“[A]n agency’s power is no greater than that delegated to it by Congress.”). Defendants’ attempted extension of its MSA authority is *ultra vires*, and the APA requires that courts “shall... hold unlawful and set aside agency action, findings, and conclusions found to be ... in excess of statutory jurisdiction, authority, or limitations, or short of statutory right.” 5 U.S.C. § 706(2)(C).

201. The actions and inactions of Defendants described in this Cause of Action are causing injuries to Plaintiffs, for which they have no adequate remedy at law.

SECOND CAUSE OF ACTION
VIOLATION OF THE MSA AND THE APA
THE AQUACULTURE FMP/PEIS VIOLATES THE MSA’S STATUTORY MANDATES

202. Plaintiffs re-allege and incorporate by reference the allegations set forth in Paragraphs 1-201 in the Complaint as if fully set forth herein.

203. As explained in the first cause of action, the challenged action is *ultra vires* of Defendants' MSA authority and as such must be set aside. In addition, and in the alternative, even if Defendants had MSA authority over the challenged action, the challenged action violates the MSA's statutory mandates.

204. The sole purpose of the Aquaculture FMP/PEIS is to establish a regional permitting scheme for the development of a commercial offshore aquaculture industry in federal waters of the Gulf of Mexico. The proposed measures in the Aquaculture FMP/PEIS are all designed to achieve this sole purpose.

205. As such, the Aquaculture FMP/PEIS is wholly inconsistent with the MSA's mandates, because the federal fisheries of the Gulf do not "require[] conservation and management" in the form of the offshore aquaculture, 16 U.S.C. § 1853(a)(1)(A), and because implementation of the Aquaculture FMP/PEIS will not protect, but rather will likely harm, wild fish in the Gulf. The Aquaculture FMP/PEIS is unlawful, in violation of the MSA's mandates to "to conserve and manage fishery resources" and to "achieve and maintain, on a continuing basis, the optimum yield from each fishery." 16 U.S.C. § 1801(b)(1), (4).

206. The Aquaculture FMP/PEIS violates the MSA's National Standard One, because the FMP and its proposed measures do not "prevent overfishing," and because the OY, set at 64 million pounds based on the average landings of most wild fish in the Gulf, does not flow from the "maximum sustainable yield from the fishery, as reduced by any relevant social, economic, or ecological factor," nor provides for the rebuilding to a level that allows for consistent maximum sustainable yield for an overfished fishery in the Gulf. *Id.* § 1802(33).

207. The Aquaculture FMP/PEIS does not include measures necessary to prevent overfishing of wild fish. Without effectively addressing how aquaculture will interact with and affect the survival of wild fish, the Aquaculture FMP/PEIS is unable to address whether or how aquaculture might prevent overfishing. Simply offering that raising and selling more fish through farming could alleviate pressure on wild stocks is insufficient, particularly without discussing the many potential negative impacts that farming fish in Gulf waters could have on wild stocks. Further, because the Aquaculture FMP/PEIS would not restrict aquaculture to species that have been or are being overfished in the wild, there is no support for the conclusion that aquaculture would reduce fishing pressure on wild managed species.

208. The Aquaculture FMP/PEIS violates the MSA's National Standard Four because the offshore aquaculture permitting scheme unfairly allocates fishing privilege to offshore aquaculture operations, and is carried out such that offshore aquaculture operations will acquire excessive share of the fishing privilege, obtain inordinate control of the market. The unfair allocation of fishing privilege violates National Standard Four because the measures proposed in the Aquaculture FMP/PEIS are not reasonably calculated to promote conservation. The Aquaculture FMP/PEIS would exclude commercial and recreational fishing for wild fish in certain areas and would ban or restrict other uses of areas of the Gulf EEZ that are to be closed for aquaculture operations. The Aquaculture FMP/PEIS does not establish a fair or equitable allocation of fishery resources and is lacking in standards or criteria to protect the interests of existing commercial and recreational fishermen and women, and their customers and families, from both the encroachment of aquaculture facilities on their fishing grounds and the related harms to wild fish that they enjoy and on which their livelihoods depend.

209. The Aquaculture FMP/PEIS violates the MSA’s National Standard Five, because its proposed measures, including but not limited to collecting wild broodstock for farmed fish, restricting access around offshore aquaculture facilities, and utilizing wild fish as fish feed for farmed fish, will result in inefficient utilization of fishery resources for the sole purpose of economic allocation—the assigning of fishing rights and exclusive use rights to offshore aquaculture operations.

210. The Aquaculture FMP/PEIS is unlawful, in violation of the MSA’s National Standard Eight, because it fails to take into account the importance of fishery resources to fishing communities in the Gulf, and because it fails to provide for “the sustained participation of such communities” or to “minimize adverse economic impacts on such communities.”

211. The Aquaculture FMP/PEIS is unlawful, in violation of the MSA’s National Standard Nine, because it fails to require measures to minimize bycatch or the mortality of any unavoidable bycatch. The Aquaculture FMP/PEIS also does not include conservation and management measures necessary to minimize bycatch or the mortality of bycatch, such as sharks, sea turtles, sea birds, marine mammals, or other marine life that may swim through or become caught in aquaculture facilities, cages, or other equipment.

212. In all of these MSA determinations, Defendants also violated the MSA’s requirement that its decisions be made using “the best scientific information available.” *Id.* § 1801(c)(3).

213. The Aquaculture FMP/PEIS does not include each element required for fishery management plans under Section 303 of the MSA, *id.* § 1853. In particular, it does not appropriately address essential fish habitat, minimize adverse effects on such habitat, or identify actions to encourage the conservation and enhancement of such habitat. *Id.* § 1853(a)(7). For

example, the standards and criteria for the siting and operation of aquaculture facilities set forth in the Aquaculture FMP/PEIS are inadequate to prevent significant environmental harms from these operations. Aquaculture FMP/PEIS at 351. Accordingly, NMFS's conclusion that the proposed offshore aquaculture activities would not adversely affect essential fish habitats is arbitrary and capricious, and not in accordance with the law.

214. In sum, the Aquaculture FMP/PEIS violates the MSA and the APA, because 1) its objective and actions are entirely economically motivated and thus lack a legitimate conservation purpose; 2) it fails to conform to the MSA's statutory mandates to, *inter alia*, prevent overfishing and to conserve and protect wild fisheries and essential fish habitats, to ensure fair allocation of fishing privileges, to ensure sustained participation of fishing communities, and to prevent and minimize bycatch; and 3) its analysis was not based on the best scientific information available.

215. For all these reasons, the challenged actions are arbitrary and capricious, an abuse of discretion, and otherwise contrary to law, in violation of the APA.

216. The actions and inactions of Defendants described in this Cause of Action are causing injuries to Plaintiffs, for which they have no adequate remedy at law.

THIRD CAUSE OF ACTION
VIOLATION OF THE MSA AND APA
DEFENDANTS VIOLATED THE MSA'S PROCEDURAL MANDATES FOR FINALIZING
A FISHERY MANAGEMENT PLAN AND ITS PROPOSED REGULATIONS

217. Plaintiffs re-allege and incorporate by reference the allegations set forth in Paragraphs 1-216 in the Complaint as if fully set forth herein.

218. Defendants violated the procedural mandates and timeframes articulated in 16 U.S.C. §§ 1853-4 of the MSA for review and finalization of a fishery management plan and its implementing regulations. Upon information and belief, the Council did not simultaneously submit proposed regulations to the Secretary with the 2009 draft Aquaculture FMP nor did it

simultaneously submit an FMP with proposed regulations in 2014, as the FMP was already final (since 2009) at the time the regulations were submitted, in violation of 16 U.S.C. § 1853(c).

Upon information and belief, this resulted in the Defendant Secretary of Commerce's failure to: (1) immediately initiate an evaluation the FMP's proposed regulations, and (2) to make affirmative or negative determination regarding the proposed regulations, as well as notify the Council in writing regarding inconsistencies with the proposed regulations and the Aquaculture FMP/PEIS, within fifteen days of the Gulf Council's approval of the Aquaculture FMP/PEIS, in violation of 16 U.S.C. § 1854(b)(1).

219. Defendants violated the procedural mandates for preparing a fishery management plan under the MSA. On information and belief, Defendants acted arbitrarily and capriciously, and in excess of its statutory authority, when its staff made changes to the aquaculture FMP/PEIS approved by the Gulf Council before it was submitted for the Secretary of Commerce's approval. *See* 16 U.S.C. § 1854(b)(1). Finally, Defendants acted arbitrarily and capriciously, and not in accord with the MSA's procedural mandates, when they decided to publish in 2014, five years after the Aquaculture FMP/PEIS became final as a matter of law, the draft Gulf Industrial Aquaculture Regulations that did not account for changes made to the Aquaculture FMP/PEIS, and that contained numerous inconsistencies with the Aquaculture FMP/PEIS, in violation of 16 U.S.C. § 1854(b)(1).

FOURTH CAUSE OF ACTION
VIOLATION OF NEPA AND THE APA
ALTERNATIVES ANALYSIS VIOLATIONS AND IMPROPER PURPOSE AND NEED

220. Plaintiffs re-allege and incorporate by reference the allegations set forth in Paragraphs 1-219 in this Complaint as if fully set forth herein.

221. NEPA and its implementing regulations require agencies to consider a full range

of reasonable alternatives to the proposed action. 42 U.S.C. § 4332(2)(C), (E). Indeed, the alternatives analysis is “the heart” of the NEPA process, and is intended to provide a “clear basis for choice among options by the decisionmaker and the public.” 40 C.F.R. § 1502.14; *see also* 42 U.S.C. § 4332(2)(C)(iii), (E). NEPA and its implementing regulations require an agency to “[r]igorously explore and objectively evaluate all reasonable alternatives.” 40 C.F.R. § 1502.14(a).

222. Defendants have violated NEPA, and the Aquaculture FMP/PEIS and ROD are invalid, because they failed to rigorously explore and evaluate all reasonable alternatives. The scope of a NEPA alternatives analysis is a function of the “purpose and need” for the agency action under review. *See* 40 C.F.R. § 1502.13. Defendants impermissibly confined the scope of their NEPA analysis by improperly defining the purpose and need for the agency action, which in turn precluded analysis of a broad array of potential environmental impacts, as well as reasonable alternatives. Alternatively, if Defendants did not impermissibly winnow the purpose and need of their action, they ignored reasonable alternatives.

223. Defendants arbitrarily and capriciously failed to adequately consider or address other reasonable and feasible alternatives to those proffered by NMFS, including other reasonable restrictions on the permitted aquaculture activities that would better address their environmental and economic impacts.

224. Defendants’ failure renders the Aquaculture FMP/PEIS inadequate, and as such, their reliance on the Aquaculture FMP/PEIS in issuing the Regulations was and is arbitrary and capricious, an abuse of discretion, otherwise not in accordance with law, and without observance of procedures required by law, in violation of NEPA and the APA.

225. The actions and inactions of Defendants described in this Cause of Action are

causing injuries to Plaintiffs, for which they have no adequate remedy at law.

FIFTH CAUSE OF ACTION
VIOLATION OF NEPA AND THE APA
FAILURE TO TAKE A HARD LOOK AT ENVIRONMENTAL IMPACTS IN THE PEIS

226. Plaintiffs re-allege and incorporate by reference the allegations set forth in Paragraphs 1-225 in this Complaint as if fully set forth herein.

227. NEPA's implementing regulations require NMFS to assess the environmental impacts of the proposed action, including direct effects and indirect effects that are reasonably foreseeable but removed in time or space. *See* 42 U.S.C. § 4332(2)(C); 40 C.F.R. §§ 1508.7-8. As part of its analysis, NEPA requires Defendants to take a hard look at the potential aesthetic, historic, cultural, economic, social, and health impacts of its action, 40 C.F.R. § 1508.8, including harm to commercial fisheries, recreational fishing, and fishery-dependent communities. NEPA further requires NMFS to use high quality, accurate scientific information, and to ensure the scientific integrity of this analysis. *See* 40 C.F.R. §§ 1500.1(b), 1502.24.

228. In violation of these mandates, Defendants' Aquaculture FMP/PEIS fails to take the required "hard look" at the potential impacts of the challenged regulations. The Aquaculture FMP/PEIS entirely failed to consider and/or to adequately analyze numerous substantial environmental and socioeconomic impacts. Defendants also entirely failed to consider high quality, accurate scientific information as NEPA requires.

229. NEPA and its implementing regulations require the scope of Defendants' analysis to include "connected actions" that "[a]utomatically trigger other actions," "[c]annot or will not proceed unless other actions are taken previously," or "[a]re interdependent parts of a larger action and depend on the larger action for their justification." 40 C.F.R. § 1508.25. An agency may not defer analysis of reasonably foreseeable, site-specific environmental consequences of a

larger program merely by saying that the consequences might be analyzed later. *See* 40 C.F.R. §§ 1501.2; 1502.2(g); 1502.5. Defendants' impermissibly segmented their analysis by ignoring and deferring analysis of the impacts of permitted aquaculture activities to some later stage, where NEPA may or may not even apply, leaving these impacts unanalyzed.

230. The Aquaculture FMP/PEIS fails to sufficiently analyze the cumulative impacts that will result from permitting offshore aquaculture in the Gulf EEZ, by failing to adequately consider the full range of cumulative impacts; wholly failing to address certain impacts, including those related to climate change, among others; failing to consider impacts over which other agencies may have overlapping authority; and improperly deferring consideration of reasonably foreseeable impacts to a later stage.

231. NEPA requires agencies to disclose and analyze measures to mitigate the impacts of proposed actions. *See* 40 C.F.R. §§ 1502.14(f), 1502.16(h). NMFS listed and relied on, but failed to take a hard look at, potential mitigations to counter the stated impacts of permitting offshore aquaculture in federal waters in the Gulf, including but not limited to potential harm to wild fisheries from the competing resources and ecological impacts of offshore aquaculture operations, danger to threatened and endangered species and other marine life from entanglement with aquaculture facilities, and economic competition of farmed fish with wild fish. Rather than analyzing the efficacy of the mitigation measures, NMFS unlawfully deferred any potential analysis or detailed discussions of the mitigation measures to the permit issuance stage. Reliance on later agency actions is not a lawful substitute for the agency's compliance with its mandate under NEPA to adequately analyze the potential significant impacts of its current action. Defendants also failed to analyze the potential impacts should/when any or all of those measures fail.

232. NMFS further made numerous conclusions that either directly contracted or completely failed to address the evidence before it, and arbitrarily and capriciously failed to sufficiently take public comments into account in defining the scope and extent of cumulative impacts.

233. Defendants' failures render the Aquaculture FMP/PEIS inadequate, and as such, their reliance on the Aquaculture FMP/PEIS in issuing the Regulations was and is arbitrary and capricious, otherwise not in accordance with law, and without observance of procedures required by law, in violation of NEPA and the APA.

234. The actions and inactions of Defendants described in this Cause of Action are causing injuries to Plaintiffs, for which they have no adequate remedy at law.

SIXTH CAUSE OF ACTION
VIOLATION OF NEPA AND THE APA
FAILURE TO TAKE A HARD LOOK AT ENVIRONMENTAL IMPACTS IN THE SEIS

235. Plaintiffs re-allege and incorporate by reference the allegations set forth in Paragraphs 1-234 in this Complaint as if fully set forth herein.

236. NEPA's "hard look" mandates apply equally to Supplemental EISes.

237. NMFS's SPEIS failed to take a hard look at the cumulative effects of and alternatives to its proposed actions, as well as potential mitigation measures that could counter the stated impacts of permitting offshore aquaculture in federal waters in the Gulf, following the Deepwater Horizon blowout.

238. Rather than analyzing the proposed actions in the context of the post-blowout environment, NMFS summarily concluded that the blowout would not change the effects of any of the proposed actions or alternatives. As such, Defendants violated NEPA in the scope and framework of its supplemental EIS analysis, as well as its purpose and need.

239. NMFS further made numerous conclusions that either directly contracted or completely failed to address the evidence before it.

240. For the reasons alleged, the SPEIS was inadequate and did not constitute a “hard look” at the impacts of implementing the Aquaculture FMP.

241. Defendants’ failure renders the SPEIS inadequate, and as such, their reliance on the SPEIS in issuing the Regulations was and is arbitrary and capricious, an abuse of discretion, otherwise not in accordance with law, and without observance of procedures required by law, in violation of NEPA and the APA.

242. The actions and inactions of Defendants described in this Cause of Action are causing injuries to Plaintiffs, for which they have no adequate remedy at law.

SEVENTH CAUSE OF ACTION
VIOLATION OF THE ESA AND APA
FAILURE TO INSURE THE CHALLENGED ACTION WILL NOT HARM PROTECTED
SPECIES OR CRITICAL HABITAT

243. Plaintiffs re-allege and incorporate by reference the allegations set forth in Paragraphs 1-242 in this Complaint as if fully set forth herein.

244. The establishment of the Aquaculture FMP/PEIS was an agency action that required formal consultation pursuant to Section 7 of the ESA.

245. Prior to finalizing the challenged action, Defendants failed to insure that the establishment of aquaculture facilities in the Gulf of Mexico is not likely to jeopardize the continued existence of any threatened or endangered species. 16 U.S.C. § 1536(a)(2).

246. Prior to finalizing the challenged action, Defendants failed to insure that the establishment of aquaculture facilities in the Gulf of Mexico is not likely to result in the destruction or adverse modification of the critical habitat of any protected species. *See* 16 U.S.C. § 1536(a)(2).

247. Prior to approving the new regulations and fishery management plan establishing and allowing for aquaculture facilities in the Gulf for the first time, and despite correctly concluding that this unprecedented regulatory regime “may affect” several ESA-protected species or their critical habitat, Defendants failed to initiate and undertake formal consultation and prepare a comprehensive, programmatic Biological Opinion on the potential effects—direct, indirect, interrelated, interdependent, and cumulative—of their action. *See* 16 U.S.C. § 1536(a); 50 C.F.R. § 402.14.

248. Defendants acknowledged that numerous ESA-protected species occur in the action area, the Gulf of Mexico, including numerous sea turtles (hawksbill, Kemp’s ridley, leatherback, green, and loggerhead), numerous whales (blue whale, finback whale, sei whale, and sperm whale), the smalltooth sawfish, and several corals (elkhorn and staghorn). Defendants acknowledged that these protected species could be affected by the aquaculture facilities that the challenge action permits, via physical interaction with aquaculture structures and behavior disruption in habitats used as feeding or breeding grounds.

249. Nonetheless, instead of undertaking formal consultation, Defendants twice engaged in its exception, “informal consultation,” in 2009 and then again in 2015. Both times Defendants determined that formal consultation and preparation of a comprehensive Biological Opinion could be avoided because its actions are “not likely to adversely affect” any listed species or their critical habitat. Defendants’ conclusions that the challenged actions “are not likely to adversely affect” any ESA-listed species or their designated critical habitat were arbitrary and capricious and otherwise not in accordance with law, in violation of the ESA and APA.

250. Defendants’ conclusions that the challenged actions are not likely to adversely

affect any ESA-listed species or their designated critical habitat failed to use the best scientific and commercial data available, in violation of the ESA and APA. 16 U.S.C. § 1536(a)(2).

251. Defendants' two informal consultations consisted only of the exchange of one- to two-page memos, without any supporting analysis in the form of a Biological Assessment. 16 U.S.C. § 1536(c)(1); 50 C.F.R. § 402.12. Defendants' failure to prepare any Biological Assessment evaluating the potential effects of the action on ESA-species and their habitat, in support of their subsequent decision not to engage in formal consultation and prepare a comprehensive Biological Opinion, was arbitrary and capricious, otherwise not in accordance with law, and failed to use the best available science and commercial data, in violation of the ESA and APA.

252. On June 11, 2015, Defendants determined they needed to "reinitiate" Section 7 consultation, because of several ESA actions in the Gulf since their 2009 informal consultation and "not likely to adversely affect" determination. 50 C.F.R. § 402.16(b)-(d). These actions were the July 10, 2014 designation of critical habitat for loggerhead sea turtles, 79 Fed. Reg. 39,856, the September 10, 2014 listing as threatened of five coral reef species, 79 Fed. Reg. 53,852, and the March 23, 2015 proposed listing of green sea turtle distinct population segments, 80 Fed. Reg. 15,271. Prior to the loggerhead sea turtle critical habitat, and at the time of the 2009 decision, there had been no critical habitat designated in the action area. Defendants again failed to prepare any Biological Assessment to evaluate the potential effects of the action on these new ESA-species and their habitat. That failure rendered its decision arbitrary and capricious, otherwise contrary to law, and failed to use the best available science, in violation of the ESA and APA.

253. Defendants' subsequent June 24, 2015 determination that, despite these

significant new issues that triggered the need to re-initiate the consultation process, it could still forgo formal consultation and the completion of a Biological Opinion, was arbitrary and capricious, otherwise contrary to law, and failed to use the best available science, in violation of the ESA and APA.

254. In its ESA determinations, Defendants arbitrarily and capriciously failed to comply with the ESA's mandates that it assess all the effects of its decisions, including direct, indirect, interrelated, and interconnected effects.

255. Throughout its ESA process, Defendants relied heavily on the rationale that, each individual permit would be subject to ESA requirements as well, and that, under the Regulations, NMFS has the authority to deny a permit application if the agency finds that the proposed location or aquaculture facility would adversely affect ESA-listed species or their critical habitat. Hence NMFS concluded that adverse effects would be "extremely unlikely," based on this later individual permit ESA review. Defendants' reliance on later ESA procedures and discretion, on a case-by-case, piecemeal level to purport to fulfil the agency's ESA obligations now, to insure no jeopardy to species and no adverse modification of their critical habitat from this programmatic action, is arbitrary and capricious, otherwise contrary to law, in violation of the ESA and APA.

256. Defendants have failed to insure that the agency or any Gulf aquaculture permittees will not make any irreversible or irretrievable commitment of resources with respect to Gulf aquaculture establishment prior to initiating and completing formal consultation on the challenged action. *See* 16 U.S.C. § 1536(d).

257. In sum, Defendants violated the ESA and APA, because they failed to follow the ESA's mandated procedures, failed to use the best scientific and commercial data available, failed to consider significant aspects of the issue, and offered an explanation that runs counter to

the evidence before the agency.

258. For all these reasons, the challenged action is arbitrary and capricious, an abuse of discretion, and otherwise contrary to law, in violation of the APA.

259. The actions and inactions of Defendants described in this Cause of Action are causing injuries to Plaintiffs, for which they have no adequate remedy at law.

REQUEST FOR RELIEF

WHEREFORE, Plaintiffs respectfully requests this Court:

A. Adjudge and declare the Gulf Aquaculture FMP and Regulations as an unlawful *ultra vires* agency actions, outside Defendants' MSA fishing authority, in violation of the MSA and APA;

B. Adjudge and declare the Gulf Aquaculture FMP and regulations, as well as the PEIS and supplemental PEIS issued in connection with that approval, to be in violation of the MSA, NEPA, ESA and the APA;

C. Vacate the challenged actions and enjoin the agency from taking any action pursuant to them, and issue any other appropriate equitable relief;

D. Issue an injunction requiring Defendants to withdraw their assertion of jurisdiction over offshore aquaculture, and prohibiting Defendants from asserting jurisdiction over, or initiation of any proceeding, based on any illegal assertion of jurisdiction over industrial aquaculture as "fishing";

E. Alternatively, vacate the challenged actions and order Defendants to undertake a new proposed rulemaking that complies with the MSA's statutory standards, a PEIS that complies with NEPA, and to formally consult and prepare a comprehensive Biological Opinion under the ESA, before determining whether any new final action.

F. Award to Plaintiffs damages as well as all costs and reasonable attorneys' fees as provided in 5 U.S.C. § 552(a)(4)(E) or any other applicable law; and

G. Grant other and further relief as the Court may deem just and proper.

Dated this 12th day of February, 2016.

Respectfully submitted,

/s/ George A. Kimbrell

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