IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF LOUISIANA

GULF FISHERMEN'S ASSOCIATION, *et al.*,	**)**	**CIVIL ACTION NO.**
	)	**2:16-cv-1271-JTM-KWR**
Plaintiffs,	**)**	
v.	**)**	**Section: "H" (4)**
	)	
NATIONAL MARINE FISHERIES SERVICE,	**)**	**Honorable Jane Triche Milazzo**
***et al.*,**	**)**	
	)	**Magistrate Karen Wells Roby**
Defendants.	**)**	
	)	

PLAINTIFFS' MEMORANDUM OF POINTS AND AUTHORITIES
IN SUPPORT OF PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT

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INTRODUCTION

On January 13, 2016, Defendant National Marine Fisheries Service (NMFS or the Agency) finalized regulations (Regulations) that authorize, for the first time, a commercial aquaculture permitting scheme in federal waters. The Regulations codify ten actions analyzed in the Fishery Management Plan for Regulating Offshore Aquaculture in the Gulf of Mexico (FMP/PEIS).[1] Plaintiffs Gulf Fishermen's Association; Gulf Restoration Network; Destin Charter Boat 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) challenge the Regulations and the FMP/PEIS, under the Magnuson-Stevens Fishery Conservation and Management Act (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.

As Plaintiffs will show, NMFS was aware offshore aquaculture carries a plethora of adverse environmental and socioeconomic consequences. NMFS also knew the MSA was never intended to oversee such impacts. But rather than continue pushing a reticent Congress to enact controversial aquaculture legislation, NMFS forged ahead with its existing MSA authority over "fishing." Further, instead of meaningfully assessing the impacts of foreseeable aquaculture operations as a whole, NMFS obscured such consideration by deferring it to the future, on an individual permit basis, and on entirely discretionary terms; improperly narrowed the purpose of

[1] The Fishery Management Plan for Regulating Offshore Aquaculture in the Gulf of Mexico also constitutes a programmatic Environmental Impact Statement (PEIS), collectively referred to throughout as "the FMP/PEIS."

the FMP/PEIS; failed to substantively analyze the environmental and socioeconomic impacts of its proposal, including harm to endangered species; and failed to follow the required procedures in its finalization of the FMP/PEIS and Regulations. In these ways, NMFS violated the MSA, NEPA, ESA, and APA.

Plaintiffs seek declaratory and equitable relief, declaring that NMFS violated the MSA, NEPA, ESA, and APA, vacating the Regulations as arbitrary and capricious agency actions, and ordering NMFS to comply with these statutes' mandates before proposing any new related action regarding aquaculture in the Gulf of Mexico.

RELEVANT PROCEDURAL HISTORY

The FMP/PEIS and Regulations resulted from a convoluted rulemaking saga spanning over a decade, propelled by NMFS's singular focus to put industrial fish farms in federal waters. *See* Administrative Record (AR)[2] 33108. As early as 2003, NMFS began working with the Gulf of Mexico Fishery Management Council (Gulf Council) to develop offshore aquaculture through a proposed general amendment to the existing fishery management plans (FMPs) of wild fisheries, while Congress was attempting to pass national legislation that would authorize aquaculture in federal waters. *See* AR126; AR22912 (The challenged permitting scheme "would set a precedent … before [any] national legislation is approved by Congress."). NMFS attempted to paper over its lack of statutory authority by simply overextending its existing MSA authority,

[2] NMFS produced the original Administrative Record with Bates numbering 00001 to 095878. Citations to those documents are preceded by "AR" followed by the corresponding number. NMFS subsequently reproduced the e-mail portion of the Administrative Record with Bates numbering FR_PR00000001 to 00040528. Citations to the reproduced e-mails are preceded by FR_PR followed by the corresponding number. *See* ECF Nos. 39, 43, 48, 61, 66.

treating aquaculture—the farming and rearing of fish in confined structures[3]—as synonymous with the commercial and recreational catching of wild fish. After realizing that the new aquaculture legislation was not gaining traction, and unable to reconcile the fundamental differences between the farming of fish and the catching of fish from a management perspective, NMFS turned the amendment into a stand-alone FMP, so that it could treat all farmed fish, regardless of species, as one "fishery unit" under the MSA. *See* FR_PR14713; FR_PR11878.

The Gulf Council approved a draft of the FMP/PEIS and Regulations in January 2009, but NMFS only sought public input on the draft FMP/PEIS. *See* AR22523; AR23334-37. The majority of comments received opposed offshore aquaculture development. AR19780-95; AR23349-6104. Nonetheless, in an unprecedented move, NMFS let the FMP/PEIS enter into effect by operation of law (as opposed to affirmatively approving it) on September 3, 2009, citing the lack of a "national [aquaculture] policy." *See* AR33108; AR26197-99.

On April 20, 2010, an explosion occurred on the Deepwater Horizon oil platform in the Gulf of Mexico, causing the "biggest offshore oil spill in American history."[4] Subsequently, on January 25, 2013, NMFS announced their intent to prepare a Supplemental Environmental Impact Statement (SPEIS). AR26222-23. Although nearly a decade had passed since the initial preparation of the FMP/PEIS, the SPEIS was limited to assessing the impacts of the oil spill. *See id.* NMFS instead prepared a separate Supplemental Information Report (SIR)—a non-NEPA document—to address the passage of time. *See* AR27454. NMFS finalized the SPEIS in June 2015, concluding that the Deepwater Horizon blowout did not alter any of its conclusions in the

[3] The Regulations defined "aquaculture" as "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 [Exclusive Economic Zone]." AR33138.
[4] Campbell Robertson & Clifford Krauss, *BP May Be Fined Up to $18 Billion for Spill in Gulf*, N.Y. Times (Sept. 4, 2014), https://www.nytimes.com/2014/09/05/business/bp-negligent-in-2010-oil-spill-us-judge-rules.html.

FMP/PEIS, even though the SPEIS repeatedly acknowledged that there was insufficient information to determine the impacts of the oil spill. *See* AR26916. In 2016, NMFS also finalized the SIR, again finding that no updates to the FMP/PEIS were necessary. AR33074.

While supplemental analyses to avoid revisiting the FMP/PEIS were ongoing, NMFS moved forward with the final step to authorize offshore aquaculture by sending revised draft Regulations for the Gulf Council's approval in February 2013. *See* AR27443-63. NMFS finally promulgated the Regulations authorizing commercial offshore aquaculture in the Gulf in 2016. *See* AR33107-46. Despite repeatedly acknowledging that aquaculture could affect federally listed species and their critical habitat, NMFS never completed the consultation and analysis required under the ESA. *See* AR23115-19; AR32684-90.

The present litigation is the second challenge to NMFS's decision to authorize commercial offshore aquaculture in the Gulf of Mexico. On October 2, 2009, after NMFS finalized the FMP/PEIS, two of the Plaintiffs in this case, Gulf Restoration Network and Food & Water Watch, Inc., filed suit challenging the FMP/PEIS. *Gulf Restoration Network, Inc. v. NMFS*, 730 F. Supp. 2d 157 (D.D.C. 2010). The district court dismissed the case, finding that the claims were not ripe and the plaintiffs lacked standing, since there was no final challengeable agency action until the issuance of implementing regulations. *Id.* at 174. Thus, one month after NMFS finally promulgated the Regulations, Plaintiffs filed this lawsuit. *See* 16 U.S.C. § 1855(f). Plaintiffs now file this Motion for Summary Judgment as to all claims in the Complaint.

RELEVANT FACTUAL BACKGROUND

NMFS readily admits that offshore aquaculture carries numerous direct and indirect impacts on the physical, economic, social, and administrative environments of the Gulf. *See* AR22788-812. These impacts include: increased risks of diseases to wild fish; chemical and nutrient pollution from inputs of aquaculture (such as fish feed, antibiotics, and pesticides) that

negatively affect water quality and the marine environment; loss of genetic diversity and habitat of wild fish from the inevitable escape of farmed fish; loss of traditional fishing grounds; reduced market price for wild-caught fish from farmed fish competition; and other associated declines in employment and income to fishing and fishing-related industries. *See id*.

NMFS also recognized that these harms could wreak havoc on the Gulf's ecosystems and communities. The FMP/PEIS acknowledged that the destruction of the local marine environment and traditional fishing industries could be detrimental to the affected fishing communities. AR22819-22. The Gulf is home for numerous species, from dolphins and sharks, tuna and mackerel, shrimp and lobster, to baitfish such as menhaden, as well as several federally protected species (6 species of whales, 5 species of sea turtles, 2 fish species, and 2 coral species protected under the ESA, plus 28 species of marine mammals protected under the Marine Mammal Protection Act). AR22655-68. This abundance also feeds the local communities. Commercial and recreational fishing, boat chartering, and water sports and tourism generate revenues to the tunes of millions and billions of dollars yearly. AR22746, 22759-65, 22909.

Yet instead of meaningful, robust analysis of the potential impacts from aquaculture as a whole, NMFS punted any such consideration to future individual permit applications. *See* AR33143-45. NMFS took ten actions: Action 1 (aquaculture permit) established the commercial permitting scheme for conducting commercial aquaculture in Gulf waters, AR22537; created a Gulf Aquaculture Permit, and authorized NOAA Fisheries' Southeast Region Regional Administrator to review and approve individual applications. *See id.*; 50 C.F.R. § 622.101 (AR33139-42). Action 2 (permit application) discussed the application process. *See* AR22538-39; 50 C.F.R. § 622.101 (AR33139-42). Action 3 (permit duration) set an initial 10-year permit term, with renewals for 5-year terms thereafter. The renewals are administrative;

no additional substantive review is required. AR22539-40; 50 C.F.R. § 622.101(d)(4), (6) (AR33141). Action 4 (aquaculture species) regulated all farmed fish—regardless of species—under the Aquaculture Fishery Management Unit. It authorized the farming of all federally managed fish species besides corals and shrimp. *See* AR22540; 50 C.F.R. § 622.105(b) (AR33144). Action 5 (aquaculture systems) deferred approval of aquaculture structures to the individual application phase, with no minimum requirements. Consideration of a structure's potential threats to essential fish habitat, federally protected species, and the marine ecosystem is discretionary. *See* AR22540-41; 50 C.F.R. § 622.105(a) (AR33144). Action 6 (siting) allowed aquaculture operations in traditional fishing grounds and critical habitats for federally listed species.[5] *See* AR22541; 50 C.F.R. § 622.103 (AR33143). Action 7 (restricted access zones) prohibited fishing and fishing vessels in areas surrounding aquaculture facilities. *See* AR22542; 50 C.F.R. § 622.104 (AR33143). Action 8 (recordkeeping) established record and self-reporting requirements, instituting after-the-fact reporting for entanglements with marine species (including those protected under the ESA), disease outbreaks, and incidents of only "major" fish escapes. AR22542-43; 50 C.F.R. § 622.102 (AR33142-43). Action 9 (production capacity) capped annual total aquaculture production at 64 million pounds, and annual production for each operator at 20 percent of the total, or 12.8 million pounds. AR22543-44; 50 C.F.R. § 622.107 (AR33145). Action 10 (revision framework) established the procedure for making changes to the FMP/PEIS and Regulations. AR22544; 50 C.F.R. § 622.109 (AR33146).

NMFS thus created a commercial offshore aquaculture permitting scheme where a permit holder can farm fish in most areas of the Gulf with little oversight. *See* AR33108. Once issued,

[5] Aquaculture is only prohibited in designated "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." AR33111.

permits are effective for at least 10 years; there are no grounds for automatic revocation. *Id.* Fish farms can be sited in traditional fishing grounds or sensitive habitat of wild fish and federally protected species. Yet, NMFS prohibits fishermen from accessing extended areas surrounding aquaculture operations. 50 C.F.R. § 622.104. The Regulations allow up to 64 million pounds of fish to be farmed annually, driving down the price of wild-caught fish. AR22623-24; AR22819.

Further, although the FMP/PEIS defers consideration of the environmental and socioeconomic impacts of aquaculture to the individual application phase, the Regulations made clear that any such consideration is discretionary. 50 C.F.R. § 622.103(a)(4) (application "may" be denied based on such factors). The Regulations call for an applicant to provide a "baseline environmental survey" of the proposed operation site, but do not set forth any minimum requirements for the types of aquaculture structures that may be employed, the stocking density of the farmed fish operations, or any conditions that must be met for site approval. *See* 50 C.F.R. §§ 622.101(a)(2), 622.103(a)(4), 622.105(a). They do not require any additional NEPA analysis by NMFS or continuous monitoring by the operators. *See* AR 33119, 33143. Finally, while NMFS acknowledged that fish escapes and encounters with other marine species are inevitable, the Regulations only require self-reporting by aquaculture operators of "major escapements" and interactions with other marine species. 50 C.F.R. §§ 622.102, 622.108.

STANDARD OF REVIEW

Summary judgment is appropriate if there is no genuine issue of material fact and the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(c); *Celotex Corp. v. Catrett*, 477 U.S. 317, 322-23 (1986). All of Plaintiffs' claims are reviewed under the APA, which provides the basic framework for judicial review of agency action. 5 U.S.C. § 702. Under the APA, if a court concludes an agency action is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law," "in excess of statutory jurisdiction, authority, or

limitations, or short of statutory right," or the action has been adopted "without observance of procedure required by law," the reviewing court "shall … hold unlawful and set aside"—that is, vacate—the challenged agency action. *Id.* § 706(2)(A), (C)-(D).[6] For procedural APA violations, a court asks whether the procedural requirements were triggered and, if so, whether those procedures had been followed. *See U.S. Steel Corp. v. U.S. E.P.A.*, 595 F.2d 207, 213 (5th Cir. 1979). For substantive APA violations, a court evaluates whether the agency "examine[d] the relevant data and articulate[d] a satisfactory explanation for its action including a rational connection between the facts found and the choice made." *Motor Vehicle Mfrs. Ass'n of U.S. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (internal quotation marks omitted). An action is arbitrary and capricious if the agency "has relied on factors which 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." *Id.* Judicial review should be "searching and careful," and a court "must not rubber-stamp administrative decisions that … [are] inconsistent with a statutory mandate or that frustrate the congressional policy underlying a statute." *Bureau of Alcohol, Tobacco & Firearms v. Fed. Labor Relations Auth.*, 464 U.S. 89, 97 (1983) (internal quotation marks omitted).

[6] Plaintiffs have standing. Plaintiffs' members include fishermen and local residents whose economic, aesthetic, and personal interests in the Gulf's marine resources, including federally protected species, are injured, and will continue to be injured, by NMFS's offshore aquaculture permitting scheme. *See Hunt v. Wash. State Apple Advert. Comm'n*, 432 U.S. 333, 342-43 (1977); *Sabine River Auth. v. U.S. Dept. of Interior*, 951 F.2d 669, 674-75 (5th Cir. 1992); *see* Lovera Decl.; Kimbrell Decl.; Fuller Decl.; Brooks Decl.; Sarthou Decl.; Shepard Decl.; Barcilon Decl.; Scott Decl.; Findley Decl.; Daynes Decl.; Favre Decl.; Burke Decl.; Cufone Decl.; Zubrick Decl. (filed concurrently). Also, Plaintiffs' interest in timely review of the Regulations and the FMP/PEIS was injured by NMFS's MSA procedural violations. *See Sierra Club v. Glickman*, 156 F.3d 606, 613-16 (5th Cir. 1998); *see* Lovera Decl.; Sarthou Decl.

ARGUMENT

The Court should grant Plaintiffs' Motion for Summary Judgment. First, NMFS's promulgation of the Regulations under the MSA was *ultra vires*, because aquaculture is not fishing, as the term is defined under the Act. Second, the FMP/PEIS and Regulations violate the MSA's national standards, are not based on best science, and fall short of the Act's mandate for protection of essential fish habitat. Their approval also violated the MSA's procedural requirements. Third, the FMP/PEIS and its supplemental analyses are also legally deficient under NEPA. NMFS defined away its alternatives analysis under an overly narrow purpose, and then deferred away any "hard look" at offshore aquaculture's direct, indirect, site-specific, and cumulative impacts to the individual application phase, with no required subsequent NEPA assessment. Finally, NMFS violated the ESA, by failing to complete consultation on the adverse effects of offshore aquaculture on federally protected species and their critical habitat. For these reasons, NMFS's commercial offshore aquaculture permitting scheme violates the MSA, NEPA, ESA, and the APA.

I. THE MSA DOES NOT AUTHORIZE AQUACULTURE.

Fishing and aquaculture, as defined by NMFS, are fundamentally different activities, with very different environmental and socioeconomic effects. Congress authorized NMFS to regulate fishing of wild fisheries under the MSA, not to establish an entire new regulatory regime permitting commercial fish farming in permanent structures in open ocean. The Regulations exceed NMFS's authority, and thus violate the APA. *See* 5 U.S.C. § 706(2)(C).[7]

[7] *Ultra vires* means action that is "unauthorized," or "beyond the scope of power allowed or granted … by law." Black's Law Dictionary (10th ed. 2014). The term is applied to federal agencies when they act in excess of their delegated power, because "an agency's power is no greater than that delegated to it by Congress." *Lyng v. Payne*, 476 U.S. 926, 937 (1986).

A. The MSA's Plain Text Supports Plaintiffs.

The MSA's entire scheme is set up to regulate wild fisheries, not aquaculture. The MSA's detailed findings and purpose statement declares why and how the United States must protect wild fish species while simultaneously manage wild fisheries to help commercial and recreational fishing economies dependent on them. *See* 16 U.S.C. § 1801(a)(1)-(12) (findings), (b)(1)-(7) (purpose), (c)(1)-(7). It does not mention aquaculture.[8] *Util. Air Regulatory Group v. EPA*, 134 S. Ct. 2427, 2445 (2014) ("An agency has no power to tailor legislation to bureaucratic policy goals by rewriting unambiguous statutory terms"); *Chevron v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 842 (1984) ("If the intent of Congress is clear, that is the end of the matter.").

NMFS's permitting scheme—a massive, unprecedented system; an entirely new and novel form of industrial activity—is predicated on one word: "harvesting," plucked out of MSA's definition of "fishing," which is: "(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 does not define "harvesting." So, NMFS went to a dictionary definition, and found a potential definition that includes "the act or process of harvesting a crop." AR0009. Then, using a second, different dictionary, NMFS found a potential definition of "crop" that

[8] There is only *one* MSA aquaculture mention, in a discrete 1996 section, to award grants to private companies for certain reinvestment activities, including "aquaculture or hatchery programs" in the Northwest Atlantic Ocean, 16 U.S.C. § 1863(a)(1)(E), and never in the context of whether the aquaculture falls under the Agency's MSA fishing purview. This single inapposite mention, though, shows Congress was cognizant of aquaculture, and as such, the canon of statutory construction, *expressio unius est exclusio alterius*, (*i.e.*, the expression of one thing implies the exclusion of another), illustrates that Congress knew what it was doing in otherwise excluding aquaculture from the MSA's jurisdiction. *United States v. Fafalios*, 817 F.3d 155, 159 (5th Cir. 2016) ("[I]t is generally presumed that Congress acts intentionally and purposely when it includes particular language in one section of a statute but omits it in another.") (quoting *Chicago v. Envt'l. Def. Fund*, 511 U.S. 328, 338 (1994)).

includes "the yield of some other farm produce." *Id.* Then, equating seafood and farm produce, and based solely on these cherry-picked, extra-statutory potential definitions, NMFS thus surmised it had a "sound basis for concluding that 'fishing' includes the catch, take or harvest of cultured stocks, and thus aquaculture activities are within the scope" of the MSA. *Id.*

There is zero evidence Congress contemplated "harvesting" should include farming. Rather, the much more logical reading—supported by the whole MSA statutory scheme, including its plain text, purpose, and legislative history, and by numerous canons of construction—is that "harvesting" in the MSA can only be understood to be a term with similar and interrelated meaning to "catching" or "capturing" of wild fish.[9]

Where, as here, there is a list of words—like catching, taking, and harvesting—they cannot be read in isolation and instead must be read to have *similar, related* meanings. *Life Techs. Corp. v. Promega Corp.*, 137 S. Ct. 734, 740 (2017) ("[A] word is given more precise content by the neighboring words with which it is associated."). NMFS cannot deny that "catching" and "taking" are similar, related words to describe traditional fishing activities, and neither is related to aquaculture or farming crops. Thus, *harvesting*'s only logical MSA definition is not the *agricultural crops* definition fabricated by NMFS, but a plain, common sense, *animal-related* definition—to "catch or kill animals for human consumption."[10] Such a definition aligns with the other words used in the Act to describe the capturing of wild fish.

[9] In another statute, Congress did define "aquaculture" and did *not* use the word "harvest." 16 U.S.C. § 2802(1)-(2) (National Aquaculture Policy, Planning, and Development Act). That statute also does not grant authority to NMFS (or any other agency) to permit aquaculture facilities.

[10] *Harvest*, Oxford English Dictionary, https://en.oxforddictionaries.com/definition/harvest (last visited Sept. 20, 2017).

NMFS's isolated reading improperly strips the term of this textual context, in contravention with fundamental precepts of statutory construction:

> The definition of words in isolation, however, is not necessarily controlling in statutory construction. *A word in a statute may or may not extend to the outer limits of its definitional possibilities*. Interpretation of a word or phrase depends upon reading the whole statutory text, considering the purpose and context of the statute, and consulting any precedents or authorities that inform the analysis.

Dolan v. U.S. Postal Serv., 546 U.S. 481, 486 (2006) (emphasis added). "Fishing" under the MSA is not harvesting alone; it is *catching, taking, or harvesting*. As Judge Learned Hand explained, "words are not pebbles in alien juxtaposition; they have only a communal existence; and not only does the meaning of each interpenetrate the other, but all in their aggregate take their purport from the setting in which they are used …." *Nat'l Labor Relations Bd. v. Federbush Co.*, 121 F.2d 954, 957 (2d Cir. 1941) (as quoted in *King v. St. Vincent's Hosp.*, 502 U.S. 215, 221 (1991)). Tellingly, NMFS itself does not use the word "harvesting" in defining "aquaculture" in the Regulations. 50 C.F.R. § 622.2.

B. The MSA's Entire Statutory Scheme Supports Plaintiffs.

NMFS's reading is also contrary to the MSA's plain text in other fundamental ways: for example, the relationship of "fishing" to "fishing vessels." The MSA only allows the issuance of fishing permits for "(A) any *fishing vessel* of the United States fishing, or wishing to fish … ; (B) the operator of any such vessel; or (C) any United States fish processor who first receives fish that are subject to the plan." 16 U.S.C. § 1853(b)(1) (emphasis added). NMFS's reading thus requires somehow transposing a stationary aquaculture facility, such as a net pen or cage, into a "fishing vessel." This is contrary to the MSA's definition. *Id.* § 1802(18) (defining "fishing vessel" as "any vessel, boat, ship, or other craft" used for fishing or aiding in fishing, such as providing storage, refrigeration, transportation, or processing). The Supreme Court has rejected arguments that "anything that floats" can be considered a vessel. *Lozman v. City of Riviera*

Beach, Fla., 568 U.S. 115, 126 (2013); 1 U.S.C. § 3. Congress's use of permitted "vessels" again shows that the MSA is intended to regulate fishing *boats*, not the raising of ocean fish crops.[11]

Another important example: the key regulatory unit of the MSA is a "fishery," defined as "(A) one or more stocks of fish which can be treated as a unit *for purposes of conservation* and management and which are identified on the basis of geographical, scientific, technical, recreational, and economic characteristics; and (B) *any fishing for such stocks*." 16 U.S.C. § 1802(13)(A) (emphases added). Segregating some fish from wild stocks to farm them has no conservation purpose for those fish. And the specific use of the term fishing in this definition again shows that its purported application to aquaculture is nonsensical. *Utility Air Regulatory Group*, 134 S. Ct. at 2442 ("[R]easonable statutory interpretation must account for both the specific context in which language is used and the broader context of the statute as a whole.") (internal quotation marks omitted).[12]

Consider too the main purposes of the MSA, which are principally meant to prevent overfishing, and to conserve and manage wild fisheries. 16 U.S.C. §§ 1801, 1851(a)(1). The Act defines "overfishing," as "a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce the maximum sustainable yield …." *Id.* § 1802(34). As NMFS itself admits, AR22866-69, this is made nonsensical by an "aquaculture as fishing" reading, which *cannot be*

[11] As an alternative, stand-alone argument, if the Court concludes that aquaculture is "fishing," it should still set aside the Regulations as applied to non-vessels, because they cover far more than *actual* vessels. 50 C.F.R § 622.2 (defining "[a]quaculture system" as "any cage, net pen, enclosure, structure, or gear deployed in waters of the Gulf ….").

[12] In an unpublished, non-precedential one-page memorandum disposition, *see* Ninth Circuit Rule 36-3, the Ninth Circuit concluded that NMFS could issue a special permit under the MSA to a single aquaculture facility off the coast of Hawaii. *Kahea v. NMFS*, 544 Fed. Appx. 675 (9th Cir. 2013). This single, one-time special permit is wholly inapposite to the present Regulations authorizing long-term commercial aquaculture in the entire Gulf EEZ. Regardless, that non-precedential decision is not persuasive, since it gives no reasoning for its summary conclusion.

overfished. *Id.* § 1802 (29); *see infra* pp. 19-20. "Harvesting" in the MSA's "fishing" definition must be read in context, so that overfishing retains its logical meaning. The term "cannot be construed in a vacuum. It is a fundamental canon of statutory construction that the 'words of a statute must be read in their context and with a view to their place in the overall statutory scheme.'" *Sturgeon v. Frost*, 136 S. Ct. 1061, 1070 (2016) (citation omitted); *Hightower v. Texas Hosp. Ass'n*, 65 F.3d 443, 448 (5th Cir. 1995) ("The statute must be read as a whole in order to ascertain the meaning of the language in context of the desired goals envisioned by Congress.").

C. The Legislative History Supports Plaintiffs.

The MSA's legislative history further shows that Congress applied the term "harvesting" without contemplating aquaculture. The MSA was passed as a response to disappearing fish stocks, and the original Senate committee report noted that fish are a "common property resource" that are traditionally "hunted" rather than "farmed." S. Rep. No. 94-416, at 5 (1975) (quotations omitted), *as reprinted in* Legis. History of the Fishery Conservation and Mgmt. Act of 1976 ("Legis. Hist."), at 660. Indeed, throughout the MSA's legislative history, the word "harvesting" is used exactly as Plaintiffs argue it should be viewed, over and over, as a form of traditional fishing, and *not once* used to mean aquaculture.[13] Unless otherwise defined, words in

[13] *See, e.g.*, Legis. Hist. at 650 ("Harvesting, both sport and commercial, should be limited to the amount which may be taken without endangering the productivity of the resource being managed."); *id.* at 624, 590, 547 ("As a result of virtually unrestrained harvesting of U.S. coastal fishery resources, particularly by large-scale foreign fishing fleet operations…"); *id.* at 362 ("But I do want to be sure that there is enough for Americans, who should do more fishing—this is my point—and encourage more U.S. fishing. If there is an abundance, we ought to go out and harvest it."); *id.* at 224 ("Counsels also would have the authority to limit the number of fishermen allowed to harvest a given species."); *id.* at 960 ("Something must be done to protect our depleted fisheries from unmanaged harvesting"); *id.* at 925 ("I am talking about the fact that some species of ocean fish have been overharvested…."); *id.* at 899 ("The level at which a fishery can be harvested without triggering irreversible decline in resources is called the maximum sustainable yield.").

a statute are interpreted as taking their ordinary, contemporary, common meaning at the time Congress enacted the statute. *BedRoc Ltd., LLC v. United States*, 541 U.S. 176, 184 (2004).

The MSA's amendment history is the same: a 1982 House of Representatives Committee Report on the Act's purpose discussed "the amount of fish harvested off our coasts." H.R. Rep. No. 97-549, at 10 (1982), *as reprinted in* 1982 U.S.C.C.A.N. 4320. Similarly, a Senate Committee Report on the MSA's 1996 amendments identified the prevention of "overfishing" and "waste and bycatch of nontarget species" as measures that must be taken to achieve "stable harvest" of fish. S. Rep. No. 104-276, at 3 (1996), *as reprinted in* 1996 U.S.C.C.A.N. 4073. Neither the stated goal of establishing "stable harvest" of fish nor the proffered solutions relate to the concept of fish farming; they address chronic problems of wild fish capture. As used in the MSA, harvesting describes traditional fishing harvests, not aquaculture.

Nor are these only past Congressional views: more recent Congresses have reaffirmed that the MSA does not provide NMFS the authority to start a new aquaculture industry. The U.S. Environmental Protection Agency (EPA), in its comments on the FMP/PEIS, warned that the House of Representatives' Committee Chairman had stated that "*Congress did not intend for the* [*MSA*] *to grant authority to NOAA and the Council to regulate offshore aquaculture as fishing under the Act*." AR23341 (raising the "issue of whether sufficient aquaculture authorities currently exist") (emphasis in the original). That letter was far from alone; the record includes multiple such congressional letters.[14]

[14] AR190, Letter from Representative Rahall to NMFS (Oct. 24, 2008) (urging NMFS to discontinue the regulatory efforts for aquaculture, because they are premised on an "overly broad reading of the statute" and that the House Chair was "aware of no provision in the [MSA] that conveys such authority."); AR27168, Letter from Rep. Markey, Committee on Natural Resources, to NMFS (Feb. 6, 2013) ("Congress did not intend for NOAA to regulate aquaculture as a fishery under MSA. MSA requires NOAA to prevent overfishing, rebuild depleted fish stocks, and designate and protect essential fish habitat: three actions that make no

Indeed for nearly a decade, NMFS, itself recognizing its lack of MSA authority for aquaculture, made *passing a new law* giving it this authority a top legislative priority. From 2005 to 2011, Congress introduced numerous bills that would have given NMFS such authority.[15] NMFS testified repeatedly in favor of those bills, and underscored that new legislative authority was required. For example, in congressional testimony in 2007, NOAA's Under Secretary for Oceans testified that "*additional statutory authority is needed* to establish a regulatory framework for aquaculture in the U.S. [EEZ]."[16] As EPA declared, it is "confusing why Congress considers it necessary to draft legislation …, to specifically authorize [NMFS] to issue offshore aquaculture permits," if the MSA already "allegedly sufficiently authorizes [NMFS] to regulate offshore aquaculture." AR23342.

The Supreme Court has warned repeatedly that "Congress does not, one might say, hide elephants in mouseholes." *Puerto Rico v. Franklin California Tax-Free Tr.*, 136 S. Ct. 1938, 1947 (2016) (internal quotation omitted). Yet this is what NMFS's *ultra vires* position amounts

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sense in the context of [aquaculture]."); AR26143-26146 (2009 Letter signed by 37 members of U.S. Congress urging disapproval of the FMP/PEIS because the MSA "was never intended to authorize offshore aquaculture").

[15] National Offshore Aquaculture Act of 2005, S.1195, 109th Cong. (2005), *available at* https://www.congress.gov/bill/109th-congress/senate-bill/1195/text ; National Offshore Aquaculture Act of 2007, H.R. 2010, 110th Cong. (2007), *available at* https://www.congress.gov/bill/110th-congress/house-bill/2010/text ; National Offshore Aquaculture Act of 2007, S. 1609, 110th Cong. (2007), *available at* https://www.congress.gov/bill/110th-congress/senate-bill/1609/text ; National Sustainable Offshore Aquaculture Act of 2009, H.R. 4363 111th Cong. (2009), *available at* https://www.congress.gov/bill/111th-congress/house-bill/4363/text ; National Sustainable Offshore Aquaculture Act of 2011, H.R. 2373, 112th Cong. (2011), *available at* https://www.congress.gov/bill/112th-congress/house-bill/2373/text.

[16] *National Offshore Aquaculture Act of 2007: Hearing on H.R. 2010 Before the H. Comm. on Natural Resources*, 110th Cong. 2 (2007) (Statement of Vadam Conrad C. Lautenbacher, Jr., NOAA Under Secretary for Oceans and Atmosphere) (emphasis added), *available at* http://www.legislative.noaa.gov/Testimony/lautenbacher071207.pdf

to: shoving an elephant-sized new regulatory scheme through a single-word mousehole. It is untenable. Congress never contemplated the farming of fish like the cultivation of agricultural crops. *FDA v. Brown & Williams Tobacco Corp.*, 529 U.S. 120, 160 (2000) ("Congress could not have intended to delegate a decision of such economic and political significance to an agency in so cryptic a fashion."). The Court should set aside the Regulations. *Nat'l Pork Producers v. EPA*, 635 F.3d 738 (5th Cir. 2014) (striking down as *ultra vires* EPA regulations attempting to apply the Clean Water Act to concentrated animal feeding operations' water pollution). To the extent NMFS wants to permit aquaculture facilities in federal waters, as the court in *National Pork Producers* explained, the proper venue is not improperly shoehorned regulations, but Congress. 636 F.3d at 753 ("To the extent that policy considerations do warrant changing the statutory scheme, such considerations address themselves to Congress, not to the courts.").

II. EVEN IF NMFS COULD REGULATE AQUACULTURE UNDER THE MSA, ITS PERMITTING SCHEME STILL VIOLATES THE ACT.

A. The Magnuson-Stevens Conservation and Management Act.

The MSA governs fishery management in federal waters, referred to as the Exclusive Economic Zone (EEZ) under the Act.[17] 16 U.S.C. § 1802(11). Recognizing the threat to the survival of wild fisheries and the importance of fishing economies, Congress enacted the MSA to "prevent overfishing, to rebuild overfished stocks, to insure conservation, to facilitate long-term protection of essential fish habitats, and to realize the full potential of the Nation's fishery resources." *Id.* § 1801(a)(6); *see id.* § 1801(a)(1)-(3). To that end, the MSA establishes eight regional fishery management councils, including the Gulf Council. *Id.* §§ 1801(b)(5); 1852(a)(1). Each fishery management council is charged with "prepar[ing] and submit[ting] to the Secretary

[17] The Gulf of Mexico EEZ (Gulf EEZ) generally extends from 3 to 200 nautical miles off of the coasts of Louisiana, Mississippi, Texas, and the west coast of Florida. *See* Gulf of Mexico Fishery Management Council, http://www.fisherycouncils.org/gulf-of-mexico/ (last visited Sept. 18, 2017).

[of Commerce] . . . a [FMP]" and implementing regulations to manage and conserve the fisheries under its authority. *Id.* § 1852(h). The preparation of a FMP and its implementing regulations must adhere to the MSA's procedural requirements. *See id.* § 1854(a)-(b).

A FMP "shall … (1) contain [] conservation and management measures … necessary and appropriate … 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)(A). A FMP must "minimize to the extent practicable adverse effects on [essential fish habitat]." *Id.* § 1853(a)(7). The MSA also requires that a FMP "utilizes … the best scientific information available." *Id.* § 1801(c)(3). Finally, a FMP must also be consistent with the MSA's ten national standards. *See id.* §§ 1853(a)(1), 1851(a)(1)-(10). Of the ten national standards, five are relevant to this case:

> (1) Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.
>
> ….
>
> (4) … If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be … (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.
>
> (5) Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.
>
> ….
>
> (8) Conservation and management measures shall … take into account the importance of fishery resources to fishing communities …, and (B) to the extent practicable, minimize adverse economic impacts on such communities.
>
> (9) Conservation 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.

Id. § 1851(a).

B. NMFS's Aquaculture Permitting Scheme Violates National Standard 1.

National Standard 1 provides that all FMPs "shall prevent overfishing while achieving, on a continuing basis, the optimum yield [(OY)] from each fishery …." 16 U.S.C. § 1851(a)(1); 50 C.F.R. § 600.310(a). NMFS's guidelines make clear that "the choice of OY and the conservation and management measures proposed to achieve it *must prevent overfishing*." 50 C.F.R. § 600.310(b)(2)(ii) (emphasis added). According to the D.C. Circuit, to meet this command, NMFS must demonstrate that a chosen measure is at least 50 percent likely to prevent overfishing. *See Nat. Res. Def. Council, Inc. v. Daley*, 209 F.3d 747, 754 (D.C. Cir. 2000).

The OY should be "prescribed on the basis of the maximum sustainable yield [(MSY)] from the fishery, as *reduced by any relevant social, economic, or ecological factor*." 16 U.S.C. § 1802(33) (emphasis added). The MSY is "the largest long-term average catch or yield that can be taken from a stock or stock complex," 50 C.F.R. § 600.310(e)(1)(i)(A), and is "influenced by its interactions with other stocks in its ecosystem," *id.* § 600.310(e)(1)(v)(C).

NMFS's aquaculture scheme violates National Standard 1. The permitting scheme does not prevent overfishing; its only purpose is to promote aquaculture. *See infra* pp. 21-22. NMFS failed to (1) take into account interactions of farmed fish with wild stocks in setting the MSY; and (2) reduce the OY based on such factors. *See* 16 U.S.C. § 1802(33); 50 C.F.R. § 600.310(e)(1)(iv).

NMFS admitted the concepts of MSY and OY are inapplicable to aquaculture.[18] *See* AR22623, 22866. NMFS nonetheless set the annual MSY for farmed fish to 64 million pounds. AR22624. The FMP/PEIS claims that its MSY represents "the average landings of all marine species in the Gulf" minus menhaden and shrimp from 2000-2006, *see id.*; in fact, 64 million

[18] Their inapposite nature further illustrates why the MSA was never intended to regulate aquaculture and NMFS's scheme is *ultra vires*. *See supra* pp. 9-17.

pounds was chosen because it was the production capacity necessary to *attract aquaculturists*, *see* AR16718 (rejecting a MSY of 16 million pounds as too low to attract investment). NMFS then set the OY equal to the MSY, claiming that no factors supported a reduction. AR22624.

That the 64 million pounds figure was chosen to ensure commercial aquaculture development is further evinced by NMFS's failure to justify how the average landings of the majority of wild-caught marine species, including landings of non-candidate fisheries for aquaculture, serve as a reasonable proxy for estimating the MSY and OY for farmed fish. The FMP/PEIS recognized elsewhere that "it is conceivable that some level of aquaculture … could result in adverse impacts to wild stocks, which could result in overfishing and depletion of such stocks." AR22879. Yet NMFS never bothered to figure out what that level might be, nor offset the OY with this ecological factor, nor ascertain how the OY would prevent overfishing. AR22624; AR16718; AR22867, 22873-77; *see* 50 C.F.R. § 600.310(e)(1)(v)(C), (e)(3)(i)(A).

In *Natural Resources Defense Council*, plaintiff environmental groups challenged a FMP's chosen quota for catch of summer flounder for failing to prevent overfishing, in violation of National Standard 1. The D.C. Circuit agreed, finding that NMFS's own data indicated that the quota was only 18 percent likely to prevent overfishing, a degree of certainty too low to meet the MSA's command. 209 F.3d at 754 (holding that quota must have "at least a 50% chance" of preventing overfishing). The D.C. Circuit also rejected NMFS's argument that the challenged FMP's restrictions on mesh size would prevent overfishing, noting that NMFS had admitted that "the mesh provision had 'not been in operation long enough'" to generate data demonstrating its effectiveness. *Id.* Here, NMFS provided even less: no level of certainty, nor any historical or projected data, to suggest that the chosen OY for aquaculture, a novel activity, will prevent overfishing of wild fisheries. Merely picking a number out of a hat violates National Standard 1.

See id. at 756 ("[W]e can divine no scientific judgment upon which the Service concluded that its measures would satisfy its statutory mandate."). Further, picking a high number to entice aquaculture developers—rather than a number that would conserve wild fisheries—was reliance on extra-statutory factors, in violation of the APA. *See* 5 U.S.C. § 706(2).

C. NMFS's Aquaculture Permitting Scheme Violates National Standard 5.

National Standard 5 mandates that "no [conservation and management measure] … shall have economic allocation as its sole purpose." 16 U.S.C. § 1851(5); 50 C.F.R. § 600.330(a). It prohibits "those measures that distribute fishery resources … on the basis of economic factors alone, and that have economic allocation as their only purpose." 50 C.F.R. § 600.330(e).

The FMP/PEIS and Regulations violate the Standard. The purpose and need section of the FMP/PEIS expressly states its purpose as economic allocation:

> While current regulations authorize NOAA Fisheries Service to grant [exempted fishing permits] for aquaculture in federal waters, such permits are of limited duration and are *not intended for the large-scale production of fish*. As a result, commercial aquaculture in federal waters is not viable under the current permitting process. *A FMP must therefore be developed to authorize the development of commercial aquaculture operations*….

AR22557 (emphases added); *see* AR22814 ("[T]he intent of this FMP is to create a permitting process to foster the development of an aquaculture industry.").

Moreover, as a result, NMFS implemented measures that allocate significant fishery resources to commercial aquaculture development. Actions 1 and 3 established an aquaculture permit of at least 10 years, because a long-term permitting scheme would create "enhanced probability that Gulf offshore aquaculture industry would develop." AR22814. In Action 6, NMFS rejected an alternative that would have only authorized aquaculture operations in suitable zones based on known environmental and socioeconomic conditions, and instead chose a less restrictive option, leaving consideration of such impacts entirely to the latter review of individual

applications (and even then it will be discretionary). *See* AR22600-02. NMFS explained the less restrictive option was necessary so "applicants would have more choices in terms of locating their offshore operations." AR22857. Similarly, Action 7 prohibited fishing and fishing vessels from accessing an area twice the size of the area encompassed by aquaculture facilities, in order to reduce the risk of potential damage to aquaculture facilities. AR22860-61.

The MSA defines "conservation and management" as "measures … required to rebuild, restore, or maintain … any fishery resource and the marine environment." 16 U.S.C. § 1802(5). *None* of the FMP/PEIS's measures achieve this; rather, the FMP/PEIS's goal is to supplement wild-caught harvest and reduce imports. AR22536. Such purely economically-motivated measures violate National Standard 5. *See Hall v. Evans*, 165 F. Supp. 2d 114, 143 (D.R.I. 2001) (invalidating regulation that allocated catch limits without serving any conservation purpose).

That NMFS listed additional objectives does not alter this conclusion. AR22557-58 (listing objectives). Crucially, these objectives were added to the FMP/PEIS only *after* NMFS had already determined the preferred management measures. AR16914-20, 16934-35 (May 2008 draft FMP/PEIS selecting implemented measures as preferred alternatives with only one purpose in the purpose and need statement). Moreover, the additional objectives still fundamentally speak to the establishment of a viable commercial aquaculture industry. *See* AR22536, 22557-58; FR_PR19912. NMFS's manufacturing of objectives fails. The FMP/PEIS and Regulations are driven solely by an economic purpose, in violation of National Standard 5.

D. NMFS's Aquaculture Permitting Scheme Violates National Standard 4.

National Standard 4 requires that fishing privileges' allocation be "reasonably calculated to promote conservation" and "carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges." 16 U.S.C. § 1851(a)(4); 50 C.F.R. § 600.325(a)(2)-(3). The allocation "should be rationally connected to

the achievement of OY or with the furtherance of a legitimate FMP objective," 50 C.F.R. § 600.325(c)(3)(i)(A); and "must be designed to deter any person … 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) (emphasis added).

The aquaculture permitting scheme violates the Standard, because it assigns an excessive share of the fishing privileges and inordinate market control to aquaculturists, and is not rationally connected to the achievement of the OY, nor reasonably calculated to promote conservation. NMFS authorized 64 million pounds of farmed fish per year; yet the Agency admitted this could flood the market with nearly double the average amount of fish previously available, which would decrease the prices of wild-caught fish, injuring fishermen. AR22624; AR22820 ("[A] potential economic and social cost of … offshore aquaculture is declines in the ex-vessel prices of commercial species and losses of fishing and fishing-related revenues.").

NMFS claimed that no individual would have an excessive share because the Regulations limit each aquaculture entity to no more than 20 percent of the OY, or 12.8 million pounds of farmed fish annually. AR22880, 22889. NMFS failed to explain how the individual production cap is rationally related to the achievement of the target OY or how it furthers the FMP/PEIS's objective. *See* 50 C.F.R. § 600.325(c)(3)(i)(A). Moreover, even 12.8 million pounds of farmed fish by a single operation could significantly reduce the price of their wild-caught counterparts.[19]

Similarly, the outright prohibition of fishing and fishing vessels from areas surrounding aquaculture facilities, coupled with the failure to prohibit aquaculture operations in traditional fishing grounds, allocate an excessive amount of "fishing" privilege to aquaculturists, without

[19] For example, NMFS identified cobia, red drum, red snapper, Almaco jack, greater amberjack, and mahi mahi as some likely farmed species. AR22680. Of those, the commercially valuable red snapper averaged 4.6 million pounds in annual landings during 1997-2007, AR22706, while greater amberjack averaged 1 to 1.6 million pounds in the same period, AR22703.

any rational connection to the achievement of the OY or conservation. AR22609-10. The FMP/PEIS admits that "the prohibition on all fishing would be expected to reduce the potential social and economic benefits of fishing in [restricted] areas." AR22611. As EPA pointed out in its comments on the FMP/PEIS, "[i]ssuance of a permit to establish an offshore marine aquaculture system affords private enterprise exclusive use of public property …. [T]hose members of the public presently using Gulf areas for fishing or recreation would be excluded from these benefits…." AR21733; AR23342-43; AR5596 ("[A] more appropriate policy would be to limit offshore aquaculture facilities to locations that will prevent or minimize … impacts whatsoever on traditional fishing grounds …."). As discussed above, NMFS's reasons for deferring siting decisions to a case-by-case basis and for setting up restricted access zones are for the flexibility and protection of aquaculture development; *see supra* pp. 21-22; such rationale has no connection to the OY. For all these reasons, NMFS violated National Standard 4.

E. NMFS's Aquaculture Permitting Scheme Violates National Standard 8.

National Standard 8 states, "conservation and management measures shall … take into account the importance of fishery resources to fishing communities …, and (B) *to the extent practicable, minimize adverse economic impacts on such communities.*" 16 U.S.C. § 1851(a)(8) (emphasis added); 50 C.F.R. § 600.345(a). Here, NMFS admitted that commercial aquaculture negatively affects local fishing communities. *See, e.g.*, AR22819-22. NMFS identified potential ways to minimize economic harms to fishing communities—for example, if aquaculturists farmed species that have no significant commercial or recreational value in wild fisheries, or if farmed fish were available during different seasons or sold through different channels than their wild counterparts—but did not adopt them. *See* AR22820. On the other hand, the Regulations prohibit fishermen from accessing areas surrounding aquaculture facilities, yet do not ban aquaculture from traditional fishing grounds. NMFS's failure to implement measures that could

alleviate the negative economic impacts on fishing communities violates National Standard 8. *See* 16 U.S.C. § 1851(a)(8); 50 C.F.R. § 600.345(b)(1) (FMP should discuss rationale for rejecting alternatives with lesser impacts on fishing communities).

F. NMFS's Aquaculture Permitting Scheme Violates National Standard 9.

National Standard 9 provides, "[c]onservation and management measures shall, to the extent practicable, (A) minimize bycatch…." 16 U.S.C. § 1851(a)(9); 50 C.F.R. § 600.350(a). "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." 50 C.F.R. § 600.350(d)(2). "Bycatch" includes "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).

NMFS acknowledged that bycatch, caused mostly by encounters and entanglements with aquaculture structures, is a serious concern. AR22801-05. The FMP/PEIS recognized that many of our nation's iconic marine species, including many threatened and endangered species, are at risk should aquaculture facilities be set up in Gulf waters. *See id.* NMFS stated that "[a]ll five species of [federally protected] sea turtles risk entanglement," AR22802, and dolphins and sharks may be injured by aquaculture structures. AR22804; *id.* (sharks and dolphins may be attracted to aquaculture structures); AR22802 (incidents of dolphin drowning due to entanglement in net pens).

Yet NMFS made no effort to consider measures to minimize such risks. Instead, the Regulations only require after-the-fact self-monitoring and reporting by the aquaculture operators for entanglement and interactions with marine species, *see* AR22883, AR33144; even though NMFS recognized the lack of incentive to report such incidents. *See* AR33112; FR_PR25415 (reporting requirement so impractical that it is "beyond any reasonable expectation of actually being fulfilled."); FR_PR40072. Indeed, in its Recovery Plan for the loggerhead sea

turtle, NMFS admitted that "[w]ithout comprehensive at-sea and dockside enforcement, regulations designed to reduce loggerhead bycatch will not be effective." AR88391.

NMFS's failure to adopt practicable measures that would minimize bycatch and deferral of any such analyses violate National Standard 9. NMFS had identified, but failed to implement, other methods of monitoring and reporting that may produce more effective outcomes. For example, NMFS noted that inspections by "observers experienced in the collection of information on the presence of any listed species or marine mammals in the area" may prevent or minimize injury to other marine species. *See* AR22802-03 (citing the findings of a NOAA 1999 workshop, by Office of Protected Resources, on ways to avoid and minimize interactions between aquaculture operations and marine mammals and turtles).

This wholly insufficient consideration is akin to the lack of bycatch protection in *Flaherty v. Bryson*, 850 F. Supp. 2d 38 (D.D.C. Mar. 2012). There, the court held that an amendment to the Atlantic Herring FMP violated National Standard 9 where it stated that "[by]catch in the herring fishery will continue to be addressed and minimized to the extent possible." *Id.* at 56 (citation omitted). The court rejected NMFS's reliance on a monitoring program to "monitor[] bycatch and potentially act[] to reduce it," *id.* at 58, and held that "[i]f anything, this statement makes it clear that neither the Council nor NMFS made any effort to consider whether bycatch was minimized to the extent practicable." *Id.* at 58-59 (quoting 16 U.S.C. § 1851(a)(9)); *see also Coastal Conservation Ass'n v. Gutierrez*, 512 F. Supp. 2d 896, 901 (S.D. Tex. Mar. 2007) (deferral of bycatch reduction analysis violates Standard 9).

G. NMFS Failed to Protect Essential Fish Habitat.

The aquaculture permitting scheme also violates the MSA's mandate that FMPs "minimize to the extent practicable adverse effects on [essential fish habitat]." 16 U.S.C.

§ 1853(a)(7).[20] NMFS recognized that aquaculture operations can negatively affect essential fish habitats. *See* AR22569-70, 22597-98. However, rather than setting criteria to assess proposed sites and structures to minimize impacts to essential fish habitat, the Regulations merely provide that the Regional Administrator *may* deny permit applications based on potential impacts to essential fish habitats. *See* 50 C.F.R. § 622.103(a)(4) . This later, discretionary consideration of potential harm to essential fish habitat falls far short of the MSA's mandate to minimize adverse effects on essential fish habitat "to the extent practicable." 16 U.S.C. § 1853(a)(7); *see* AR21749 (memo from NMFS's regional scientist suggesting that the FMP/PEIS "incorporate plans for developing standard[s] … for monitoring and evaluating offshore aquaculture impacts on essential fish habitats."); *Pac. Marine Conservation Council, Inc. v. Evans*, 200 F. Supp. 2d 1194, 1200 (N.D. Cal. 2002) (holding non-mandatory observer program insufficient to meet MSA's requirement to minimize bycatch). Moreover, limiting any essential fish habitat analysis to individual applications violates NMFS's own guidance that adverse effects to essential fish habitat from "cumulative, or synergistic consequences of actions" be considered. 50 C.F.R. § 600.810(a); *Motor Vehicle*, 463 U.S. at 44 (action is arbitrary and capricious if it "entirely fails to consider an important aspect of the problem").

H. NMFS Violated the MSA's Procedural Requirements.

The MSA contains several procedural safeguards for its substantive standards. First, no regulation shall be proposed unless the fishery management council deems it "necessary and appropriate" to implement a FMP. 16 U.S.C. § 1853(c). Second, NMFS must review any FMP and its proposed regulations. *Id.* § 1854(a)-(b). To ensure timely review of a FMP and its

[20] "Adverse effects" is "any impact that reduces quality and/or quantity of [essential fish habitat]," and includes "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).

proposed regulations, the MSA requires their simultaneous submission to, and immediate review by, NMFS. *Id.* §§ 1853(c)(1), 1854(b)(1) (requiring NMFS's approval of draft regulations within 15 days). NMFS can only make technical, non-substantive changes to draft regulations. *Id.* § 1854(b)(1)(A), (b)(3). Here, instead of reviewing the draft Regulations within the statutory 15 days upon Gulf Council's submission in 2009, NMFS did not take any action until 2013, after the FMP/PEIS had gone into effect, when it sought the Council's approval of new draft Regulations that NMFS unilaterally edited. *See* AR22523, 23224; AR27172, 27220. This delay violated the MSA. *See* 16 U.S.C. § 1854(b)(1) (Secretary *shall* make determination regarding consistency of proposed regulation within 15 days); *Sierra Club v. Train*, 557 F.2d 485, 489 (5th Cir. 1977) ("'[S]hall' generally indicates a mandatory intent …."). Moreover, NMFS's unilateral changes, coupled with the lapse of time between approving the FMP/PEIS and the proposed Regulations, prohibited the Council from making a meaningful determination of the Regulations' necessity. *See, e.g.*, AR20601-02; *see Associated Fisheries of Me., Inc. v. Evans*, 350 F. Supp. 2d 247, 253 (D. Me. 2004). NMFS's procedural failings also hindered the public's ability to meaningfully address the consistency of the regulations to the FMP/PEIS. *See, e.g.*, Lovera Decl. ¶¶ 12-16 (filed concurrently). For these reasons, NMFS's failure to timely review the draft Regulations with the FMP/PEIS violated the MSA.

III. NMFS VIOLATED NEPA.

A. National Environmental Policy Act.

NEPA, "our basic national charter for protection of the environment," 40 C.F.R. § 1500.1(a), requires federal agencies to assess the environmental and intertwined socioeconomic consequences of their proposed actions, to ensure that their decisions are fully informed, and to make the public aware of the effects of agency actions. 42 U.S.C. §§ 4321-4332; 40 C.F.R. §§ 1502.1, 1503.1. NEPA requires federal agencies to prepare an

Environmental Impact Statement (EIS) for all "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1502.3. An EIS must comprehensively analyze the action's impacts, 40 C.F.R. §§ 1502.2, 1502.16, and consider "reasonable alternatives which would avoid or minimize adverse impacts," *id.* § 1502.1. An agency must also address public comments in the final EIS. *Id.* § 1503.4(a). NEPA thus requires an agency to take a "hard look" at the environmental and intertwined socioeconomic consequences of its actions so that they "are integrated into the very process of decision-making." *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976).

To take the requisite "hard look," an EIS must discuss all reasonably foreseeable direct, indirect, and cumulative impacts of the proposed action, including intertwined socioeconomic effects. 40 C.F.R. §§ 1508.7, 1508.8, 1508.14, 1508.25. An EIS must also 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).

The alternatives discussion is "the heart" of the NEPA process, and must provide a "clear basis for choice among options." 42 U.S.C. § 4332(2)(C)(iii), (E); 40 C.F.R. § 1502.14(a). An agency's alternatives analysis is, in turn, a function of the "purpose and need" of the action under review. *Id.* § 1502.13 (agency must "specify the underlying purpose and need to which [it] is responding in proposing the alternatives….").

Under some circumstances, agencies may use a programmatic EIS to analyze a wide-ranging program, in order to assess the combined impacts of similar actions and reasonable alternatives under that program. *Nevada v. Dep't of Energy*, 457 F.3d 78, 92 (D.C. Cir. 2006) (citing 40 C.F.R. § 1508.25(a)). When a programmatic EIS is used, the NEPA regulations

contemplate preparation of "subsequent narrower statements or environmental analyses … incorporating by reference the general discussions and concentrating solely on the issues specific to the [site-specific] statement." 40 C.F.R. § 1508.28 (definition of "tiering"); *Sierra Club v. Espy*, 38 F.3d 792, 796 (5th Cir. 1994) ("[A]n EA may be tiered to an existing and broader EIS."). However, an agency may not defer analysis of reasonably foreseeable, site-specific impacts of a program merely by saying that those impacts 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). Such postponed analysis is antithetical to NEPA's basic charge to undertake analysis and integrate it into agency decision-making *as early as possible.* 40 C.F.R. §§ 1501.2, 1502.2(g), 1502.5. An agency must analyze all reasonably foreseeable site-specific impacts in the first instance, and, if some impacts are unable to be determined, set forth these limitations and complete subsequent site-specific NEPA analysis, which may tier to the broader programmatic EIS.

NEPA also requires updates to incorporate new information that may alter the results of an agency's original environmental analysis. *In re Katrina Canal Breaches Litig.*, 696 F.3d 436, 449-50 (5th Cir. 2012). 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 apply to a supplemental EIS. *Miss. River Basin All. v. Westphal*, 230 F.3d 170, 174 (5th Cir. 2000).

B. The FMP/PEIS's Overly Narrow Purpose Violated NEPA's Alternatives Mandates.

NMFS violated NEPA by impermissibly confining its purpose, and the corresponding scope of its analysis, to solely developing commercial offshore aquaculture. *See supra*

pp. 21-22.. This purpose may serve the interest of private aquaculturists, but, in NEPA analyses, "an agency should always consider the views of Congress, expressed, to the extent that the agency can determine them, in the agency's statutory authorization to act, as well as in other congressional directives." *Nat'l Parks & Conservation Ass'n*, 606 F.3d 1058, 1070 (9th Cir. 2010). By overly narrowing its purpose, NMFS ignored the MSA's other major statutory purpose—the conservation and management of fishery resources. 16 U.S.C. § 1801(a); *supra* p. 17.

This narrow purpose is fatal to the FMP/PEIS, since the alternatives considered, and, if they are considered, how, necessary follows from the action's stated purpose and need. *Sierra Club v. Fed. Hwy. Admin.*, 435 F. App'x 368, 374 (5th Cir. 2011) ("An 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' action, and the EIS would become a foreordained formality." (citation omitted)). A reader of the FMP/PEIS can see this error play out, time and again. For example, in Action 1, NMFS rejected the no action alternative of maintaining the status quo of authorizing aquaculture under an exempted fishing permit, because "the purpose and need for this FMP is to create a permitting process to foster the development of [commercial aquaculture]." AR33080. Similarly, in Action 3, NMFS preferred a 10-year permit, which is better for aquaculture investors, despite acknowledging that shorter durations would "be more beneficial to the physical and biological environments." AR22589-90 (shorter permits "would not be expected to be conducive to the development of an offshore aquaculture industry"). And in Action 6, NMFS refused to consider a reasonable alternative that would have limited case-by-case siting determinations in zones predetermined to be suitable for aquaculture—even though it would prohibit aquaculture in areas

with unsuitable environmental conditions yet still afford NMFS flexibility to consider localized impacts—in order to keep a larger area for potential aquaculture operations. *See* AR22600-09; AR22858; AR33089-91. By improperly limiting the purpose solely to developing commercial aquaculture, NMFS sidestepped its statutory duty to meaningfully assess all alternatives, including the no action alternative of *not* authorizing commercial offshore aquaculture. *See Se. Alaska Conservation Council v. Fed. Highway Admin.*, 649 F.3d 1050, 1057 (9th Cir. 2011) ("Informed and meaningful consideration of alternatives—including the no action alternative—is thus an integral part of the statutory scheme.").

In *Simmons v. United States Army Corps of Engineers*, 120 F.3d 664 (7th Cir. 1997), the Seventh Circuit held that the defendant agency violated NEPA by defining the purpose of the challenged EIS as finding a single source of water supply, thereby rejecting alternatives other than the creation of a single reservoir. *Id.* at 667, 669. The court observed:

> One obvious way for an agency to slip past the strictures of NEPA is to contrive a purpose so slender as to define competing "reasonable alternatives" out of consideration (and even out of existence). The federal courts cannot condone an agency's frustration of Congressional will. If the agency constricts the definition of the project's purpose and thereby excludes what truly are reasonable alternatives, the EIS cannot fulfill its role. Nor can the agency satisfy the Act.

Id. at 666. Here, the FMP/PEIS's narrow purpose defined away reasonable alternatives—such as the use of short-term permits or non-offshore aquaculture production facilities—that could have met its objectives of reducing seafood imports and supplementing wild fisheries.

C. NMFS Failed to Ensure Site-Specific Impacts of Offshore Aquaculture.

NEPA requires NMFS to analyze reasonably foreseeable site-specific impacts at the outset, and if some impacts are yet unknown, to complete later site-specific NEPA analyses (which tier back to the FMP/PEIS). 40 C.F.R. §§ 1508.7, 1508.8, 1508.25; *Kern v. U.S. Bureau of Land Mgt.*, 284 F.3d 1062, 1072 (9th Cir. 2002) ("An agency may not avoid an obligation to

analyze in an EIS environmental consequences that foreseeably arise from an [action] merely by saying that the consequences are unclear or will be analyzed later…."). NMFS failed to do either.

NMFS failed to analyze the myriad site-specific impacts, instead improperly deferring this analysis until the permit stage. AR33119. The FMP/PEIS deferred analysis of the baseline conditions, the starting point needed to determine the ultimate impacts of offshore aquaculture. AR22902. After broadly discussing potential impacts to wild fish, marine ecosystems, and fishing communities, NMFS refused to consider in any detail impacts to any particular areas of the Gulf. AR22788-812. But NMFS had sufficient site-specific information, including GIS data, ocean depths, currents, and other competing uses, which it used to identify "zones" suitable—and also those unsuitable—for aquaculture. AR22602, 22606; AR16700-01.

Nor has NMFS ensured that these assessments will ever happen. The Regulations *do not require* the Regional Administrator to complete site-specific NEPA analysis—an environmental assessment (EA) or EIS—as part of application review. AR33119. NMFS cannot defer analysis of site-specific impacts to the later permit stage and then not ensure that this analysis will take place. 40 C.F.R. § 1508.28. Indeed, NMFS's own NEPA Coordinator expressly informed the Deputy Regional Administrator of these flaws, stating that "at least one more level of site-specific *NEPA analysis* is *necessary* before [NMFS] can begin on-the-ground (ocean site) implementation," and noted that a programmatic EIS should "preview" the second NEPA analysis, including a list of "criteria [for] … future site-specific decisions" such as "thresholds concerning cage and fish population densities, water quality, cage spacing," and more. FR_PR78 (emphasis added); FR_PR1085; *see also* FR_PR29-30 (meeting transcript questioning whether the FMP/PEIS alone would alleviate NEPA duties for individual operations); FR_PR1974; FR_PR2066; FR_PR36344.

Not only is foreseeable site-specific analysis required for a "hard look" at the environmental consequences, it is essential to ensure that decision makers have enough information to make reasoned decisions and to allow for informed public participation.[21] *See Sierra Club v. Sigler*, 695 F.2d 957, 965 (5th Cir. 1983); *see also Nat. Res. Def. Council, Inc. v. Morton*, 388 F. Supp. 829, 838–39 (D.D.C. 1974), *aff'd*, 527 F.2d 1386 (D.C. Cir. 1976). In *Morton*, the Bureau of Land Management (BLM)'s programmatic EIS for its grazing program was not sufficient to meet NEPA obligations because it lacked the "specific environmental effects of the permits…to be issued," and did "not provide the detailed analysis of local geographic conditions, necessary for the decision-maker to determine what course of action is appropriate under the circumstances." *Id.* at 839, 841. The BLM, like NMFS here, did not indicate it would ever prepare additional NEPA statements, nor consider "on the ground" effects. *Id.* at 832-33. NMFS cannot initiate a novel offshore aquaculture program without ever taking a "hard look" at site-specific impacts.

D. NMFS Failed to Take a "Hard Look."

The Fifth Circuit uses three criteria for determining the adequacy of an EIS, considering whether: (1) the agency has taken a good faith, objective hard look at the environmental consequences of the action and alternatives; (2) the EIS provides detail sufficient to inform those who did not participate in its preparation of these consequences; and (3) the EIS explanation of alternatives is sufficient to permit a reasoned choice among different courses of action. *Sierra*

[21] EPA repeatedly informed NMFS that the FMP/PEIS did not contain sufficient site-specific information, or even criteria to guide later analysis, and that the FMP/PEIS would not replace subsequent operation-specific NEPA reviews, as contemplated after a programmatic statement. *See* AR21730; AR23339. EPA explained that a PEIS should include triggers for when additional NEPA analysis will be completed (such as each application for an individual operation), and set criteria to determine site-specific impacts. AR21731. NMFS did neither. EPA reiterated its concerns after NMFS prepared the SPEIS, noting that the SPEIS lacked critical information on impacts to water quality and the cumulative impact of individual operations since there is no guaranteed additional site-specific NEPA analysis. AR27165-66.

Club, 695 F.2d at 965. Further, this assessment must be of high quality, containing an adequate and accurate compilation of relevant information, including scientific data. 40 C.F.R. §§ 1500.1(b), 1502.24. The FMP/PEIS violated the Fifth Circuit's first and second criteria because NMFS failed to accurately, and with scientific integrity, disclose and assess the direct, indirect, and cumulative impacts of offshore aquaculture, or to adequately describe claimed mitigation measures to avoid significant adverse impacts, in violation of NEPA.

1. Failure to Adequately Assess Direct and Indirect Impacts.

NMFS failed to address myriad environmental and socioeconomic impacts of offshore aquaculture in the Gulf, or addressed them in a conclusory fashion without the requisite detail for a "hard look." In *Sierra Club*, the Fifth Circuit found that the agency painted only a "rosy picture" of the increase in bulk commodities activities for the proposed construction of a deepwater port and crude oil distribution system, like "reduced U.S. trade deficit," because it ignored costs and failed to use data before it to assess negative impacts. 695 F.2d at 976. The court held the agency "cannot tip the scales of an EIS by promoting possible benefits while ignoring their costs," as the agency must rely on an EIS that "fully and accurately disclose the environmental, economic, and technical costs associated with the project." *Id.* at 978-79 ("There can be no 'hard look' at costs and benefits unless all costs are disclosed.").

Like the agency in *Sierra Club*, NMFS assumed benefits, like a reduction in a seafood trade deficit, without support from the record,[22] while dismissing environmental and socioeconomic costs, such as: nutrient and chemical pollution of the marine environment; farmed fish escapes; disease and parasite transmission; overfishing for fish feed; and impacts to

[22] To the contrary, the FMP/PEIS recognized that farmed fish in the Gulf is unlikely to replace imports and reduce the trade deficit, rendering its claimed benefits-costs analysis illusory. AR22883, 22906; *see also* FR_PR4197; FR_PR11897.

overfished wild stock and wildlife, including federally protected species. *See* AR23339-41, 23345-48. NMFS glossed over critical studies that demonstrated the likelihood and severity of these harms. AR25430-719 (identifying 592 peer-reviewed studies relevant to these topics). Of the 592 studies, NMFS referenced only 20 in the FMP/PEIS. AR25342; AR25415-25418.

Specifically, NMFS failed to take a hard look at the impacts of fish escapes. Escapes of farmed fish are a major concern with net pen or cage aquaculture, because they can result in competition and genetic introgression with wild species, and as NMFS acknowledged, it is "almost certain" that escapes will happen. AR1761, 1781; AR22796. Indeed, the only offshore aquaculture operation NMFS ever authorized in the Gulf using an Exempted Fishing Permit suffered escapes due to typical Gulf weather events. AR22677-78. NMFS nonetheless minimized the potential damage caused by such escapes, ignoring scientific citations supplied by commenters. *See* AR22788, 22790-91; AR25430-719; AR23933, 23957-58. Moreover, this threat[23] is exacerbated by the fact that NMFS has no real way to confirm that broodstock for farmed fish will be harvested from the same region as the operations. *See* FR_PR36334; FR_PR36347. Yet, NMFS is not requiring a plan to prevent escapes, AR23020, but only self-reporting, and even then only of "major" escapes over a certain percentage, AR22612, in effect allowing over 8 million fish to escape per year unreported.[24] NMFS failed to adequately fulfill its duty to fully analyze and disclose the potential impacts of escapes in the Gulf.

[23] The recent escape of more than 160,000 Atlantic salmon from a net pen in the State of Washington confirms the likelihood of farmed fish escape. There the escape happened in part due to strong currents in *state* waters, as opposed to federal waters even farther out in the open ocean. Rick Anderson, *More than 160,000 Non-Native Atlantic Salmon Escaped into Washington Waters in Fish Farm Accident*, L.A. Times (Sept, 3, 2017), http://www.latimes.com/nation/la-na-atlantic-salmon-20170903-story.html.

[24] Based on the Gulf Council's own maximum ideal number of operations, largest cage, and highest density estimates, according to the FMP/PEIS. AR23969-70.

Further, NMFS ignored the potential for overfishing, of both feeder fish stocks like the menhaden, and the threat to overfished wild stocks from aquaculture of those same species. Although admitting that menhaden fishery may be indirectly negatively affected by an increase in demand for farmed fish feed, NMFS relied on the uncorroborated assumption that that this feed will come from sustainable fisheries and defers analysis to later stock assessments, while ignoring impacts from land-based plant substitutes for feed (many of which are fossil-fuel intensive and indirectly contribute to the Gulf dead zones). AR22809, 22811-12. Of the likely candidate species for fish farming, two were classified as overfished (greater amberjack and red snapper), AR22658; AR22706; AR94663; 94698; but NMFS failed to assess how aquaculture might impact these already-stressed populations, instead relying on the FMPs for these stocks as proxies, even though those plans never assessed competition from aquaculture.

Finally, NMFS recognized, but failed to adequately analyze, the intertwined socioeconomic impacts—direct, indirect, and cumulative—of offshore aquaculture to wild fish commercial and recreational industries in the Gulf. The FMP/PEIS identifies, but fails to assess, the likely magnitude of impacts from offshore aquaculture, such as competition and exclusion for use of fishing grounds, decreased market price for wild-caught fish, and the associated decline in employment and income of fishing-related industries, AR22820-21, 22860-62; deferring consideration of these impacts to the permit level. AR22708; AR22806; AR22855; AR22903-5. Yet any such subsequent analysis is discretionary, and, in any event, cannot satisfy the independent NEPA obligation necessary to the programmatic EIS. *See supra* pp. 28-30. Further, NMFS speculated about employment benefits of offshore aquaculture to dismiss negative economic impacts to fishermen and fishing communities, despite contrary evidence in the record and the very purpose of FMP—to increase domestic farmed fish production (which will compete

with traditional wild fisheries). AR22908-9; AR22883; AR22921; *but see* AR77242 (facilities may be automated); AR93582 (prior operation only employed less than 50 people); AR93833.

This violation was not cured by the 2015 SPEIS, which also fails the "hard look" test. *Miss. River Basin All*, 230 F.3d at 174-75; *Sierra Club*, 695 F.2d at 965. The SPEIS's essential conclusion—that there would be no change in impacts from offshore aquaculture after the Deepwater Horizon oil spill—is belied by its recognition of the need for more information before conclusions can be drawn as to the significance and long-term effects of the blowout. AR26916. But missing information is not a valid excuse for inadequate assessment, NEPA regulations require agencies to state missing information, summarize existing credible scientific evidence, and evaluate the reasonably foreseeable impacts based on generally accepted science. 40 C.F.R. § 1502.22. Moreover, NMFS ignored—without explanation—extensive information on post-Deepwater impacts, *see* AR26791-803 (comments discuss 445 studies); AR26972-75 (SPEIS citing less than 10 of those studies), and failed to include *any* new information since 2009 beyond the oil spill.[25] FR_PR34866; AR26775; AR26895-98; AR27025-30. NMFS's failure to adequately assess the magnitude of its decision's impacts violates NEPA.

2. Failure to Adequately Assess Cumulative Impacts.

In the Fifth Circuit, meaningful consideration of cumulative impacts requires analysis of:

> (1) the area in which effects of the proposed project will be felt; (2) the impacts that are expected in that area from the proposed project; (3) other actions—past, proposed, and reasonably foreseeable—that have had or are expected to have impacts in the same area; (4) the impacts or expected impacts from these other actions; and (5) the overall impact that can be expected if the individual impacts are allowed to accumulate.

[25] A supplemental information report (SIR) is not the equivalent of an EIS, nor sufficient when new information is significant. *Idaho Sporting Cong., Inc. v. Alexander*, 222 F.3d 562, 566 (9th Cir. 2000).

Fritiofson v. Alexander, 772 F.2d 1225, 1245 (5th Cir. 1985), *abrogated on other grounds by Sabine River Auth. v. U.S. Dep't of Interior*, 951 F.2d 669 (5th Cir. 1992); *O'Reilly v. U.S. Army Corps of Eng'rs*, 477 F.3d 225, 234-35 (5th Cir. 2007) (same).[26] NMFS's cumulative effects analysis is wholly inadequate and renders the decision unlawful. As EPA explained, the FMP/PEIS represents a "piecemeal use added to a mixture of existing and future uses without a thorough consideration of the cumulative effects of all these uses to the Gulf's diverse and increasingly fragile ecosystems." AR23340.[27]

The FMP/PEIS's cumulative effects section is conclusory, fails to even make clear how much of the entire Gulf will be impacted, and entirely fails to address the cumulative impact from offshore aquaculture on essential fish habitat, managed (and overfished) wild fish stocks, and the overall conflicts or competing uses of the Gulf. AR22894-907. By deferring consideration of environmental and socioeconomic impacts until the individual permit stage, NMFS completely left out the required assessment of the cumulative impacts that offshore aquaculture industry as a whole on the Gulf. For example, NMFS deferred consideration of on-the-ground baseline conditions until the permit stage, and only based on aquaculturist-supplied analysis. AR22902; *Louisiana v. Lee,* 758 F.2d 1081, 1086 (5th Cir. 1985) (an accurate baseline is crucial in NEPA analysis). NMFS similarly dismissed potential impacts to sensitive marine wildlife, including federally listed species, again deferring such analysis to the permit stage. AR22900-01. Yet, it is unclear how a later individual assessment would ensure that there would be no jeopardy to the migratory paths and habitats of sensitive species. *Id*. NMFS also deferred

[26] *See also* 40 C.F.R. § 1508.7 (definition of cumulative effects).

[27] In its review of the FMP/PEIS, EPA "repeatedly identified the need for a cumulative effects analysis," including a hard look at how the proposed action will impact Gulf resources and ecosystems, in combination with all other past, present, and reasonable foreseeable actions by any agency or entity. *Id.*

assessment of the baseline conditions until the permit stage. AR22902. NMFS cannot defer away the cumulative impacts analysis required under NEPA.

The FMP/PEIS's cumulative impacts analysis is also deficient for failing to adequately consider reasonably foreseeable actions. *Fritiofson*, 772 F.2d at 1245. The assessment of additional actions or uses of the Gulf is extremely limited, considering only new liquefied natural gas terminals and natural disasters, a fraction of the overall picture of other uses in the Gulf and stressors to it. AR22897-98. Most disturbingly, the FMP/PEIS entirely fails to address climate change, although this is a major factor compounding the impacts of the proposed action and other uses of the Gulf and thus should have been addressed in the cumulative impact analysis. The recent Harvey and Irma hurricanes are unfortunate but apt examples of the kind of severe weather that is becoming more frequent and intense due to climate change, and which can cause escapes and damage to aquaculture equipment, *see* AR22677-78, exacerbate existing negative conditions in the Gulf.[28] NMFS's failure to adequately assess the magnitude of environmental and socioeconomic impacts of its decision violated NEPA.[29]

3. Lack of Adequate Mitigation Measures

NMFS relied on, but failed to take a hard look at, potential mitigations to counter the stated impacts of offshore aquaculture in the Gulf, deferring instead to "case-by-case review."

[28] Stuart Leavenworth, *Hurricanes Irma, Harvey restart debate on climate change and warmer oceans*, The Miami Herald (Sept. 6, 2017), http://www.miamiherald.com/news/nation-world/article171632462.html.

[29] Nor did the SPEIS cure these deficiencies—indeed it fails almost completely to address how the Deepwater blowout changes or contributes to cumulative impacts from adding offshore aquaculture to the existing uses and impacts (like from climate change) to the resources of the Gulf. AR26962-67; *see*, *e.g.*, AR73729 (regarding climate impacts, the energy cost for carnivorous finfish is "rather high"). Evidence shows that the damage from Deepwater could affect aquaculture and aggravate its harm to the Gulf, AR26889-90, 26791-26803, and the SPEIS cumulative effects analysis fails to take this information, or any updated information on aquaculture impacts, into account.

See, e.g., AR22903. NMFS failed to "conduct[] a serious and thorough evaluation of environmental mitigation options for the" FMP/PEIS, as required by this Circuit, because it failed to provide any detail as to what mitigation measures will actually *be*, relying instead on siting (with no set criteria other than some general areas where operations will be prohibited) and other to-be-determined permit conditions. *Miss. River Basin All.*, 230 F.3d at 177; *see supra* pp. 4-7. The FMP/PEIS's stated mitigation measures deal almost entirely with mitigating economic impacts from the permitting scheme to *applicants*, as opposed to the environmental impacts, as required by NEPA regulations. AR22889; 40 C.F.R. § 1502.16(h) (EIS shall discuss the "means to mitigate adverse *environmental* impacts"). NMFS summarily deferred any mitigation measures for protected species to future ESA consultations, *see infra* pp.41-48, and "periodic stock assessments" for wild fish. AR22891-92. NMFS relied on subsequent siting analysis to mitigate recognized impact to fishermen from exclusion of waters around aquaculture operations, even though consideration of fishing grounds at the permit stage is discretionary. AR22893. Deferring any analysis of actual mitigation measures flies in the face of NEPA's requirement to look *before* you leap. 40 C.F.R. §§ 1501.2, 1502.5.

IV. NMFS VIOLATED THE ENDANGERED SPECIES ACT.

In the ESA, Congress made "it abundantly clear that the balance has been struck in favor of affording endangered species the highest of priorities." *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 194 (1978). "[The ESA's] plain language . . . shows clearly that Congress viewed the value of endangered species as 'incalculable.'" *Id*. at 187 (citation omitted). The ESA contains a variety of protections designed to meet this end, including Section 7, which mandates that all federal agencies "insure" its actions are not likely to jeopardize ESA-protected species or

adversely modify their designated critical habitat. 16 U.S.C. § 1536(a)(2).[30]

To carry out these substantive mandates, the ESA and its regulations require agencies to undergo a consultation process under Section 7 with the wildlife agencies (or in NMFS's case, self-consult) on the effects of their proposed actions when the agency determines the proposed action "may affect" a listed species or its critical habitat. *Id.* § 1536(a)(2); 50 C.F.R. §§ 402.12-402.16. Formal consultation requires a comprehensive Biological Opinion, analyzing whether the proposed action is likely to jeopardize the continued existence of ESA-protected species. 50 C.F.R. § 402.14(h)(3). "Informal consultation," what NMFS did here instead, is an exception to the Biological Opinion requirement once the "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.* §§ 402.12, 402.13(a), 402.02.

A. NMFS's "Not Likely to Adversely Affect" Decision is Arbitrary and Capricious.

The sum total of NMFS's ESA "analysis" is a few 2-page summary memos. As early as 2009 NMFS acknowledged that its proposed action "may affect" multiple ESA-species—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 initiated consultation. AR23115-16. NMFS admitted that "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." AR23116; *see also* AR94767-74; FR_PR7832-33; AR21732; AR25430-719. Yet NMFS failed to undertake formal

[30] 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." 16 U.S.C. § 1532(5)(A).

consultation, quickly ending its process just weeks later, instead summarily concluding in a mere 2-pages that adverse impacts to ESA species were "extremely unlikely," AR23118, despite the fact NMFS was authorizing a novel activity across hundreds of nautical miles.

NMFS repeated a second cursory "not likely to adversely affect" decision in 2015, when it "reinitiated" consultation due to changes to several Gulf ESA species since 2009. AR32684, 32686. These changes included the first critical habitat designation it had considered: in 2014,[31] huge swaths of the Gulf of Mexico were designated as critical habitat for the loggerhead sea turtle. Nonetheless less than two weeks later NMFS again summarily concluded it could still avoid formal consultation. AR32688; FR_PR37500.

NMFS did not prepare a Biological Opinion, nor did it even prepare a Biological Assessment, *see* 50 C.F.R. § 402.12. In fact the entire Administrative Record appears barren of any forms of ESA analysis, studies, or much in the way of communication besides some e-mails. Commenters raised numerous concerns and studies regarding harm to endangered species, ignored by NMFS. *See* AR21891-92 (comments of National Park Service discussing potential harm from aquaculture operations to ESA-species and habitat); AR25430-25719 (containing studies relevant to ESA issues); AR21934-35; FR_PR22113. Instead NMFS's decision appears to be entirely predicated on these summary exchanges of 2-page letters, without any supporting documentation. This fails the ESA's mandates. In fulfilling its Section 7 duties, the ESA mandates that all agencies use the best scientific and commercial data available. 16 U.S.C. § 1536(a)(2), which NMFS failed to do here. *See id.* Indeed, among other things, NMFS appears to have ignored its own 2008 loggerhead turtle recovery plan, which specifically lists aquaculture

[31] Endangered and Threatened Species: Critical Habitat for the Northwest Atlantic Ocean Loggerhead Sea Turtle Distinct Population Segment (DPS) and Determination Regarding Critical Habitat for the North Pacific Ocean Loggerhead DPS, 79 Fed. Reg. 39,856 (July 10, 2014).

as a threat to the turtles and warns of the dangers aquaculture facilities present to them and their critical habitat. *See* AR88279-80; AR88391. APA review requires that the agency "examine the relevant data and articulate a satisfactory explanation for its action," *Motor Vehicle*, 463 U.S. at 43, which NMFS failed to do here. And the ESA places the burden on NMFS, *not Plaintiffs*, here, and they have failed to meet it. *See* Interagency Cooperation Under the Endangered Species Act, 51 Fed. Reg. 19926, 19949 (Dec. 16, 2008) ("[T]he burden is on the Federal agency to show the absence of likely, adverse effects to listed species or critical habitat as a result of its proposed action in order to be excepted from the formal consultation obligation.").

NMFS's failing can be seen most prominently with regards to the loggerhead sea turtle's critical habitat.[32] In the middle of the agency's deliberations, massive portions of the Gulf were designated as now protected critical habitat,[33] mostly *Sargassum* habitat, a floating marine grass that turtle hatchlings use for food and shelter. Yet despite this huge amount of the Gulf now designated as turtle habitat, NMFS still found that it did not have to engage in formal consultation and prepare a Biological Opinion, instead declaring summarily that it was "extremely unlikely" that the permitted aquaculture facilities the Regulations created would adversely affect the habitat. AR32687, 32689.

The trigger for formal consultation is low: "The threshold for formal consultation must be set sufficiently low to allow Federal agencies to satisfy their duty to 'insure' under section 7(a)(2)." 51 Fed. Reg. at 19949. A finding of "not likely to adversely affect . . . can be made only

[32] Summary Map of Loggerhead Critical Habitat in the Northwest Atlantic, http://www.nmfs.noaa.gov/pr/species/turtles/images/loggerhead_critical_habitat_map.jpg**.** (attached as Ex. A to the Declaration of Sylvia Shih-Yau Wu) (filed concurrently).

[33] Critical habitat is designated to preserve specific features known as "primary constituent elements," which are "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); 50 C.F.R. § 424.12(b).

if ALL of the reasonably expected effects of the proposed action will be beneficial, insignificant, or discountable." U.S. Fish and Wildlife Serv. & Nat'l Marine Fisheries Serv., *Endangered Species Consultation Handbook* 4-1 (1998) (emphasis in original). 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. "Discountable effects" are those that are "extremely unlikely to occur." *Id.* at B-55. This is a very low standard.

The Regulations do not prohibit the siting of aquaculture facilities in the turtle habitat or protect it in any way. Indeed, for turtles themselves, NMFS itself criticized the conditions proposed to reduce the likelihood of entanglements as "too vague." FR_POR13729. Absent such a permitting prohibition in turtle critical habitat, it defies geography, science, and common sense for NMFS to conclude that habitat that covers *over half of the entire Gulf*, still is "extremely unlikely" to be adversely affected. AR88279 (Recovery Plan explaining that "[n]et pens and associated aquaculture structures, depending on their siting, may 'collect' [*Sargassum* seaweed] rafts or interfere with [sea turtles'] natural passive movements and, therefore, may entangle, capture, or disrupt migratory movements of post-hatchling or pelagicstage sea turtles."). This is particularly true when it is considered that the actual grass within that habitat is floating—that is, moving—so even if an aquaculture facility is secured in one spot, there is no guarantee that the grass will not move into that spot. Absent further analysis, it is literally an inevitable target, a far cry from "extremely unlikely." NMFS's decision otherwise was arbitrary and capricious.

B. NMFS Violated the ESA by Relying Entirely on Future ESA Processes For Individual Permits.

There is a reason that the ESA work was so cursory. In both 2009 and 2015, NMFS, to

avoid preparing a comprehensive Biological Opinion on the acknowledged dangers of its new and novel aquaculture permitting scheme on endangered species and their habitat, relied mainly on the promise of future ESA processes. Driven by its reluctance to impose any regulatory oversight that might deter investment in aquaculture, NMFS once again relied on the fact that future individual permits in the Gulf would themselves be subject to the ESA to get off the hook from doing any programmatic analysis on the entire regulatory scheme.[34]

That is not how the ESA works. NMFS's reliance on future ESA obligations does not give it a free pass for this programmatic action, the approval setting in motion those future permits. As NMFS staff recognized, the proper way forward was to undertake a programmatic consultation in order to inform later ESA obligations for individual permits. FR_PR34744 (explaining that the "best approach" that would be to do a "programmatic consultation" "on the entire program of issuing [aquaculture] permits.").

Crucially, the "effects" that must be considered by the Agency *now* are very broadly defined and expressly include the impacts of the future permits:

> Effects of an action refers to 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* on that action, that will be added to the environmental baseline.
> …
> Indirect effects are those that are caused by the proposed action and *are later in time, but are still reasonably certain to occur*. Interrelated actions are those that are *part of a larger action and depend on the larger action for their justification*.

[34] FR_PR34754 (stating that doing a programmatic biological opinion would require NMFS to place specific conditions on aquaculture operations); AR23116 ("[T]the location and systems used in proposed aquaculture operations will be subject to review and additional ESA consultation will be conducted during this process."); AR32690 ("NMFS may deny an application … if the proposed location, and/or use of the proposed system, would adversely affect ESA-listed species or their critical habitat."); AR23117 (same); AR32685 (same); AR32687 (relying on NMFS's discretion to deny an application based on adverse effects to ESA-protected species and habitats to conclude "[t]herefore, we believe any adverse effects to the *Sargassum* habitat are extremely unlikely to occur and are discountable."); AR32690 (same).

> Interdependent actions are those that have *no independent utility* apart from the action under consideration.

50 C.F.R. § 402.02 (emphases added). Thus NMFS has an immediate legal obligation to consider the potential impacts of future permits reasonably certain to occur. *Id.* The permits depend on the Regulations for their justification and have no independent utility: without them, there can be no aquaculture facilities in the Gulf EEZ. *Id.*

In *Median County Environmental Action Association v. Surface Transportation Board*, the agency came to a "not likely to adversely affect" ESA decision regarding construction of a railroad line to a limestone quarry. 602 F.3d 687 (5th Cir. 2010). Plaintiffs challenged the agency's limitation of its ESA analysis to just the railway and not the quarry. *Id.* at 700. The Fifth Circuit applied and adopted the ESA regulations' broad definition of indirect and interrelated effects, and applied a "but-for" causation test for what must be analyzed as effects. *Id.* at 700-01, 694. The court then held that, because the quarry could be built and operated even *without* the rail, it was thus not interrelated and the defendant agency had not acted arbitrarily and capriciously in excluding it. *Id.* The present case is just the opposite: "but for" the new regulations, the aquaculture permits *cannot* be issued. *Accord Nat'l Wildlife Fed'n v. Coleman*, 529 F.2d 369, 373-74 (5th Cir. 1976) (rejecting agency attempts to exclude later indirect effects from their ESA analysis where Department of Transportation considered the direct impact on protected crane habitat from highway construction, but failed to consider the additional loss of habitat that would come from the later private development facilitated by the new highway).

ESA regulations for formal consultation explain that each agency must review their actions and whether to consult "at the earliest possible time," 50 C.F.R. § 402.14(a), the opposite of what NMFS did. NMFS cannot turn a blind eye to these impacts and kick the can down the road based on promises it will fulfill its legal duties at some future time.

NMFS's approach suffers from a second, related flaw: those later individual permit decisions are not equivalent in scope: they will be singular and discrete, and as such will not cover the entire new regulatory permitting scheme NMFS is establishing here. As the Ninth Circuit has held, in rejecting similar arguments, "biological opinions must be coextensive with the agency action, and [stipulations to protect listed species] cannot be substituted for comprehensive biological opinions." *Conner v. Burford*, 828 F.2d 1441, 1457 (9th Cir. 1988); *see also Pac. Coast Fed'n of Fishermen's Ass'ns v. Nat'l Marine Fisheries Serv.*, 482 F. Supp. 2d 1248, 1266-67 (W.D. Wash. 2006) ("In adopting a wholesale deferral of analysis to the project level, it cannot be said that the agencies satisfied their burden to 'make certain' that the proposed action is not likely to jeopardize listed species or destroy or adversely modify critical habitat.").

Later, permit-specific consultation does not relieve NMFS of its duty to consult on the regulations on a programmatic level. Leaving ESA analyses to just those later individual decisions will create piecemeal decision making, and miss larger, cumulative impacts on species and habitat of the entire scheme. *Conner*, 828 F.2d at 1454-55 (holding that agency could not put off biological opinion until later stage of oil and gas lease approvals, since it is "critical that ESA review occur early in the process to avoid piecemeal chipping away of habitat."). It is death by a thousand cuts. NMFS can and must now analyze the cumulative effects of the entire scheme and all the future aquaculture facilities it will legalize, in a comprehensive Biological Opinion. Such front-end analysis can then be used to inform future permitting analyses and facility-specific ESA obligations. NMFS's failure to undertake it violated the ESA.

V. THE COURT SHOULD VACATE THE CHALLENGED ACTION.

The Court should vacate the Regulations because the Regulations and their underlying FMP/PEIS violate the MSA, NEPA, ESA, and APA. The APA unequivocally states that a

"reviewing court shall … *hold unlawful and set aside* agency action … found to be … arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law; [or] without observance of procedure required by law." 5 U.S.C. § 706(2) (emphasis added). The Supreme Court has explained that if an agency's decision "is not sustainable on the administrative record made," then it "must be vacated and the matter remanded to [the agency] for further consideration." *Camp v. Pitts*, 411 U.S. 138, 143 (1973). Thus vacatur is the presumptive remedy here, and NMFS bears the burden of showing why anything less than vacatur is warranted. *See, e.g.*, *Sierra Club v. Van Antwerp*, 719 F. Supp. 2d 77, 78 (D.D.C. 2010) ("[B]oth the Supreme Court and the D.C. Circuit Court have held that remand, along with vacatur, is the presumptively appropriate remedy for a violation of the APA.").

NMFS is unlikely to meet the burden to justify remand without vacatur here. The Fifth Circuit recognizes that remedy only where: (1) the "seriousness of the agency's deficiencies" and (2) "the disruptive consequences of an interim change that may itself be changed" would render vacatur inappropriate. *Allied-Signal, Inc. v. U.S. Nuclear Regulatory Comm'n*, 988 F.2d 146, 150-51 (D.C. Cir. 1993); *cf. Central and South West Services, Inc. v. U.S. E.P.A.*, 220 F.3d 683, 692 (5th Cir. 2000) (citing *Allied-Signal*). "Both prongs must be satisfied to warrant remand." *Permian Basin Petrol. Ass'n Chaves Cty. v. Dep't of the Interior*, No. 7:14-CV-50-RAJ, 2016 WL 4411550, at *2 (W.D. Tex. Feb. 29, 2016).

As to the seriousness of NMFS's deficiencies, the Regulations were fundamentally flawed, *ultra vires* and in violation of the substantive provisions of the MSA, NEPA and the ESA, as well as procedurally flawed under the MSA. *See supra* pp. 8-48. NMFS's errors here were sufficiently serious because NMFS cannot substantiate its decision on remand. *See Permian Basin*, 2016 WL 4411550, at *2 (vacating decision made without consideration of material

information and based on improper assumptions); *id.* ("[Where there is] little or no prospect of the rule being readopted upon the basis of a more adequate explanation…, the practice of the court is ordinarily to vacate the rule.") (quoting *Ill. Public Telecomms. Ass'n v. FCC*, 123 F.3d 693, 693 (D.C. Cir. 1997)). Indeed, this Circuit has vacated agency actions found to be *ultra vires*. *See Texas Pipeline Ass'n v. F.E.R.C.*, 611 F.3d 258, 264 (5th Cir. 2011).

Nor can NMFS meet the second factor—the disruptive consequences of vacatur. The D.C. Circuit has instructed that the judicial determination of the disruptive consequences of vacatur is analogous to the standard for granting a preliminary injunction. *See Int'l Union, United Mine Workers v. Fed. Mine Safety & Health Admin.*, 920 F.2d 960, 967 (D.C. Cir. 1990). A preliminary injunction is only warranted "upon a clear showing that the moving party is '*likely* to suffer irreparable harm ..., that the balance of equities tips in his favor, and that an injunction is in the public interest.'" *Permian Basin*, 2016 WL 4411550, at *3 (quoting *Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 20 (2008)) (emphasis in original)). None of those factors are met here. As discussed above, the Regulations put into place a novel aquaculture permitting scheme to the detriment of local economies and the environment, with unsubstantiated hope that aquaculture would eventually reduce U.S. reliance on imported seafood. *See supra* pp. 21-22. Vacatur will benefit the environment and long-standing fishing communities by requiring that NMFS provide proper regulatory oversight of offshore aquaculture under the appropriate legal authority. Any economic or administrative inconveniences to aquaculture investors and NMFS are outweighed by the benefits to the environment and the local economy.

CONCLUSION

For the foregoing reasons, the Court should grant summary judgment in Plaintiffs' favor.

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Respectfully submitted,

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