BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In re: Ocean Era, Inc. Modified National Pollution Discharge Elimination System Permit No. FL0A00001 for the Velella Epsilon Facility in the Gulf of Mexico	)	**PETITION FOR REVIEW** NPDES Appeal No. 25-01M

Clay Garside (La. Bar # 29873)
Waltzer Wiygul & Garside, LLC
3201 General Degaulle Dr., Ste 200
New Orleans, LA 70114
clay@wwglaw.com
Art. 1313 Service: service@wwglaw.com
Tele: (504) 340-6300
Fax: (504) 340-6330

Attorney for Petitioners

Date: June 14, 2025

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Federal Cases (Cont'd) **Page(s)**

Federal Statutes

Other Authorities (Cont'd) **Page(s)**

Other Authorities (Cont'd) **Page(s)**

Other Authorities (Cont'd) **Page(s)**

INTRODUCTION

Pursuant to 40 C.F.R. § 124.19(a), Center for Food Safety (CFS), Recirculating Farms Coalition (Recirculating Farms), Tampa Bay Waterkeeper (TBWK), Suncoast Waterkeeper (SCWK), Healthy Gulf, Sierra Club, and Food & Water Watch (FWW) (collectively, Petitioners) petition for review of the conditions of modified National Pollution Discharge Elimination System (NPDES) Permit No. FL0A00001, issued to Ocean Era, Inc. (Ocean Era) on May 15, 2025, by the Regional Administrator, U.S. Environmental Protection Agency Region IV (EPA). U.S. EPA, Modified NPDES Permit No. FL0A00001–Ocean Era, Inc. (2025) (modified Permit or Permit).[1] This modified Permit, including the non-modified aspects of the original permit (June 8, 2022), authorizes Ocean Era to operate the only ocean finfish farm in U.S. federal waters—in the Gulf of America (Gulf of Mexico or Gulf) approximately 45 miles from the coast of Sarasota, Florida—and to discharge untreated, industrial wastewater from the facility directly into the surrounding ocean. *See* Final Modified Permit.

The Region's issuance of the Permit is illegal for various reasons, under at least five federal laws: the Federal Water Pollution Control Act, 33 U.S.C. 1251-1376, (Clean Water Act or CWA), the National Environmental Policy Act, 42 U.S.C. 4321- 4370, (NEPA), the Endangered Species Act, 16 U.S.C. §§ 1531-1544, (ESA), the Marine Mammal Protection Act, 16 U.S.C. § 1361 *et seq*., (MMPA), and the Marine Protection, Research and Sanctuaries Act, 33 U.S.C § 1401 *et seq*., (MPRSA, Ocean Dumping Act). Additionally, the various documents, particularly the Environmental Assessment (EA), Biological Evaluation (BE), and Ocean Discharge Criteria Evaluation (ODCE), supporting the Permit are outdated.

[1] Documents are available on the U.S. EPA's website, https://www.epa.gov/npdes-permits/ocean-era-inc-velella-epsilon-aquatic-animal-production-facility-national-pollutant.

First, EPA's issuing of the permit violates the Ocean Discharge Criteria (ODC) of the CWA by failing to assess numerous pollutants under mandatory criteria and failing to assess relevant factors. *See* EPA, Final ODCE: Ocean Era, Inc.–Velella Epsilon, Sep. 30, 2020. The modified Permit relies on the initial ODCE. Further, the EPA relies on ineffective permit conditions, essentially to "alert the EPA," Final Modified Permit at 9, which will do nothing to mitigate the release of farmed fish. The Permit issuance thus cannot adequately ensure that the facility will not result in "unreasonable degradation of the marine environment," in violation of federal law.

Second, EPA's permit process violates NEPA, as the NEPA documentation ignores cumulative impacts, other mandatory NEPA factors, and short-term and long-term effects of the Permit. *See* Final EA: NPDES Permit for Ocean Era, Inc.–Velella Epsilon Offshore Aquaculture Project – Gulf of Mexico, September 2020 (EA). Additional assessment is needed to fully evaluate the impacts of the project.

Third, EPA's permit process violates ESA by failing to assess numerous project impacts on endangered and threatened species in the BE. *See* Biological Evaluation, EPA and USACE, Final Biological Evaluation: Ocean Era, Inc.–Velella Epsilon, Sep. 30, 2020. (BE). Despite a Letter of Concurrence (LOC) issued by National Marine Fisheries Service (NMFS or NOAA Fisheries) in February 2025 that amended the consultation record following the 2022 permit, a Biological Opinion (BiOp) remains necessary to ensure that the project does not threaten listed species or critical habitat.

Fourth, EPA failed to receive proper authorization for the facility under the MMPA. This facility will inevitably "harass" marine mammals and result in "takes," which require proper authorization from NMFS.

Fifth, EPA's permit process violates the Ocean Dumping Act, by failing to consider the facility, tools, and equipment that will become marine debris when they are abandoned, damaged and/or break free; the various components could be considered "dumping" of "material." 33 U.S.C. §§ 1402(c) and 1402(f).

Copper was removed from Table 1 of the potential discharges in the final modified Permit, based on modifications to the original permitted facility, however, EPA still based its approval on clearly erroneous conclusions in a now also outdated ODCE. First, the EPA erroneously concluded that this facility may discharge antibiotics, pathogens, escaped fish, and fish feed, without causing "unreasonable degradation" to the marine environment under the ODC. ODCE at 48. In approving discharges of escaped fish and pathogens, without evaluating these under the ODC, the EPA unlawfully permitted unreasonable degradation in violation of the CWA. Second, the EPA concluded that Ocean Era's discharges are unlikely to significantly impact the human environment because the agency's assessments overlooked various discharges, avoided assessing these discharges for the full duration of the Permit, and stated that conditions of the Permit would mitigate impacts without sufficient explanation. Modified Permit at 19. Third, the EPA concluded that the project's potential threats are "highly unlikely to occur or extremely minor in severity" and that the proposed project is not likely to adversely affect listed species or designated critical habitat. BE at 28. The EPA could not have reasonably reached these conclusions, as it did not sufficiently assess discharges, nor did it adequately evaluate whether those discharges could adversely affect endangered or threatened species and the marine environment.

Lastly, the various documents in analysis and support of the Permit are badly outdated, particularly, and perhaps most notably, the EA, BE, and ODCE. Petitioners could not have

anticipated that EPA would rely on these outdated analyses in considering the modification application and so could not have commented regarding the same.

As set forward herein, Petitioners contend that EPA committed numerous substantive and procedural errors prior to issuing the modified Permit. Based on these errors, discussed more below, Petitioners request that the Environmental Appeals Board (EAB or "the Board") grant this petition for review and remand the Permit to EPA with instructions for EPA to correct all substantive and procedural shortcomings and provide for appropriate supplemental public notice and comment after the required analyses are completed and the Permit corrected.

PROCEDURAL BACKGROUND

EPA issued an NPDES permit to Ocean Era in 2020 following a public comment period and public hearing. Petitioners sought review of the permit before EPA's EAB. On May 6, 2022, the EAB issued a decision that remanded in part and denied review in part for the permit appeal. The EAB remanded the permit decision to the Region "to clearly state whether the region determined that the permitted discharge will not cause unreasonable degradation of the marine environment." *In re Ocean Era, Inc.*, NPDES Appeal Nos. 20-08 & 20-09, Order Remanding in Part and Denying in Part, May 6, 2022. In response to the EAB decision, EPA revised the permit record and issued a final permit on June 9, 2022. The terms of the 2022 permit ("the original permit") are effective for CWA and other purposes to the extent not changed in the modified Permit and are therefore part of the modified Permit.

Two petitions for review challenging the final original permit were filed in the U.S. Circuit Court of Appeals for the Second Circuit and the U.S. Circuit Court of Appeals for the D.C. Circuit. The petitions were subsequently consolidated in the D.C. Circuit, where the consolidated petition remains pending, although stayed.

On July 5, 2023, Ocean Era formally submitted a request for permit modification under 40 CFR §124.5 and provided ancillary information. On July 17, 2023, Ocean Era submitted a revised NPDES permit application and information in support of the modification. In essence, the modifications requested were changes in: the species of fish to be farmed, from Almaco jack to red drum; the maximum level of fish production from 88,000 lbs to 55,000 lbs (though the total number of fish remains the same); the feed used for the new species of fish; the cage design, material, and mooring system; and the addition of a permit condition prohibiting the intentional or negligent release of produced fish.

On November 25, 2024, Petitioners submitted comments regarding the application for a modified NPDES permit.[2] When EPA solicited comments on the modification, it specifically limited comments to the changes requested, which Petitioners honored. Petitioners also incorporated all prior objections to approval of the original permit raised in prior comment period(s) as they remain in effect and thus relevant. Petitioners noted that "[t]he limited scope of these alterations do not in any way remedy those permit failings, which continue to exist."[3] Petitioners further commented that the justification for the modified Permit retains the prior errors on which the original permit was based, despite the reduction in maximum fish production level and the prohibition on intentional or negligent release of fish, as it is ineffectual as a mitigation measure because farmed fish are almost certain to be released.

Petitioners, already in litigation on the original permit, had previously notified EPA and the court that the proper process would be to revoke the original permit and begin anew, given the various changes in the project and Gulf nearly five years later.[4]

---

[2] Exhibit A, Petitioners' Comments on Modification, Nov. 25, 2024.
[3] *Id.* at 1.
[4] Exhibit B, Petitioners' Letter to EPA and Response To Federal Respondents' Motion

During the latest comment period on the modified Permit, Petitioners were not yet aware that the modified Permit would be issued largely based on original and now over five years outdated documents, including specifically the ODCE, BE, and EA. Petitioners are challenging this, in this appeal.

On May 15, 2025, EPA issued a final Permit to Ocean Era that contains the modifications requested. Out of an abundance of caution, Petitioners herein raise applicable issues from the original petition and various comments as they are part of the new Permit terms, as well as the new issues in the modified Permit.

THRESHOLD PROCEDURAL REQUIREMENTS

Petitioners satisfy the threshold requirements for filing a petition for review under 40 C.F.R. Part 124. In particular:

1. Petitioners are entitled to petition for review of the Permit decision because they filed timely public comments with the Region regarding the original permit. *See* 40 C.F.R. § 124.19(a)(2). Petitioners CFS, FWW, Sierra Club, and Healthy Gulf submitted joint comments, and Petitioner Recirculating Farms filed comments, both on September 29, 2019.[5] [6] Petitioners CFS, FWW, Sierra Club, and Suncoast Waterkeeper also filed supplemental joint comments on February 4, 2020.[7]
2. Petitioners CFS, FWW, Sierra Club, Healthy Gulf, Suncoast Waterkeeper, and Recirculating Farms jointly submitted comments regarding application for a modified Permit on November 25, 2024.[8]

For Partial Remand Without Vacatur.

[5] Exhibit C, Petitioners' Original Comments, Sep. 29, 2019.

[6] Exhibit D, Petitioner Recirculating Farms' Original Comments, Sep. 29, 2019.

[7] Exhibit E, Petitioners' Supplemental Comments, Feb. 4, 2020.

[8] Exhibit A.

3. Petitioners CFS, FWW, Sierra Club, Healthy Gulf, Suncoast Waterkeeper, and Recirculating Farms notified EPA and the court that the proper process would be to revoke the original permit and start anew given the significant changes to the project and outdated support documents.[9]
4. Petitioners' various written comments and notices raised the issues in this petition, preserving them for review.[10] Citations to relevant comments are below.
5. Any issues not included in Petitioners' comments raised herein were not apparent during the comment periods, or were prevented by EPA's request to limit comments to modified Permit changes.

PETITIONERS

CFS is a nonprofit, public interest organization with a mission to protect public health and the environment by curbing the proliferation of harmful food production technologies, such as industrial aquaculture practices, and by promoting sustainable forms of food production. CFS represents over 950,000 farmer and consumer members who reside in every state across the country, who support safe, sustainable food production. CFS has long had a specific aquaculture program, dedicated to addressing the adverse environmental and public health impacts of industrial aquaculture, including numerous policy, scientific, and legal staff. In its program, CFS strives to ensure and improve aquaculture oversight, furthering policy and cultural dialogue with regulatory agencies, consumers, chefs, landowners, and legislators on the critical need to protect public health and the environment from industrial aquaculture and to promote and protect more sustainable alternatives.

[9] Exhibit B, Petitioners' Letter to EPA and Response To Federal Respondents' Motion For Partial Remand Without Vacatur.
[10] *See* Exhibits A and C-E.

Recirculating Farms is a collaborative group of farmers, educators, food justice advocates and many others committed to building community health, by developing new sources of fresh, accessible food. Through training, outreach and advocacy, Recirculating Farms runs ecologically and socially responsible programs that grow local, affordable food, and create stable jobs in green businesses, in diverse communities, to foster physical, mental and financial wellness. The group has been focused on sustainable aquaculture since its inception.

SCWK is a non-profit public benefit corporation with members throughout Southwest Florida, including Pinellas, Hillsborough, Sarasota, Manatee, and Charlotte Counties. SCWK is dedicated to protecting and restoring the Florida Suncoast's waterways on behalf of its members through enforcement, fieldwork, advocacy, and environmental education for the benefit of the communities and SCWK's members that rely upon these precious coastal resources. To further its mission, SCWK actively seeks federal and state implementation of environmental laws, and, where necessary, directly initiates enforcement actions on behalf of itself and its members. SCWK has been registered as a non-profit corporation in Florida since 2012 and has maintained its good and current standing in Florida since that time. SCWK is a licensed member of Waterkeeper Alliance, Inc., an international non-profit environmental organization, made up of over 300 separate Waterkeeper programs, such as SCWK. SCWK's office is located in Sarasota, Florida.

TBWK is a non-profit public benefit corporation organized under the laws of the State of Florida with members throughout the Tampa Bay watershed. TBWK is dedicated to protecting and improving the Tampa Bay watershed while ensuring swimmable, drinkable and fishable water for all. TBWK's approach combines sound science, policy advocacy, grassroots community engagement and education to stand up for clean water together as a community,

ensuring a clean and vibrant future for the Tampa Bay watershed. To further its mission, TBWK actively seeks federal and state implementation of environmental laws, and, where necessary, directly initiates enforcement actions on behalf of itself and its members. TBWK has been registered as a non-profit corporation in Florida since 2017 and, like SCWK, is a licensed member of Waterkeeper Alliance, Inc. TBWK's office is located in St. Petersburg, Florida.

Healthy Gulf is a New Orleans based non-profit with a mission to collaborate with and serve communities who love the Gulf of Mexico by providing the research, communications, and coalition-building tools needed to reverse the long pattern of over exploitation of the Gulf's natural resources. Healthy Gulf has hundreds of members and over 20,000 e-supporters spread out across the region and the nation. Since 1994, Healthy Gulf has been working to advance a healthy Gulf of Mexico returned to its former splendor that supports a thriving ecosystem that includes the Gulf's natural resources and, just as importantly, the people, communities, and cultures that depend on those resources.

FWW is a national, nonprofit, public-interest consumer advocacy organization that mobilizes people to hold elected officials accountable and fight the corporate control and abuse of the essential resources that people need in order to live. FWW members include commercial and recreational fishermen and women, conservationists, and consumers, and it advocates on issues related to aquaculture, food safety standards, and other environmental and food policy issues. Food & Water Watch staff have tracked developments in the aquaculture field, submitted comments to federal agencies, and communicated with legislators and agency officials on aquaculture issues since the organization's inception.

Founded in 1892, Sierra Club is the most enduring environmental organization in the United States. Sierra Club amplifies the power of its 3.8 million members and supporters to

defend everyone's right to a healthy world. Sierra Club works with other partner organizations, nonprofits, and campaigns to build a diverse, inclusive movement that represents today's American public. Sierra Club knows that environmental issues can't be separated from social justice—because we all breathe the same air and share the same land.

STATUTORY AND REGULATORY FRAMEWORK

I. CWA

The Congressional goals of the CWA are "to restore and maintain the chemical, physical, and biological integrity of the nation's waters." 33 U.S.C. § 1251(a). The heart of the CWA is the NPDES permitting program. Under Section 301, "the discharge of any pollutant by any person shall be unlawful." 33 U.S.C. § 1301(a). "The combined effect of sections 301(a) and 402 is that '[t]he CWA prohibits the discharge of any pollutant from a point source into navigable waters of the United States without an NPDES permit.'" *Nw. Evtl. Advocates v. EPA*, 537 F.3d 1006, 1010 (9th Cir. 2008) (quoting *N. Plains Res. Council v. Fid. Exploration & Dev. Co*., 325 F.3d 1155, 1160 (9th Cir. 2003)).

Congress enacted Section 403 to provide heightened protections for marine waters. 33 U.S.C. § 1343. Congress directed EPA to publish regulations and guidelines for determining degradation of the "waters of the territorial sea, the contiguous zone, and oceans." *Id*. § 1343(c)(1). Section 403 requires that EPA's determination of degradation "shall include" specific factors including effects on alternate uses of the ocean, effects to human health and welfare, and effects to esthetic, recreation and economic values. *Id*. §§ 1343(c)(1)(A)-(G).

Section 403 further circumscribes the exercise of EPA's discretion. "[N]o permit shall be issued under section 1342" where "insufficient information exists on any proposed discharge to make a reasonable judgment on any of the guidelines established pursuant to this subsection." *Id*.

§ 1343(c)(2). "Thus, the Act requires ocean polluters who receive a permit to satisfy both the technological requirements of the effluent limitations and also the ocean degradation criteria of section 403." *Nat. Res. Def. Council, Inc. v. U.S. E.P.A.*, 863 F.2d 1420 (9th Cir. 1988); *see also Am. Petroleum Inst. v EPA*, 787 F.2d 965, 970 (5th Cir. 1986).

A. ODC

As noted, the CWA prohibits the discharge of any pollutants, unless in compliance with certain sections of the statute. 33 U.S.C. § 1311(a). To provide a further measure of protection for the territorial seas and oceans, Congress amended the CWA to include the ODC, and specifically prohibited the issuance of any permit for discharges into the territorial seas and oceans, unless such permit was in compliance with regulations for determining degradation of ocean waters. The statute mandates that if EPA cannot obtain sufficient information on any proposed discharge to make a reasonable judgment as to its impact on the marine environment, "no permit shall be issued." 33 U.S.C. § 1343 (c)(2).

In passing the ODC, Congress intended to provide additional protections to the oceans. In 1972 testimony before the House of Representatives in favor of the ODC, EPA Administrator William D. Rucklehaus testified that the ODC "would take into account the effect of pollutant disposal, in particular volumes, and concentrations, on human health and welfare, marine life and esthetic, recreational and economic values." H.R. 11896, 92 Cong., 1st Sess. 72 (1971).

EPA regulations, promulgated pursuant to Section 1343, impose an affirmative burden on EPA to evaluate the impacts from the discharges into oceans on human health and welfare, marine life and upon esthetic, recreational, and economic values. 40 C.F.R. § 125.122(a)(1)-(10). The Agency is compelled to determine "the degradation of the waters of the territorial seas, the contiguous zone, and the oceans." 33 U.S.C. § 1343(c)(1). If the discharge is a threat to human

health or welfare, or results in a loss of recreational or economic values, an NPDES permit cannot be issued. 33 U.S.C. § 1343(a). However, if the EPA decides to issue an NPDES permit, it must impose conditions under 40 C.F.R. § 125.123(d). Permit conditions include those that "are necessary because of local environmental conditions," and each permit must contain a clause allowing for the modification or revocation of any permit if continued discharge causes unreasonable degradation. 40 C.F.R. § 125.123(d)(3),(4).

II. NEPA

Congress enacted NEPA after recognizing that human activity, particularly including resource exploitation and technological advances, is having a profound effect on the natural environment. 42 U.S.C. § 4331. For both federal agencies and the public to have information regarding environmental impacts, each federal agency must create a detailed statement before taking a major federal action. 40 C.F.R. § 1500.1(b). The statement should include:

> (i) the environmental impact of the proposed action,
> (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
> (iii) alternatives to the proposed action,
> (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
> (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

42 U.S.C. § 4332(c).

A federal agency may avoid issuing a full impact statement if it first prepares a shorter Environmental Assessment (EA) and makes a Finding of No Significant Impact (FONSI). 40 C.F.R. §§ 1501.5, 1501.6. The EA shall "[b]riefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact," and "[b]riefly discuss the purpose and need for the proposed action . . . and the environmental impacts of the proposed action and alternatives." 40 C.F.R. § 1501.5(c). Agencies

must take a "hard look" at the data and base a FONSI on a "convincing statement of reasons." *Save the Yaak Comm. v. Block*, 840 F.2d 714, 717 (9th Cir. 1988).

III. ESA

ESA, 16 U.S.C. §§ 1531-1544, "represent[s] the most comprehensive legislation for the preservation of endangered species ever enacted by any nation." *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 180 (1978). The ESA declares it the policy of Congress "to conserve endangered species and threatened species." 16 U.S.C. § 1531.

Pursuant to Section 7 of the ESA, before undertaking any action that may have direct or indirect effects on any listed species, an action agency must engage in consultation with NMFS and/or Fish and Wildlife Service (FWS) (collectively, the consulting agencies) in order to evaluate the impact of the proposed action. *See* 16 U.S.C. § 1536(a). In jointly issued regulations, the consulting agencies defined the term "action" for the purposes of Section 7 broadly to mean "all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies," 50 C.F.R. § 402.02, "in which there is discretionary federal involvement or control." *Id.* § 402.03. An agency may only avoid this consultation requirement for a proposed action if it determines that its action will have "no effect" on threatened or endangered species or critical habitat. *Id.* § 402.14(a).

The purpose of consultation is to ensure that the action at issue "is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [designated] habitat of such species." 16 U.S.C. § 1536(a)(2). As defined by the ESA's implementing regulations, an action will cause jeopardy to a listed species if it "reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the

reproduction, numbers, or distribution of that species." 50 C.F.R. § 402.02. The evaluation of the effects of the proposed action on listed species during consultation must use "the best scientific . . . data available." 16 U.S.C. § 1536(a)(2). Moreover, after the initiation of consultation, the action agency is prohibited from making "any irreversible or irretrievable commitment[s] of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures." *Id.* § 1536(d).

Consultation under Section 7 may be "formal" or "informal". Informal consultation is "an optional process" consisting of all correspondence between the action agency and the consulting agency, which is designed to assist the action agency, rather than the consulting agency, in determining whether formal consultation is required. *See* 50 C.F.R. § 402.02.

If the action agency finds that the proposed action "may affect, but is not likely to adversely affect" any listed species or critical habitat and the consulting agency concurs with this finding, then the informal consultation process is terminated. 50 C.F.R. § 402.14(b).

If the action agency finds that the proposed action "may affect" listed species or critical habitat, then the action agency must undertake formal consultation. 50 C.F.R. § 402.14; *see also* FWS & NMFS, Endangered Species Consultation Handbook (Consultation Handbook) at 3-13 (1998). The result of formal consultation is the preparation of a BiOp by the consulting agency, which provides analysis of the best available scientific data on the status of the species and how it would be affected by the proposed action.[11] Additionally, a BiOp must include a description of the proposed action, a review of the status of the species and critical habitat, a discussion of the

[11] When preparing a biological opinion, the consulting agency must (1) "review all relevant information," (2) "evaluate the current status of the listed species," and (3) "evaluate the effects of the action and cumulative effects on the listed species," 50 C.F.R. § 402.14, using "the best scientific and commercial data available," 16 U.S.C. § 1536(a)(2); *see also Greenpeace v. Nat'l Marine Fisheries Serv.*, 80 F. Supp. 2d 1137, 1149-50 (W. D. Wash. 2000) (remanding biological opinion where agency failed to "meaningfully analyze" the risks to the species and the key issues).

environmental baseline, and an analysis of the direct and indirect effects of the proposed action and the cumulative effects of reasonably certain future state, tribal, local, and private actions. *See* Consultation Handbook at 4-14 to 4-31.

IV. MMPA

The MMPA established a federal responsibility to conserve marine mammals. 16 U.S.C. § 1361 *et seq*. Under the MMPA, it is illegal to "take" a marine mammal without proper authorization from NMFS. *Id*. §§ 1372, 1374. "Take" is defined as "harass, hunt, capture or kill, or attempt to harass, hunt, capture or kill any marine mammal." *Id*. § 1362 (13). "Harassment" is defined as "any act of pursuit, torment, or annoyance," which has the potential to injure a marine mammal in the wild, or has the potential to injure or disturb a marine mammal in the wild by disrupting behavioral patterns including "migration, breathing, nursing, breeding, feeding, or sheltering." *Id*. § 1362 (18)(a).

BACKGROUND

I. Industrial Netpen Ocean Aquaculture Generally

The Permit would allow Ocean Era to operate the only industrial ocean finfish farm in U.S. federal waters—in the Gulf of Mexico approximately 45 miles from the coast of Sarasota, Florida—and discharge untreated, industrial wastewater from the facility directly into the surrounding ocean. Modified Permit at 1. Industrial ocean fish farming—also known as offshore or marine finfish aquaculture—involves the mass cultivation of finfish in the ocean, in netpens, pods, and cages, which can have devastating environmental and socio-economic impacts. As detailed in Petitioners' comments and the citations therein, industrial aquaculture, such as the Velella Epsilon (VE) project, is associated with many environmental and public health concerns, including: the escape of farmed fish into the wild; outcompeting wild fish for habitat; food and

mates or intermixing with wild fish and altering their genetics and behaviors; the spread of diseases and parasites from farmed fish to wild fish and other marine life; and pollution from excess feed, wastes and any antibiotics or other chemicals used flowing through the open pens into natural waters.[12] Industrial aquaculture also significantly affects public health, as antibiotics, pesticides, and other chemicals that are heavily used to prevent disease and parasites in industrial aquaculture can accumulate in fish tissues.[13]

II. History of Offshore Aquaculture in the Gulf

On January 13, 2016, the National Oceanic and Atmospheric Administration (NOAA) issued the Gulf Industrial Aquaculture Regulations implementing the Fishery Management Plan (FMP) for commercial offshore aquaculture in the Gulf of Mexico. Fisheries of the Caribbean, Gulf, and South Atlantic; Aquaculture, 81 Fed. Reg. 1762, 1762 (Jan. 13, 2016). The Aquaculture FMP and its implementing regulations were the first-ever permit program for commercial offshore aquaculture in federal waters. 81 Fed. Reg. at 1762. This program would have allowed up to 20 industrial facilities and collectively 64 million pounds of fish to be grown annually in the Gulf. *Id*.

In response, Petitioners CFS and Recirculating Farms, along with other conservation and fishing groups, successfully challenged NMFS's authority to regulate aquaculture under the Magnuson Stevens Fishery Conservation and Management Act (MSA). *See Gulf Fishermens Ass'n v. Nat'l Marine Fisheries Serv.*, 341 F. Supp. 3d 632 (E.D. La. 2018). On September 25, 2018, the Federal District Court for the Eastern District of Louisiana ruled that Congress never intended the MSA to regulate aquaculture, which presents different harms than traditional

[12] *See also* Exhibit F, Friends of the Earth, Fact Sheet: Industrial Ocean Fish Farming.
[13] *See* Exhibit C at 3-5; Exhibit D at 3-5.

fishing. The court rejected NMFS's attempt to permit a novel aquaculture scheme based on its authority to regulate the "catching, taking, or harvesting of fish," 16 U.S.C. § 1802, and concluded that the Department of Commerce "acted outside of its statutory authority in shoehorning an entire regulatory scheme into a single unambiguous word." *Id*. at 642. In August 2020, the Fifth Circuit Court of Appeals affirmed the lower court's decision and concluded that the MSA "unambiguously precludes the agency from creating an aquaculture regime." *Gulf Fishermens Ass'n v. NMFS*, 968 F.3d 454 (5th Cir. Aug. 2020).

III. Florida Sea Grant and VE

During the above litigation, Ocean Era's predecessor corporation, Kampachi Farms, began working with Florida Sea Grant to pursue the expansion of offshore aquaculture in the Gulf of Mexico. In 2017, Florida Sea Grant awarded $139,474 to develop the VE demonstration fish net pen and stated its intention for this project to serve "as an educational platform for policymakers, the public, and fishing industry interests while concurrently pursuing an application for a commercial aquaculture permit in the Gulf of Mexico waters off southwest Florida and documenting the process for future applicants to follow."[14] In a May 7, 2020 email to officials at NOAA, the CEO of Ocean Era, Neil Sims, wrote that VE is "funded under the SeaGrant project to use the goodwill generated from the VE demonstration pen to pioneer the permitting process for a commercial offshore fish farm."[15] Neil Sims is a partner with Florida Sea Grant, which explicitly supports and promotes offshore aquaculture in the Gulf, beginning with VE.[16] Neil Sims admitted: "We intend to begin the commercial permit application process

[14] NOAA Sea Grant, *Sea Grant Announces $9.3 Million for Aquaculture Research and Industry Support* (Oct. 31, 2017), https://seagrant.noaa.gov/News/Article/ArtMID/1660/ArticleID/1656/Sea-Grant-announces-93-million-for-aquaculture-research-and-industry-support.

[15] Exhibit G, Emails from Neil Sims, at 2.

[16] Florida Sea Grant, *Testing the Waters of Offshore Aquaculture*, https://www.flseagrant.org/testings-the-waters-of-offshore-aquaculture-mapp/ (last visited June 11, 2025).

as soon as we have the demonstration net pen permit in hand."[17] Sims also recently said in a 2025 interview that the current VE project is "only about one percent of the size of a commercial facility," that he hopes to build in the future.[18]

With funding support from Florida Sea Grant, on November 9, 2018, Ocean Era, (formerly Kampachi Farms, LLC) submitted a permit application to the U.S. Army Corps of Engineers (USACE) under the Rivers and Harbors Act for putting structures in U.S. waters and to the EPA under the CWA for an NPDES permit for a "pilot" fish farm project off the coast of Sarasota, Florida in the federal waters of the Gulf of Mexico.

IV. The Original Draft Permit

In April 2019, EPA/USACE made available a draft EA on the VE project, and on August 30, 2019, EPA issued the draft CWA NPDES permit with a 30-day comment period. *See* EPA, Draft Environmental Assessment National Pollutant Discharge Elimination System Permit and Rivers and Harbor Act Section 10 Permit for Kampachi Farms–Velella Epsilon Offshore Aquaculture Project (Aug. 30, 2019) (Draft EA). On December 12, 2019 only one public hearing was announced for January 28, 2020 on the EPA permit. *See* EPA, Notice of Public Hearing and Extended Public Comment Period Regarding the Proposed Issuance of a National Pollutant Discharge Elimination System Permit, Public Notice No. 19FL00002, Dec. 12, 2019. The EPA public comment period was extended to February 4, 2020. *Id.* The EPA received over 40,000 oral and written comments during the comment period.

[17] Exhibit G at 2.

[18] Aaron Mesmer, *Hawaiian Company Takes Major Step Towards Placing Fish Farm Off Sarasota County's Coast*, FOX 13 TAMPA BAY, May 23, 2025, https://www.fox13news.com/news/hawaiian-company-takes-major-step-towards-placing-fish-farm-off-sarasota-countys-coast (last visited June 11, 2025).

V. Petitioners' Comments

Petitioners CFS, Sierra Club, FWW, Healthy Gulf, and Recirculating Farms along with many other organizations, submitted comments on the draft permit on September 29, 2019, pursuant to 40 C.F.R. § 124.11.[19]

Petitioners challenged the EPA's failure to assess numerous significant impacts in the EA,[20] the EPA's omission of several pollutant discharges from its ODCE,[21] and the agency's failure to complete a BiOp under the ESA.[22] Petitioners encouraged the agency to complete a full assessment of discharges such as fish escapes, parasites and pathogens, and antibiotic resistance over the full term of the Permit to meet the mandates of federal law.[23]

Petitioners CFS, FWW, Healthy Gulf, Sierra Club, and Suncoast Waterkeeper also filed supplemental joint comments on February 4, 2020,[24] challenging EPA's failure to assess risks to human health,[25] risks to environmental health from pathogens and parasites,[26] the project's contribution to harmful algal blooms (HABs),[27] and the threat of extreme storms damaging the facility.[28] These comments also expressed concern over impacts to endangered species and marine mammals.[29] Petitioners CFS, FWW, Sierra Club, Healthy Gulf, Suncoast Waterkeeper, and Recirculating Farms submitted joint comments regarding the draft modified permit on

[19] Exhibits C and D.
[20] Exhibit C at 3-5; Exhibit D at 3-7.
[21] Exhibit C at 9; Exhibit D at 12.
[22] Exhibit C at 10-13; Exhibit D at 14.
[23] Exhibits C and D.
[24] Exhibit E.
[25] Exhibit E at 1-2. *See also* Exhibit C at 8; Exhibit D at 3-5.
[26] Exhibit E at 2-3. *See also* Exhibit C at 4, 12, 14; Exhibit D at 4, 12.
[27] Exhibit E at 13-16. *See also* Exhibit D at 9-10.
[28] Exhibit E at 16-17. *See also* Exhibit C at 8; Exhibit D at 9, 12.
[29] Exhibit E at 3-13. *See also* Exhibit C at 10-13; Exhibit D at 12-16.

November 25, 2024.[30] These comments re-urged all of the prior objections to this Permit as well, as original terms remain in effect if not modified, noting too that neither the reduction of maximum pounds of fish production nor a permit condition prohibiting intentional or negligent release of fish cured any of the deficiencies in the original permit.

VI. Designation of the Gulf as an AOA

While the draft original permit was pending, several changes took place regarding future plans for offshore aquaculture in the Gulf. First, on May 7, 2020, the Trump Administration signed an Executive Order, Promoting American Seafood Competitiveness and Economic Growth. Exec. Order 13921, 85 Fed. Reg. 28471 (May 12, 2020) (EO). This EO aimed to aid the commercial aquaculture industry and increase seafood production by streamlining the aquaculture permitting process. Notably, this EO mandated that the Secretary of Commerce identify "Aquaculture Opportunity Areas," (AOAs) which are geographic areas containing locations suitable for commercial aquaculture. Within two years of identifying each area, the EO required the Secretary to complete a programmatic EIS for each in a process aimed to streamline environmental review and site selection analysis.

On August 20, 2020, NOAA announced the designation of federal waters in the Gulf of Mexico as an AOA.[31] As a result of this designation, NOAA has highlighted certain portions of the Gulf to host offshore aquaculture operations for finfish, plants, bivalves, or a combination of species.[32]

---

[30] Exhibit A.

[31] NOAA Fisheries, Press Release, *NOAA Announces Regions for First Two Aquaculture Opportunity Areas under Executive Order on Seafood* (Aug. 20, 2020), *available at* https://www.fisheries.noaa.gov/feature-story/noaa-announces-regions-first-two-aquaculture-opportunity-areas-under-executive-order.

[32] NOAA Fisheries, *Gulf of America Aquaculture Opportunity Area Programmatic Environmental Impact Statement*, https://www.fisheries.noaa.gov/southeast/aquaculture/gulf-america-aquaculture-opportunity-area-programmatic-environmental-impact-statement (last visited June 11, 2025).

VII. The Original Permits

The EPA released its final EA September 2020, along with the final BE. EPA made a FONSI on the EA and approved the final permit on September 30, 2020, and made public the process for administrative appeal. *See* Final EA; EPA, Finding of No Significant Impact: Ocean Era, Inc.–Velella Epsilon National Pollutant Discharge System Elimination Permit, Sep. 30, 2020.

That original permit allowed Ocean Era to place a copper alloy mesh submersible floating "net-pen" cage approximately 45 miles (72 km) southwest of Sarasota, Florida. EPA, Ocean Era, Inc.–Velella Epsilon: Fact Sheet for NPDES Permit FL0A00001, 1 (Fact Sheet). The permit allowed Ocean Era to raise approximately 20,000 fish (Almaco jack, or kampachi; *Seriola rivoliana*) over approximately 12 months, with a total harvest weight around 80,000 pounds. *Id.* The maximum amount of feed *per month* was estimated at 27,000 pounds. Fact Sheet at 1.

The Fact Sheet explained, "[a]quaculture facilities produce and discharge wastes (excess fish feed and fecal material) that contain pollutants . . . [and] [a]ccordingly, marine finfish aquaculture operations are point sources that discharge pollutants." *Id.* Part II of the permit concerned monitoring requirements, specifically regarding water quality, sediment, and benthic monitoring, *id.* at 3, while Part IV required the implementation of best management practices (BMPs) and a BMP plan to prevent or minimize the discharge of wastes and pollutants and ensure proper disposal of wastes to minimize negative environmental impacts. *Id.* at 3-4. Part V required environmental monitoring and implementation of an environmental monitoring plan (EMP) to meet the requirements of specific provisions of the CWA, and Part VI required implementation of Facility Damage Prevention and Control (FDPC) practices and a FDPC plan for prevention and mitigation of natural and man-made disasters. Finally, Part VII concerned

implementation of quality assurance procedures and a quality assurance project plan (QAPP) to ensure water quality data by the permittee is reliable. This permit was re-issued on June 9, 2022 in response to a ruling by the EAB, and the same provisions, other than the modifications, are in the new modified Permit as well. *See* Final permit 2022; Final Modified Permit 2025; Final Fact Sheet for Modified Permit 2025 at 4.

VIII. The Modified Permit

In issuing the modified Permit on May 25, 2025, EPA largely relied on its prior analysis of the original permits. *See* Final Permit Modification Justification. The terms of the 2022 permit remain in effect except to the extent they have been specifically modified, and most have been included in the Final Modified Permit. *See* Final Modified Permit. The modifications include a change in the fish species produced from Almaco jack (*Seriola rivoliana*) to red drum (*Sciaenops ocellatus*), a reduction in maximum production amount from 88,000 to 55,000 pounds, a different fish feed for red drum, a larger cage size, a change in netpen material from copper to plastic, an increase in embedment anchors from three to eight, use of four ballast blocks on the seafloor not present in the original permit, an increase in lengths of lines of at least 4,750 feet, and an increase in the operational footprint from 11 acres to 23 acres. *See id.* at 3-5. The modified Permit also includes a prohibition on the intentional or negligent release of any fish produced. *See* Final Modified Permit at 8.

STANDARD OF REVIEW

The Board grants review of a petition if the permit condition at issue is based on (1) a clearly erroneous finding of fact or conclusion of law or (2) involves a matter of policy or exercise of discretion that warrants review. 40 C.F.R. § 124.19(a)(4)(i). When evaluating a challenged permit for error, the Board considers whether "the permit issuer 'duly considered the

issues raised in the comments' and ultimately adopted an approach that 'is rational in light of all of the information in the record.'" *In re Charles River Pollution Control Dist.*, NPDES Appeal No. 14-01, slip.op. at 5 (EAB Feb. 2, 2015) (quoting *In re Gov't of D.C. Mun. Separate Storm Sewer Sys*., 10 E.A.D. 323, 342 (EAB 2002)). The permit issuer "must articulate with reasonable clarity the reasons for [its] conclusions and the significance of the crucial facts in reaching those conclusions." *In re Ash Grove Cement Co*., 7 E.A.D. 387, 417 (EAB 1997) (alteration in original) (quoting *In re Carolina Power & Light Co.*, 1 E.A.D. 448, 451 (Acting EPA Adm'r 1978)). While the Board may defer to the permit issuer's technical judgments, it will not defer "where the permitting authority's rationale for its conclusions is weak or non-existent." *In re Chukchansi Gold Resort & Casino Waste Water Treatment Plant*, 14 E.A.D. 260, 280 (EAB 2009).

In considering the meaning of an administrative regulation, the Board applies "normal tenets of statutory construction." *In re Bil-Dry Corp.*, 9 E.A.D. 575, 595 (EAB 2001). In addition to the plain meaning of regulatory language, the Board considers the regulation in its entirety, the objective of the statute being implemented, and the regulatory history. *In re Howmet Corp*., 13 E.A.D. 272, 282 (EAB 2007); *see also In re Morton L. Friedman & Schmitt Constr. Co*., 11 E.A.D. 302, 328 (EAB 2004).

ARGUMENT

I. The issuance of the modified Permit is illegal under the CWA.

The overarching objective of the CWA "is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. l25l(a). To achieve this objective, Congress established several goals, including: (l) eliminating the discharge of pollutants into navigable waters by 1985; (2) attaining water quality that provides for the protection and

propagation of fish, shellfish, and wildlife and provides for recreation in and on the water by July 1, 1983; and (3) prohibiting the discharge of toxic pollutants in toxic amounts. *Id*. This Permit does not attain these goals for the Gulf of Mexico. Water pollution has already caused massive harm to the Gulf and other ecosystems that rely on the Gulf, from Taylor Energy in 2004 to the Deepwater Horizon spill in 2010 and more in recent years. Historic HABs in 2017-2019 and again in 2021 threatened both public and ecosystem health, harming tourism and killing marine life. Massive coral bleaching,[33] "spinning" critically endangered smalltooth sawfish,[34] and other ecosystem disruptions are evidence of an over-stressed marine environment. Given recent events, the region should not be subjected to more pollution. Approval of the modified Permit violates the purpose of the CWA and does not even meet the few lax requirements in the CWA for permits outside of state waters. It violates the ODC provisions of the CWA and fails to protect the marine waters from "unreasonable degradation," as mandated by Congress**.**

A. EPA failed to consider relevant factors under the ODC.

As previously stated, the ODC and associated regulations impose a requirement on EPA to evaluate the impact of discharges. The Fifth Circuit discussed the nature of the analysis required in *Am. Petroleum Institute v. E.P.A.,* 787 F.2d 965, 982 (5th Cir. 1986). There, the court affirmed that EPA must consider "relevant factors," both as part of its own evaluation and as part of its evaluation of the applicant's information. The court noted that it could not affirm the agency's decision-making process if it failed to "consider relevant factors." *Id.* at 982 n.39 (citing *Citizens to Preserve Overton Park v. Volpe,* 401 U.S. 402, 416 (1971)). To consider all

[33] Florida Fish and Wildlife Conservation Commission, *Coral Bleaching*, https://myfwc.com/research/habitat/coral/news-information/bleaching/ (last visited June 11, 2025).
[34] Florida Fish and Wildlife Conservation Commission, *Abnormal Fish Behavior Event 2023-Present*, https://myfwc.com/research/saltwater/health/spinningevent/ (last visited June 11, 2025).

the relevant factors, EPA must provide a reasoned basis for its action, fully explaining its reasoning, analysis, and inquiry on each. *Asarco v. E.P.A.,* 616 F.2d 1153, 1161 (9th Cir. 1980).

Instead of completing the evaluation required by the courts, in September 2020, EPA produced the ODCE which concluded that "no-unreasonable degradation will likely occur as a result of the discharges from this project." ODCE at 48. In only four pages of conclusory statements, EPA discussed the ten factors under 40 C.F.R. § 125.122. ODCE at 45-48. Yet, EPA's four-page discussion of factors fails to evaluate health impacts from the discharge and fails to evaluate all pollutants that will be discharged under the factors, rendering its conclusion clearly erroneous. EPA has not updated this document. In addition to being insufficient, it is also now outdated; it is over five years old and does not include important issues in the Gulf after 2020.

1. EPA must evaluate the threat to human health caused by the project's contribution to HABs.

Pursuant to 40 C.F.R. § 125.122(a)(6), EPA must evaluate "the potential impact of the discharge on human health through direct and indirect pathways." Based on this evaluation, EPA must then determine whether the discharge will cause a threat to human health through exposure to pollutants or through consumption of exposed aquatic organisms. If the discharge causes a threat to human health, by definition, unreasonable degradation has occurred. 40 C.F.R. § 125.121(e)(2) ("Unreasonable degradation of the marine environment means . . . threat to human health through direct exposure to pollutants or through consumption of exposed aquatic organisms."). The regulation does not require an unreasonable or significant threat to human health, only the existence of a threat to human health. If unreasonable degradation would result from the discharge, EPA must deny the permit.

Here, a threat to human health exists due to the project's contribution to HABs.[35]

EPA concedes that uneaten food, fecal matter, and metabolic wastes from the facility will lead to increased phosphorus levels, and "increased phosphorus may, along with nitrogen, contribute to algal blooms and coastal eutrophication." ODCE at 35. Further, the EA acknowledges that both phosphorus and nitrogen from the facility may cause excess growth of phytoplankton and lead to aesthetic and water quality problems. Final EA at 15. The agency notes that such nutrient addition to the Gulf is "of concern" with regards to HABs, but dismisses it because "quantitative direct links to marine aquaculture are lacking in the scientific literature." *Id*. at 15. That is to say, although it recognizes the problem, EPA says it lacks information to adequately assess the problem.

A lack of information does not excuse the agency from properly assessing a discharge under the ODC; to the contrary, the statute states that if EPA is unable to obtain sufficient information on any proposed discharge to make a reasonable judgment as to its environmental effect, "no permit shall be issued." 33 U.S.C. § 1343(c)(2); *see also Am. Petroleum Inst. v. E.P.A*., 787 F.2d 965, 981 (5th Cir. 1986). EPA fails to address the threat to human health of HABs from the discharge in the Gulf as part of its determination of "no unreasonable degradation to the marine environment." EPA mentions HABs as a factor evaluated by NMFS in an LOC issued after the 2022 permit. However, this letter is not part of the EPA documents available to Petitioners for review, and it does not replace ODC requirements. EPA's ODCE also does not discuss the potential impacts on health from the discharge of phosphorus or nitrogen, nor does it address the specific impacts of HABs on human health. EPA's failure to consider and

[35] *See* Exhibit C at 9-10; Exhibit E at 13-16.

evaluate threats to human health from the impacts of the discharge on contributing to HABs is contrary to law, arbitrary and capricious, and clearly erroneous.

In fact, contrary to EPA's assertion, EPA cited the Florida Fish and Wildlife Conservation Commission's (FWC) website in the Draft EA as a source regarding the contributions of nitrogen and phosphorus to HABs. Draft EA at 16, n.3. This website specifically provides information about the numerous human health effects from HABs, including respiratory irritation, skin irritation, and burning eyes.[36] Further, numerous commenters expressed concern and submitted information on the human health impacts of HABs. Response to Significant Comments (2020) at 22-24 and (2025) at 16-19. Accordingly, there is a need for a specific evaluation of the location of the discharge and the impacts on HABs and human health. EPA's failure to analyze such information was clear error.

2. EPA must evaluate the threat to human health caused by the project's contribution to antibiotic resistance.

The agency acknowledges a human health threat in the form of antibiotic resistance due use of antibiotics at the project site. The EA states that "aquaculture practices can potentially lead to elevated levels of antibiotic residuals, antibiotic-resistant bacteria" as a human health impact." Final EA at 15. Yet the ODCE failed to discuss the human health impacts under the mandatory ten factors and failed to provide any location-specific evaluation for the impacts of antibiotic use at this facility.[37]

In promulgating the ODC, the EPA recognizes the importance of the location of the discharge as a factor to be considered in assessing health risks. *See* ODC, 45 Fed. Reg. 65,945 (1980) ("The director must also consider the potential impacts of the discharge on human health

[36] Florida Fish and Wildlife Conservation Commission, *Red Tide FAQ*, https://myfwc.com/research/redtide/faq/.
[37] *See* Exhibit C at 9; Exhibit D at 12.

either directly as through physical contact or indirectly through the food chain. These factors should be addressed when considering the location of the discharge and the type and volume of the discharger's effluent."). In this case, regarding concerns over antibiotic resistance, EPA cites only studies from other locations around the world with different environmental conditions. ODCE at 40-43. EPA also again admits that its evaluation is not complete as "technical details require further study." ODCE at 42. EPA's failure to evaluate factors and conditions specific to the location of the project as part of an analysis of the health threat was arbitrary and capricious and led to an erroneous conclusion.

B. EPA failed to consider all discharged pollutants under the ODC.

EPA's analysis of the other required factors in the ODC is similarly flawed and incomplete.[38] EPA agreed that the CWA broadly defines "pollutants" and admitted that the scope of the original permit covers "the indirect discharges from marine finfish aquaculture operations," EPA, Final Response to Significant Comments–Velella Epsilon Offshore Aquaculture Project 19 (Sept. 30, 2020) (Final Agency Response to Significant Comments). The ODCE does not evaluate new aspects of the modified project including: waste production from a different species (red drum), different fish food, amount of pollution discharge that the new cage allows, and leaching from concrete, buoys, and other new materials. *See* Final Modification Justification at 5. Each of these omissions is a legal error and violates the ODC of the CWA.

1. EPA failed to evaluate pathogens under the modified Permit.

Regarding pathogens, Petitioners commented that EPA must assess the project's discharged pathogens prior to making a determination of no unreasonable degradation.[39] In the

[38] *See* Exhibit C at 9; Exhibit D at 12.
[39] Exhibit C at 9; Exhibit D at 12.

modified Permit, EPA instructs that the "permittee shall create and implement health management procedures to prevent and minimize the indirect transfer or discharge of aquaculture pathogens," Final Modified Permit at 14, however, the agency failed to explain *how* the conditions attached to the permit will prevent the spread of pathogens. EPA thus failed to sufficiently consider pathogens.

2. EPA failed to include escaped live and dead fish in the ODCE.

EPA also failed to assess escaped live and dead fish under the ODC, but pointed to the EA as its assessment, which already lacks analysis by leaning on unsupported mitigation measures. Petitioners commented that escaped live fish increase competition with wild stocks for food, habitat, and spawning areas.[40] 40 C.F.R. § 125.122(a)(4) even requires EPA to evaluate "the importance of the receiving water area to the surrounding biological community, including the presence of spawning sites, nursery/forage areas, migratory pathways, or areas necessary for other life functions or critical stages in the life cycle of an organism." Without assessing this discharge under this factor and the nine other mandatory factors, the agency cannot meaningfully determine that the discharge will not unreasonably degrade the marine environment. Failing to mention impacts from dead fish is also problematic. EPA's failures here were clear legal error.

C. The discharge, as permitted, will result in unreasonable degradation in violation of federal law.

EPA did not evaluate the discharges as required by the ODC, and on that basis alone, the modified Permit should not have been issued. Without considering the impacts of all discharges, EPA cannot properly determine the potential for the pollutants to bioaccumulate, the potential effects of the discharges on species listed under ESA, the potential impacts on essential habitat,

[40] Exhibit C at 3; Exhibit D at 4.

the "potential impacts on human health through direct and indirect pathways" from the authorized discharges, the impacts of the discharges on "[m]arine water quality criteria," or any of the other relevant factors. 40 C.F.R. § 125.122(a). EPA's ODCE is therefore arbitrary and capricious, rendering the modified Permit unlawful.

Significantly as well, the modified Permit violates the law by allowing numerous discharges that will cause "unreasonable degradation." The ODC specifically prohibits a discharge which will "threaten human health through direct exposure to pollutants or through consumption of exposed aquatic organisms." 40 C.F.R. §§ 125.121(e), 125.123(b). This discharge will contribute to HABs as well as to antibiotic resistance, both of which, by definition, constitute "unreasonable degradation." *See* 40 C.F.R. § 125.121(e)(3). EPA therefore must deny the modified Permit or include conditions with the modified Permit to prevent the degradation. In failing to do so, EPA acted arbitrarily and capriciously, in violation of the law.

D. EPA failed to consider local environmental conditions and left out a mandatory revocation/modification clause from the NPDES permit.

EPA is required to impose conditions provided in 40 C.F.R. §125.123(d)(1)-(4) as part of any permit issued under the ODC. EPA must impose conditions that it deems necessary "because of local environmental conditions." 40 C.F.R. § 125.123(d)(3). Yet in this permit, EPA failed to impose location-specific conditions designed to address the impact of this discharge on swimming, fishing, and other factors listed in 40 C.F.R § 125.122(1)-(10). In addition, the agency is required to include, as a specific permit term, a clause required by 40 C.F.R. § 125.123(d)(4) ("All permits which authorize the discharge of pollutants pursuant to paragraph (c) of this section shall . . . contain the following clause: In addition to any other grounds specified herein, this permit shall be modified or revoked at any time if, on the basis of any new data, the director determines that continued discharges may cause unreasonable degradation of the marine

environment."). EPA expressly stated that it had incomplete and inadequate information. Per force, this permit is being issued pursuant to 40 C.F.R. § 125.123(c) and must comply with Section 125.123(d). EPA's failure to consider local conditions and to include the required clause is arbitrary and capricious. These failures are indicative of EPA's overall lack of consideration of the ODC in this case.

II. EPA's inadequate analysis of the Permit application violates NEPA.

NEPA, 42 U.S.C. § 4321 et seq., serves as "our basic national charter for protection of the environment," by requiring federal agencies to assess the environmental and socioeconomic impacts of projects to ensure that their decisions are fully informed. NEPA requires federal agencies to prepare an EIS for all "major Federal actions significantly affecting the quality of the human environment." NEPA requires agencies to assess reasonable alternatives and take a "hard look" at the direct, indirect, and cumulative environmental impacts of a proposed action. 40 C.F.R. §§ 1502.16, 1508.8, 1508.25(c). To satisfy the "hard look" standard, the agency must provide a "scientific and analytic basis" for comparing the alternatives, meaning the agency must provide "some quantified or detailed information." 40 C.F.R. § 1502.16. "General statements about 'possible' effects and 'some risk' do not constitute a 'hard look' absent a justification regarding why more definitive information could not be provided." *Neighbors of Cuddy Mountain v. U.S. Forest Serv*., 137 F.3d 1372, 1379 (9th Cir. 1998).

A. EPA failed to take a hard look at the direct, indirect, and cumulative impacts of the project.

EPA violated NEPA by failing to take a hard look at the direct, indirect, and cumulative impacts of the project in the EA. When an agency decides not to prepare an EIS, it must put forth a "convincing statement of reasons" to explain its decision and demonstrate it was based on a reasoned consideration of the relevant factors. *Ocean Advocates v. U.S. Army Corps of Eng'rs*,

402 F.3d 846, 864 (9th Cir. 2005) (quoting Blue Mountains, 161 F.3d at 1212); *Nat'l Ass'n of Home Builders v. Norton*, 340 F.3d 835, 846 (9th Cir. 2003). Agencies cannot avoid meeting their NEPA obligations "by making conclusory assertions that an activity will have only an insignificant impact on the environment." *Ocean Advocates* at 864.

In comments, Petitioners explained that EPA needed to assess all direct, indirect, and cumulative impacts of the project for its full term and in light of other projects in the Gulf.[41] In their comments, Petitioners pointed to a number of direct, indirect, and cumulative impacts the agency needed to consider, including an assessment of the sourcing of fish feed for this project, an assessment of impacts on species for the full term of the permit, assessments of this project in relation to future aquaculture projects actively being planned in the Gulf, and assessment of additional impacts such as fish escapes, pathogens and parasites, and antibiotic use.[42] None of this information was included in the EA. Even if any of this is in the LOC, that does not replace requirements for the EA.

Instead, EPA issued a FONSI, which is flawed for numerous reasons, including but not limited to: the agency's assessment of cumulative impacts is outdated in light of the Gulf's designation as an AOA, NOAA's plans for additional facilities in the Gulf, HABs, identification of a new endangered species in the Gulf - the Rice's Whale, "spinning" behavior of critically endangered smalltooth sawfish often resulting in death, "inundation" events of sargassum, and 11 hurricanes since the EA was completed. Second, the EA fails to cover the full term of the Permit or a subsequent permit, which could be renewed as soon as the pilot project ends without

[41] Exhibit C at 7-9; Exhibit D at 7-8.
[42] Exhibit C at 3-5; Exhibit D at 3-7.

additional environmental review. And third, the agency fails to consider numerous impacts of the project.[43] These shortcomings render the FONSI arbitrary and capricious and contrary to law.

B. EPA failed to prepare an EA that sufficiently takes into account the cumulative impacts of the project.

The cumulative impacts section of the EA is legally insufficient, factually incorrect and now outdated. In determining whether a proposed federal action will significantly impact the environment, the agency must consider "[w]hether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment." 40 C.F.R. § 1508.27(b)(7). NEPA's implementing regulations define cumulative impact as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions . . . Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." *Or. Natural Res. Council v. United States BLM*, 470F.3d 818 (9th Cir. 2006); 40 C.F.R. § 1508.7. "Moreover, in considering cumulative impact, an agency must provide some quantified or detailed information; . . . general statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definite information could not be provided." *Ocean Advocates v. United States Army Corps of Eng'rs*, 402F.3d 846, 868 (9th Cir. 2004) (quoting *Kern v. United States*,284 F.3d 1062, 1075 (9th Cir. 2002); *Muckleshoot Indian Tribe v. United States Forest Serv*., 177 F.3d 800, 810 (9th Cir. 1999)).

[43] Exhibit C at 7-9; Exhibit D at 8-12.

1. The cumulative impacts analysis is outdated and excludes cumulative impacts of the project in relation to other planned Gulf offshore aquaculture projects.

The EA is insufficient as it assesses only cumulative impacts of the VE facility and Manna Fish Farms, another facility proposed in the Northern Gulf. Final EA at 51. However, the VE facility is funded by Florida Sea Grant, which specifically plans to operate the VE facility "while concurrently pursuing an application for a commercial aquaculture permit" and using VE to "document the process for future applicants to follow."[44] These plans were in place in 2017 when Florida Sea Grant funded VE; thus, they existed during the early stages of the permitting process.[45] Ocean Era's CEO, Neil Sims, confirmed in a May 2020 email that its plan to "pioneer the permitting process for a commercial offshore fish farm" still exists.[46] Further, on August 20, 2020, NOAA announced the designation of federal waters in the Gulf of Mexico as an AOA, with the intention of announcing more by 2025.[47] NOAA made AOA designations in response to a non-legislative mandate contained in the May 7, 2020 EO, and on November 15, 2021, NOAA published *An AOA Atlas for the Gulf of Mexico*, considering certain sites where offshore aquaculture could occur in the Gulf.[48] NOAA also hosted a series of public listening sessions and public comment on their related Draft Programmatic EIS regarding the Gulf AOAs throughout 2024. NOAA has an online strategic plan for 2023-2028 to support creation of a new offshore

[44] NOAA Sea Grant, *Sea Grant Announces $9.3 Million for Aquaculture Research and Industry Support* (Oct. 31, 2017), https://seagrant.noaa.gov/News/Article/ArtMID/1660/ArticleID/1656/Sea-Grant-announces-93-million-for-aquaculture-research-and-industry-support (last visited June 13, 2025).
[45] *Id*.
[46] Exhibit G at 2.
[47] NOAA Fisheries, Press Release, *NOAA Announces Regions for First Two Aquaculture Opportunity Areas under Executive Order on Seafood* (Aug. 20, 2020), *available at* https://www.fisheries.noaa.gov/feature-story/noaa-announces-regions-first-two-aquaculture-opportunity-areas-under-executive-order.
[48] Kenneth L. Riley, et al., *An Aquaculture Opportunity Atlas for the Gulf of Mexico*, NOAA Technical Memorandum NOS NCCOS 299 (2021), *available at* https://repository.library.noaa.gov/view/noaa/33304.

aquaculture industry[49]. Given these plans and VE's purpose to serve as a pioneer in permitting additional facilities, the agency's reasoning for its failure to consider future projects is unsupported. The EA admits "it is reasonably foreseeable that the marine aquaculture industry may expand in the Gulf," Final EA at 51, yet future projects are too "speculative" to warrant consideration. *Id*. This conclusion entirely overlooks Florida Sea Grant's, Ocean Era's, and NOAA's explicit plans beyond VE. Thus, the agency's failure to consider cumulative impacts of this project in relation to the numerous future projects planned for the Gulf renders the EA arbitrary and capricious and the FONSI unlawful. EPA's failure to supplement its analysis with the reasonably foreseeable, indeed expected, expansion of marine aquaculture industry in the Gulf is clearly erroneous.

2. The EPA violated NEPA by limiting its environmental review and failing to examine the significant effects of the project and other long-term effects.

In addition to failing to take into account the cumulative impacts of this new industry, the EPA violated NEPA and implementing regulations by illegally limiting the temporal scope of its analysis. The EPA refused to examine the effects of this project for its original full five-year permit term, in defiance of the mandate to consider "[b]oth short- and long-term effects" of their permit. 40 C.F.R. § 1508.27(a). The CEQ regulations unambiguously state that significance cannot be avoided by terming an action temporary or by breaking it down into small component parts. 40 C.F.R. § 1508.27(b)(7). This remains a problem with the modified Permit, as it allows a two-year window during which the project may be operational and opportunity for renewal.

In defiance of these NEPA implementing regulations, EPA limited its analysis, indicating the effects were short term and thus insignificant. EPA failed to sufficiently analyze cumulative

[49]NOAA, *NOAA Aquaculture Strategic Plan 2023-2028* (updated April 2025), *available at* https://s3.amazonaws.com/media.fisheries.noaa.gov/2025-04/Strategic-Plan-2025_Final.pdf.

impacts of the proposed facility during the full duration of the issued permits by using the shorter time of fish grow-out, i.e. one year, to excuse sufficient analysis of cumulative impacts. NEPA defines cumulative impacts as "the impact of the environment which results from the incremental impacts of the action when added to other past, present and reasonably foreseeable future actions." 40 C.F.R. § 1508.7. In its draft EA, EPA itself admitted that an adequate cumulative impacts analysis must, at a minimum, cover the entire life of the proposed permit. Draft EA at 48. This is again an issue with the new modified Permit as it is issued for a two year duration, with the rearing of fish estimated during a 12-month window within the two years. EPA failed to sufficiently analyze cumulative impacts such as interference with migration, entanglements, and ocean noise disturbance over the full potential duration of the permit in the final EA.

An analysis of the full Permit duration is essential for migration because it is uncertain which 12 months during the two-year Permit timeframe the project will be in operation. Certain times of year may result in more migration impacts. The EA acknowledges that giant manta rays will likely encounter the facility during their migrations, but fails to analyze this impact because EPA claims that the project will not affect them over a short period. Final EA at 36. This dismissal does not address how or whether the project will unduly affect their migration at any given time during the full permit term or subsequent renewals. Similarly, the EA states that sea turtles are "highly migratory" throughout the Gulf, but does not address how or whether the project will interfere with their migration during the potential times of operation during the span of this Permit. Final EA at 22.

Additionally, the EA fails to provide a significant analysis of the risks of entanglement and ocean noise disturbance, dismissing these impacts due to the short period, Final EA at 41-42, despite the longer Permit period. Marine mammals, seabirds, and other ESA-listed species such

as sea turtles, whales, and the giant manta ray will be attracted to the operation as a food source and could become entangled, Final EA at 42, especially now with increased, longer lines, anchors, buoys and gear. *See* Modified Justification at 5. The EA also acknowledges that underwater noise disturbance could affect these species. Final EA at 41. However, the EA dismisses these impacts as unsubstantial over a shorter period. *Id*.

Thus the agency's cumulative impacts analysis is arbitrary and capricious because EPA limits its analysis to the "pilot-scale" proposal as well as only one other aquaculture project. Final EA at 49. At a minimum, to satisfy NEPA's hard look requirement, EPA's analysis must examine the full permit term and the reasonably foreseeable expansion of the current proposal beyond its pilot stage. The limitations in review are illegal under NEPA's implementing regulations and debilitating to the environmental analysis. *See* 40 C.F.R. § 1508.27.

3. The agency failed to discuss cumulative project impacts on the fish feed industry in the Gulf.

Further, the farming of finfish at this facility, and eventually on an industrial scale, will require a massive amount of fish feed, which will have cumulative impacts on the environment and public health.[50] Most industrially farmed finfish, such as the fish that will be raised at the facility, are carnivorous and need protein in their feed.[51] This often consists of lower-trophic level "forage fish," which are at risk of collapse.[52] Specifically in the Gulf of Mexico, there is a long history of concern about the impacts of the menhaden fishery on the aquatic food web. It is primarily a "reduction" fishery, meaning the fish are pressed into fishmeal and fish oil for use in

[50] *See* Exhibit C at 5; Exhibit D at 5; *see also* Changing Markets Foundation, *Until the Seas Run Dry* (2019), http://changingmarkets.org/wp-content/uploads/2019/04/REPORT-WEB-UNTILL-THE-SEAS-DRY.pdf (concluding that using wild fish to feed farmed fish "raises concerns of overfishing, poor animal welfare and disruption of aquatic food webs").
[51] *Id.*
[52] *Id.*

various products, like pharmaceuticals and notably pet and fish feeds.[53] Locally called "pogies", these fish are at the base of the food chain and are important prey for a wide range of marine life, including marine mammals such as dolphins, sea birds, and predatory fish, which will be harmed by their depletion.[54] Further development of industrial aquaculture will only increase the demand for pogies and contribute to these impacts on Gulf species and the ecosystem in its entirety. Petitioner Recirculating Farms commented on concerns with menhaden.[55]

C. EPA unlawfully relied on mitigation measures without explanation, rather than assessing the direct impacts of the project.

EPA's reliance on unexplained mitigation measures renders the discussion of direct and indirect impacts insufficient and its FONSI clearly erroneous. While agencies can use terms in a permit to prevent harm from an impact, the "feasibility of mitigation measures is not self-evident," and the record still needs to support the conclusion that the measures attached to the permit will actually have the intended effect. *See O'Reilly v. U.S. Army Corps of Engineers*, 477 F.3d 225, 234 (5th Cir. 2007) (holding that the agency did not provide a rational basis for determining that the USACE has adequately complied with NEPA because "the EA provides only cursory detail as to what those measures are and how they serve to reduce those impacts to a less-than-significant level."). EPA's inclusion in the modified Permit of a condition prohibiting the intentional or negligent release of farmed fish is completely ineffective to mitigate these impacts from fish releases. It has been established that releases will occur, regardless.[56] EPA claims that permit conditions will render significant impacts from fish escapes, pathogen spread,

[53] Monterey Bay Aquarium, *Atlantic Menhaden, Gulf Menhaden* 8 (June 4, 2015), *available at* https://sfw-images.s3-accelerate.amazonaws.com/reports/M/MBA_SeafoodWatch_Menhaden_Report.pdf.
[54] *Id*. at 50.
[55] Exhibit D at 5.
[56] *See* Exhibit A at 2-4.

and antibiotic use insignificant without supporting these conclusions with analysis or explanation. Such conclusions are thus arbitrary and capricious and contrary to law.

D. EPA failed to take a hard look at other potential impacts.

The final EA fails to take a hard look at foreseeable impacts of adverse weather on this project. Even a single extreme weather event could have a devastating effect on marine ecosystems surrounding the operation through damaging the pens and infrastructure–even if submersible–and allowing the release of farmed fish and debris into surrounding waters.[57] EPA has information that strong storms will eventually affect facilities, eliminating the effectiveness of some of the habitat mitigation efforts listed in the permit, but failed to consider or analyze that information in the EA or Final Modification Justification. Instead, the agency again relied on indistinct mitigation measures without any support. Final Agency Response to Significant Comments at 32 (2020) and (2025) at 17.

Additionally, the EA acknowledges that the proposed site location is home to numerous sensitive marine species. A number of these species receive federal protection under the ESA and the MMPA. Final EA at 21-25.

The EA admits that the giant manta ray "may encounter the facility given its migratory patterns," *id. at 48*, and also recognizes that sea turtles may be impacted by the proposed operations, *id.* at 50, but stops short of taking a hard look at these likely impacts.

E. EPA failed to sufficiently assess reasonable alternatives.

The alternatives are the "heart" of the NEPA analysis, and they are required in an EA, including a "no action" alternative and other reasonable alternatives. 40 C.F.R. § 1508.25(b).

[57] Exhibit C at 8; Exhibit D at 9; Exhibit E at 16-17.

EPA assessed only two alternatives: the no action alternative and issuance of a NPDES permit and Section 10 of the Rivers and Harbors Act authorization. Final EA at 11.

This discussion of alternatives left out all discussion of onshore alternatives that can increase domestic seafood production while avoiding and reducing environmental, public health, and socio-economic impacts.[58] The complete failure to consider less-damaging, viable alternatives was arbitrary and capricious.

F. The significant impacts of the proposed project require the preparation of an EIS.

From all these insufficient analyses emerged the EPA's "finding of no significant impact." That finding violates NEPA, which requires federal agencies to prepare an EIS for any project which will or may "significantly affect[] the quality of the human environment," 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1508.3, and the "threshold for requiring preparation of an EIS is 'relatively low.'" *Oregon Natural Desert Ass'n v. Singleton*, 47 F. Supp. 2d 1182, 1190 (D. Or. 1998). NEPA's intensity factors weigh in favor of significance, as the effects of the first offshore aquaculture facility are "highly uncertain or involve unique or unknown risks." 40 CFR § 1508.27 (b)(5). As stated by Florida Sea Grant and the CEO of Ocean Era, Inc., this project will also "establish a precedent for future actions" and is thus significant. *Id.*; *see also* Exhibit G at 2. EPA is required to prepare a full EIS. The agency's failure to do so is arbitrary, capricious, and contrary to law, and its FONSI is erroneous.

[58] *See* Exhibit C at 7; Exhibit D at 8.

III. The Endangered Species Act requires EPA to conduct formal consultations and prepare a BiOp prior to issuing the permit.

A. The BE describes twenty species that this facility will impact.

More than 20 federally protected species, listed as either threatened or endangered, are located in or near the action area. Final BE at 9. The facility will be placed in a migration route for several listed species, posing threats from vessel strikes and entanglement. *Id*. at 17-20. Further, the location will impact these species' habitat through water quality impacts and other stressors and disturbances such as light pollution, fish escapes, and noise.[59] Notably, a new endangered species, one of the "rarest" whales in the world, according to NOAA Fisheries, was identified in 2021, the Rice's whale; its range is the northeastern Gulf of Mexico and Gulf coast of Florida.[60] This species was not considered in the BE. Further the "spinning" behavior often leading to death since 2023 of the critically endangered smalltooth sawfish is also absent in the outdated BE.

The BE describes sea turtles as "highly migratory," Final BE at 14, and concedes that "ESA-listed sea turtles may be attracted to aquaculture facilities as potential sources of food, shelter, and rest," *id*. at 24, exposing them to entanglement and other disturbance. The agency notes that the loggerhead sea turtle is a slow growing species "vulnerable to various threats including alterations to beaches, vessel strikes, and bycatch in fishing nets." *Id*. at 15.

The agency also acknowledges the risk of entanglement and vessel strikes for whales, *id*. at 23, and the risk of entanglement for the smalltooth sawfish. *Id*. at 22. This area was identified as a Biologically Important Area for the Bryde's whale, meaning this area is essential for

[59] Exhibit C at 8-9, 13; Exhibit D at 10-11, 15-16.
[60] NOAA Fisheries, *Species Directory: Rice's Whale*, https://www.fisheries.noaa.gov/species/rices-whale (last visited June 11, 2025).

reproduction, feeding, and migration of this species. *Id*. at 13. The agency also concedes that the giant manta ray may encounter the facility based on its migration route. *Id*. at 22

B. EPA's BE fails to adequately assess threats to listed species.

EPA unlawfully failed to sufficiently evaluate threats to species in its BE and has reached the flawed conclusion that the project's threats are "highly unlikely to occur or extremely minor in severity" and that the proposed project is not likely to adversely affect listed species and critical habitat or designated critical habitat. As detailed above and in Petitioners' comments, the expansion of finfish aquaculture systems into the open ocean generally, and the Gulf in particular, presents serious threats to these species, including live and dead fish escapes; discharge of industrial wastewater, pharmaceuticals, heavy metals, and excess nutrients; nets, lines and entanglement; and the spread of parasites and disease.[61] Further, it is readily apparent based on Florida Sea Grant's plans and the CEO's emails,[62] that the construction and operation of this pilot project will not be the only one in the Gulf. Cumulatively, these numerous planned aquaculture facilities could result in serious adverse effects on listed species and designated critical habitat that the agency has left unassessed.

The agency's BE is insufficient in various aspects. First, EPA failed to consider several impacts on endangered species, thus rendering the BE arbitrary and capricious. A BE is arbitrary and capricious when an agency "entirely failed to consider an important aspect of the problem or to consider the relevant factors and articulate a rational connection between the facts found and the choice made." *Native Ecosystems Council v. Dombeck*, 304 F.3d 886, 901 (9th Cir. 2002). Here, the EPA failed to consider the effects on listed species of releasing feed into the water as a

[61] *See* Exhibit C at 9-13; Exhibit D at 12-15.
[62] Exhibit G.

food source, as well as potential disturbances caused by light pollution. Additionally, while EPA acknowledges genetic impacts to wild fish from cultured fish and the potential spread of disease from cultured to wild fish, EPA fails to even mention the impact of escaped cultured fish on endangered species in the BE.

The BE also fails to assess impacts to species in light of the Gulf's status as an AOA and Ocean Era's ability to renew its NPDES Permit. Instead, the BE leaves out meaningful assessment of impacts on various matters, like migration, insisting that the short duration of the project will have no impact. Finally, the BE fails to consider the new endangered species, identified in 2021 after the BE was written-Rice's whale, and impacts to the critically endangered smalltooth sawfish that has been experiencing "spinning" episodes often resulting in death since 2023. These shortcomings render the BE arbitrary and capricious and contrary to law.

1. The BE fails to cover all impacts to listed species from the project.

Petitioners commented on impacts to species erroneously left out of the final BE. First, Petitioners expressed concern that the release of excess feed into the area could attract endangered species, increasing the risk of entanglements and vessel strikes.[63] As noted, the BE concedes that numerous species are at risk of entanglement, including whales, sea turtles, and fish species. This is even more of a risk in the modified Permit given the additional anchors and dramatic increase in footage of lines. The agency failed to evaluate excess feed as a food source for listed species in the final BE, and instead responded that the question of whether the proposed facility acts or does not act as a fish aggregating device (FAD), which is an object that attracts fish, is outside the scope of the NPDES and USACE's permitting actions. Final Agency

[63] Exhibit C at 13; Exhibit D at 15-16.

Response to Significant Comments (2020) at 35 and (2025) at 17-18. Supposedly, the LOC also discusses this matter, but it was not available to the Petitioners and does not replace the requirement to evaluate this in the BE. To the contrary, ESA regulations require that "[a] biological assessment *shall* evaluate the potential effects of the action on listed and proposed species," 50 C.F.R. § 402.12 (2001) (emphasis added), and the scope of the "action area" includes "all areas to be affected directly or indirectly by the Federal Action and not merely the immediate area involved in the action." 50 C.F.R. § 402.02 (2001). The release of feed as a food source is thus within the scope because it directly affects the area surrounding the proposed project. Failure to assess this impact is arbitrary and capricious.

The agency similarly side-stepped its duty to assess the impacts of escaped fish on listed species. Final Agency Response to Significant Comments (2020) at 17, and (2025) 38. Nowhere in the Permit does the EPA *require* VE to source from native fish species, though it mentions this in the Memo. Final Modification Justification at Enclosure 1. Beyond this mitigation measure, the agency's only explanation for its failure to assess this impact is that, because Almaco jack (now red drum) are not endangered, no evaluation of genetic impacts to Almaco jack (now red drum) is required. *Id*. However, Petitioners commented that the agency needs to assess the impact on listed species, not on Almaco jack or red drum.[64] The agency acknowledged the presence of numerous fish species in the proposed area, yet failed to mention or evaluate competition or interactions from escaped fish in its BE. This is arbitrary and capricious.

[64] Exhibit C at 10-12; Exhibit D at 13-15.

2. The BE does not cover a sufficient span of time.

The agency acknowledged other potential impacts to listed species throughout the BE, yet failed to evaluate those impacts due to the span of the project.[65] The giant manta ray, for example, may encounter the facility, but "disturbance is not expected because the facility is small and will have a short deployment period." Final BE at 20. Further, the agency refrains from evaluating the risk of entanglement and disturbance to marine mammals and sea turtles due to the project's length. *Id*. at 21-22. Yet Ocean Era may renew its permit without further assessment of risks to species, s*ee* 33 U.S.C. §1371(c)(1), and this facility is intended to be the first of many. A longer time span needs to be assessed to ensure that listed species remain unharmed.

C. EPA must complete formal consultation.

Despite the project's adverse effects to listed species and critical habitats, EPA did not conduct a formal Section 7 consultation on the project. Nor did the agency ever evaluate, in any sort of Section 7 process, the indirect or cumulative impacts to listed species that will occur considering this facility will be one of many in the Gulf AOA. *See* 50 C.F.R. § 402.02 (defining "indirect effect" as one that is (1) "caused by the proposed action," (2) occurs later in time than the action, and (3) is reasonably certain to occur"); *id.* § 402.14(g) (requiring a BiOp to evaluate the "effects of the action," which include the action's "indirect effects"); *see also San Luis & Delta-Mendota Water Auth. v. Locke*, 776 F.3d 971, 1009 (9th Cir. 2014).

In short, EPA has failed to undertake the legally mandated process for formally and fully analyzing and addressing impacts to listed species and their habitat, notably the newly identified species, the Rice's whale, and "spinning" smalltooth sawfish events since 2023 often

[65] Exhibit C at 8; Exhibit D at 10-11.

resulting in death, although it is apparent that marine finfish aquaculture indisputably harms myriad such species in various ways.

D. EPA must complete a BiOp.

As set forth above, EPA has not provided sufficient data to support its conclusions and made no attempt to quantify or analyze the potential harm from several significant impacts to the Listed Species. The threshold for triggering formal consultation is very low, and a BiOp that meaningfully accounts for and addresses the action's adverse impacts on each listed species is mandated unless it can be clearly established that a proposed action is not likely to adversely affect a particular species.[66] EPA has not met this burden.

IV. The MMPA requires EPA to obtain proper authorization from NMFS before issuing the Permit.

Marine mammals in the project area are protected by the MMPA.[67] 16 U.S.C. §§ 1361-1407. This statute prohibits the "take" of marine mammals, 16 U.S.C. § 1372, and broadly defines "take" to include "harassment," which includes any "pursuit, torment, or annoyance" of marine mammals that "has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding or sheltering." *Id*. § 1362(13), (18)(A)(ii). The MMPA allows for the incidental taking of small numbers of marine mammals with authorization from NMFS. *See id*. § 1371(a)(5).

A. "Takes" of marine mammals will occur as a result of the VE facility.

Due to the inevitable "takes" of marine mammals, EPA must obtain proper authorization from NMFS before authorizing this permit. EPA acknowledges that twenty-two marine mammal

[66] Exhibit C at 11-12; Exhibit D at 14.
[67] *See* Exhibit E at 5-9.

species may occur in the Gulf, including one sirenian species (a manatee) and twenty-one cetacean species (dolphins and whales). ODCE at 21. These species will be subjected to potential vessel strikes, entanglement, and increased ocean noise. EA at 39-40; *see also* Exhibit C at 13; Exhibit D at 15-16. EPA must complete an accurate assessment of risks posed by this project to marine mammals, including the newly recognized Rice's whale identified in 2021, after the finalization of the supporting documents for this permit and obtain proper authorization from NMFS.

V. Under the Ocean Dumping Act, should the facility be abandoned or destroyed, it may become illegal wreck or discarded equipment waste.

The Ocean Dumping Act regulates the dumping of material beyond the territorial sea and prevents or strictly limits dumping material that would "adversely affect human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities." 33 U.S.C. §1401(b). The Ocean Era project admits it will include: eight anchors, four concrete nodes, 3,306 feet of mooring/chain line, 1,128 feet of bridle lines, 787 feet of grid line, 656 feet of anchor to buoy lines, and a large fish cage able to contain at least 20,00 fish/55,000 lbs of fish. Final Modification Justification at 5.

Fish farming facilities globally have seen abandonment, breakage due to human error or marine wildlife, and violent weather that impacted the integrity and stability of the structures, materials, tools, and equipment. A white paper from the Aquaculture Stewardship Council published in November 2019[68] determined that extreme weather is currently one of the major causes of plastic 'ghost gear' from fish farms entering oceans and warns that the increasing

[68] Aquaculture Stewardship Council, *Marine Litter and Aquaculture Gear* (November 2019), https://www.asc-aqua.org/wp-content/uploads/2019/11/ASC_Marine-Litter-and-Aquaculture-Gear-November-2019.pdf (last visited June 11, 2025).

"frequency and severity" of tropical storms due to climate change could exacerbate the problem.[69] Two main sources of plastic used in aquaculture account for more than 35 different plastic materials which end up in the environment - gear (nets, cage components, buoys, etc.) and tools and equipment (bottles, bags, trays, buckets, and the like).[70] These impacts should be considered prior to issuance of an NPDES permit.

In the event that the Ocean Era operation fails and the equipment is abandoned, damaged and/or breaks free, the various components could be considered "dumping," 33 U.S.C. §1402(f) of "material," 3 U.S.C. §1402(c), under the Ocean Dumping Act, when they are no longer part of the permitted project, being used for the purpose permitted.

These materials would adversely affect human health, welfare, and amenities by polluting the marine environment. Harm to human health can occur when people may encounter the debris on beaches and in the water, being cut or entangled. Also, debris in waterways can introduce harmful chemicals and pathogens as they degrade, or grow or collect organisms, leading to impaired water quality and potential health risks. Microplastics and associated chemicals can accumulate in fish and shellfish, potentially entering the human food chain. raising concerns about inflammation, hormonal disruption, and links to cancer. Studies suggest that plastic debris can concentrate and transport chemical pollutants, making them available for consumption by marine organisms and potentially humans who eat contaminated seafood.

Marine debris negatively impacts human welfare by harming local aesthetics and important revenue-generating activities like tourism and fishing. Littered beaches deter tourists,

---

[69] Aquaculture Stewardship Council, *Extreme Weather a Major Cause of Ghost Gear from Aquaculture According to New ASC White Paper* (Nov. 28, 2019), https://asc-aqua.org/news/extreme-weather-a-major-cause-of-ghost-gear-from-aquaculture-according-to-new-asc-white-paper/ (last visited June 11, 2025).

[70] Aquaculture Stewardship Council, *ASC Gear Management Final Powerpoint,* https://www.asc-aqua.org/wp-content/uploads/2019/08/ASC_Gear-management_FINAL-WHITE-POWER-POINT.pdf (last visited June 11, 2025).

leading to reduced revenue for coastal communities. Fishing gear entanglement with debris can damage boats and reduce fishing yields. The presence of marine debris can degrade the overall quality of life and amenities in coastal communities by making beaches and waterways unsightly, dangerous, and less enjoyable for recreation, leisure activities, and enjoying nature.

Debris from the facility would also affect the marine environment and ecological systems by harming wildlife through entanglement and ingestion, damaging and polluting habitats, and transporting invasive species.

Finally, debris from the project could affect economic potential, as discussed above, through reduced tourism revenue and damaged fishing industries, and also increased costs for cleanup and debris removal. All of this would be violations of the Ocean Dumping Act. Petitioners raised concerns about debris and pollution from the project in their comments.[71] The EPA failed to consider violations of the Ocean Dumping Act when issuing the Permit.

VI. The EA, BE, and ODCE are outdated and not a sufficient basis for issuance of the modified Permit.

The EA published September 2020, nearly five years ago, and BE and ODCE were prepared in support of a five-year permit that would have expired September 29, 2025, just four months from now, had it not been reissued in 2022. The EA, BE, and ODCE contain outdated and irrelevant information to serve as a basis for the new modified Permit with vastly different specifications. The original EA contemplated a much smaller footprint (less than half), with a different species, mooring system, cage, equipment, and fish feed. Final Modification Justification at page 5. This is a different project, to be located in an area greatly changed over time, thus the EA and ODCE are no longer relevant to the new project and modified Permit.

[71] Exhibit C at 9, 12; Exhibit E at 16-17.

Since the EA and ODCE, the Gulf has changed dramatically, with NOAA identifying 11 significant hurricanes,[72] one of which, Ian (2022), was a Category 4 that went over the location of this project. EPA itself notes elsewhere that the frequency and intensity of storms has been increasing.[73] Current and future impacts from these storms, nor cumulative impacts of these and future storms, were considered with respect to the modified Permit.

Additionally, in the past five years, Florida and the Gulf experienced massive coral bleaching,[74] HABs,[75] inundation by giant carpets of sargassum,[76] and perhaps most notably, "spinning" episodes of critically endangered smalltooth sawfish often resulting in their death,[77] as well as identification of a new endangered Gulf whale species, the Rice Whale, in 2021, through studying the carcass of a whale that stranded and died in the Florida Everglades,[78] just south of where this project will be located. These matters were briefly addressed (in some instances just mentioned) in EPA responses to comments, however the response was simply that they were considered in various documents (EA, ODCE, BE) or dismissed as minimal or insignificant; these did not meet legal requirements, as detailed above. Response to Significant Comments at 22-24, 37, 38-39, (2020) and (2025) 14, 16-19 pointing to EPAs 2020 limited response.

---

[72] National Ocean Service, *Archive of Significant Tropical Storms and Hurricanes*, https://oceanservice.noaa.gov/hazards/hurricanes/hurricane-archive.html (last visited June 10, 2025).
[73] EPA, *Climate Change Indicators: Tropical Cyclone Activity* (updated June 2024), https://www.epa.gov/climate-indicators/climate-change-indicators-tropical-cyclone-activity (last visited June 10, 2025).
[74] Florida Fish and Wildlife Conservation Commission, *Coral Bleaching*, https://myfwc.com/research/habitat/coral/news-information/bleaching/ (last visited June 11, 2025)
[75] Tom Bayles, *Swath of Red Tide Forms Along SW Florida Coast From Tampa Bay to Key West*, WGCU, Feb. 2, 2025, https://www.wgcu.org/section/environment/2025-02-02/swath-of-red-tide-forms-along-southwest-florida-coast-from-tampa-bay-to-key-west.
[76] Caricoos, Sargassum Tracker, https://www.caricoos.org/sargassum (last visited June 13, 2025).
[77] Florida Fish and Wildlife Conservation Commission, *Abnormal Fish Behavior Event 2023-Present*, https://myfwc.com/research/saltwater/health/spinningevent/ (last visited June 11, 2025).
[78] NOAA Fisheries, *Species Directory: Rice's Whale*, https://www.fisheries.noaa.gov/species/rices-whale (last visited June 11, 2025).

Smalltooth sawfish were once found in the Gulf of Mexico from Texas to Florida and along the East Coast from Florida to North Carolina.[79] Their distribution has dramatically decreased, and today, the species is generally only found off the coast of Florida.[80] Since 2023, smalltooth sawfish have been observed swimming erratically, spinning in circles, and ultimately dying. Scientists suspect that a combination of factors, including toxic algae and the ingestion of toxin-laden prey, are causing the spinning and death.[81]

NOAA Fisheries labeled the Rice's whale one of the rarest whales in the world, with only an estimated 100 individuals remaining, and it is endangered throughout its range.[82] Research indicates Rice's whales are resident and live year-round in the Gulf of Mexico and most sightings have been concentrated in the northeastern Gulf and the west coast of Florida.[83] Petitioners raise concerns about endangered species in various comments.[84]

Several factors contributed to recent coral decline, including Stony Coral Tissue Loss Disease, heat stress from rising sea temperatures, pollution from runoff and development, physical damage from hurricanes (11 in the Gulf since 2021), and boat traffic. Florida's coral reef experienced the worst coral bleaching event ever recorded in the summer of 2023. Unusually hot waters started in mid-July, a month earlier than the typical peak heating in August and

---

[79] NOAA Fisheries, *Species Directory: Smalltooth Sawfish*, https://www.fisheries.noaa.gov/species/smalltooth-sawfish (last visited June 11, 2025).
[80] Florida Fish and Wildlife Conservation Commission, *Abnormal Fish Behavior Event 2023-Present*, https://myfwc.com/research/saltwater/health/spinningevent/ (last visited June 11, 2025).
[81] *Id.*
[82] NOAA Fisheries, *Species Directory: Rice's Whale*, https://www.fisheries.noaa.gov/species/rices-whale (last visited June 11, 2025).
[83] *Id.*
[84] Exhibit C at 12-16; Exhibit E at 3-13.

September. NOAA estimates that 90% of healthy coral cover has been lost. The Florida Keys have been particularly hard hit, with a 2023 heatwave causing a 100% bleaching event.[85]

NOAA Fisheries tells the story about the dangers of HABs, though its information is long outdated, showing only economic impacts from 2015 and prior.[86] HABs occur regularly now, the severity of which changes. HABs in 2017-2019 and again in 2021 in the Gulf, just north of Clearwater, Florida and into Sarasota, near the site of the Ocean Era project, were severe. All have a significant impact on the quality of the marine environment and the people living and working there. HABs can cause: rashes, stomach cramps, nausea, diarrhea, vomiting, coughing and throat irritation, sneezing, eye and nose irritations, and people who are sensitive to smells can have respiratory irritation.[87] Exposure to high levels of toxins can affect the liver and nervous system,[88] and exposed pets can become ill too.[89] If people or animals splash in the water or if boats create wakes, the algae cells can be broken apart, and the cyanotoxins can release into the air; the toxins mix with water droplets and spray, causing people and animals to potentially inhale the toxin.[90] The Florida Department of Health warns not to eat contaminated fish or shellfish as it can cause illness.[91] Increased nutrients from offshore fish farming can be expected to contribute to more frequent and more intense HABs.

---

[85] Nova Southeastern University Florida, *NSU Researchers Put 2023 Coral Bleaching Event Under Microscope*, March 22, 2025, https://news.nova.edu/news-releases/nsu-researchers-put-2023-coral-bleaching-event-under-microscope (last visited June 13, 2025).

[86] NOAA Fisheries, *Hitting Us Where It Hurts: Untold Story of Harmful Algal Blooms* (last updated Sept. 25, 2024) https://www.fisheries.noaa.gov/west-coast/science-data/hitting-us-where-it-hurts-untold-story-harmful-algal-blooms (last visited June 11, 2025).

[87] Florida Department of Health, *HABs: Harmful Algal Blooms*, https://www.floridahealth.gov/environmental-health/aquatic-toxins/harmful-algae-blooms/index.html (last visited June 11, 2025).

[88] *Id.*

[89] *Id.*

[90] *Id.*

[91] *Id.*

Sargassum, a type of seaweed, causes significant environmental, economic, and health problems in the Caribbean and Florida, especially during the summer. Large amounts of sargassum wash onto beaches, impacting tourism, fisheries, and public health. Some of the concerns associated with sargassum "inundation" events are: smothering marine life, like corals; mats blocking sunlight, hindering the growth of underwater plants that other marine life rely on like seagrass, the primary food for threatened Florida manatees, and contribution to beach erosion. Machinery used for removal can further exacerbate the problem, inundating mangroves, disrupting their function as nurseries for aquatic species, and depleting oxygen in the water as sargassum rots and decomposes, creating terrible smells that impact humans much like HABs.

As sargassum decomposes, it releases gases. Exposure to hydrogen sulfide and ammonia may cause mild to serious health effects, including respiratory, cardiovascular, and neurological impacts.[92] It can cause irritation of eyes, nose, throat and lungs, skin rashes and other health issues.[93] Additionally, sargassum is reported to bioaccumulate heavy metals and metalloids, particularly arsenic, which poses potential health hazards to people when species we eat feed on sargassum or are exposed to chemicals leaching from the sargassum.[94] Giant sargassum mats may also support the growth of *Vibrio* bacteria due to the presence of sufficient nutrients to support its growth. This suggests that the accumulation of sargassum could lead to an increased risk of *Vibrio*-related illness through foodborne exposure.[95]

Increases in sargassum can affect sea turtles. The build-up of sargassum in coastal areas blocks the access of sea turtles to beaches to lay their eggs and impedes turtle hatchlings from

[92] EPA, *Sargassum Inundation Events (SIEs): Impacts on Human Health*, https://www.epa.gov/habs/sargassum-inundation-events-sies-impacts-human-health (last visited June 11, 2025).
[93] *Id.*
[94] *Id.*
[95] *Id.*

reaching the ocean. Sargassum on beaches can impede the warming of turtle nests by direct sunlight, which causes imbalance in the sex ratios of hatchlings, shifting toward more males. In other instances, decomposing sargassum may lower nesting success in sea turtles as this creates lethal high temperatures for developing embryos.[96] As it rots and sinks, sargassum can also suffocate marine life by creating low oxygen in waters.[97]

Economic impacts include deterring tourism, impacting hotels, restaurants, and other tourism-related businesses, disruption of fisheries when giant mats block boat engines and reduce fish catches, and increasing costs for local governments and hotels for cleaning up and disposing of sargassum, often in landfills. Recent years, like in 2025, have seen record amounts of sargassum, causing widespread disruptions. Florida Atlantic University called sargassum "a harmful algal bloom with catastrophic impacts on coastal ecosystems, economies, and human health" noting that increased nitrogen availability from various sources is supporting blooms.[98] In April 2025, the total sargassum amount set a new record that exceeds the all-time high in June 2022.[99] Additional nutrients in the water from offshore fish farming can be expected to worsen sargassum inundation.

None of these significant important matters were considered or discussed in the outdated EA, BE, or ODCE, making these documents completely irrelevant as support for the new modified Permit, and rendering EPA's **decision on the permit unlawful.**

---

[96] *Id.*

[97] EPA, *Sargassum Inundation Events (SIEs): Impacts on Aquatic Life and Associated Ecosystems*, https://www.epa.gov/habs/sargassum-inundation-events-sies-impacts-aquatic-life-and-associated-ecosystems (last visited June 11, 2025).

[98] Florida Atlantic University, News Desk, *Sargassum Now Worlds Largest Harmful Algal Bloom Due to Nitrogen,* https://www.fau.edu/newsdesk/articles/nitrogen-seaweed-study.php (last viewed June 13, 2025).

[99] Caricoos, Sargassum Tracker, https://www.caricoos.org/sargassum (last viewed June 13, 2025).

RELIEF SOUGHT

Petitioners respectfully request that the Board hold the modified NPDES Permit invalid and remand the Permit to the EPA to correct the deficiencies described above. *See* 40 C.F.R. § 124.19(l)(2)(iii). The EPA must provide a thorough explanation of its process and its ultimate finding. If the EPA cannot make an affirmative finding, based on the evidence before it, that the discharge will not significantly impact the surrounding environment, harm endangered species, or cause unreasonable degradation, then it must prohibit the discharge.

Respectfully submitted this 14th day of June, 2025,

Clay Garside (La. Bar # 29873)
Waltzer Wiygul & Garside, LLC
3201 General Degaulle Dr., Ste 200
New Orleans, LA 70114
clay@wwglaw.com
Art. 1313 Service: service@wwglaw.com
Tele: (504) 340-6300
Fax: (504) 340-6330

Attorneys for Petitioners

STATEMENT OF COMPLIANCE WITH WORD LIMITATION

This document contains 16,315 words, including headings, footnotes, and quotations in accord with the Order from the Board granting an Expedited Motion for Leave to Exceed Word Limitation issued June 13, 2025.

Clay Garside (La. Bar # 29873)
Waltzer Wiygul & Garside, LLC
3201 General Degaulle Dr., Ste 200
New Orleans, LA 70114
clay@wwglaw.com
Art. 1313 Service: service@wwglaw.com
Tele: (504) 340-6300
Fax: (504) 340-6330

Attorney for Petitioners

LIST OF ATTACHMENTS

Exhibit A	Petitioners' Comments on Modified Permit
Exhibit B	Petitioners' Letter to EPA and Response to Federal Respondents' Motion for Partial Remand Without Vacatur
Exhibit C	Petitioners' Original Comments
Exhibit D	Petitioner Recirculating Farms' Original Comments
Exhibit E	Petitioners' Supplemental Comments
Exhibit F	Friends of the Earth, Fact Sheet: Industrial Ocean Fish Farming
Exhibit G	Emails from Neil Sims

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Petition for Review and Exhibits attached thereto in the matter of Ocean Era, Inc.'s NPDES permit for Velella Epsilon were served by electronic mail, pursuant to the Revised Order Authorizing Electronic Service of Documents in Permit and Enforcement Appeals dated September, 21, 2020, on the following persons, this 14th day of June, 2025:

Kevin J. McOmber
Administrator
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, SW
Atlanta, GA 30303
Phone: (404) 562-9900
Email: McOmber.Kevin@epa.gov
Tyler.kip@epa.gov
Schwartz.paul@epa.gov
Raines.chase@epa.gov

Ocean Era, Inc.
c/o Neil Anthony Sims
PO Box 4239
Kailua-Kona, HI 96745
Phone: (808) 989-2438
Email: neil@ocean-era.com

Clay Garside (La. Bar # 29873)
Waltzer Wiygul & Garside, LLC
3201 General Degaulle Dr., Ste 200
New Orleans, LA 70114
clay@wwglaw.com
service@wwglaw.com
Tele: (504) 340-6300
Fax: (504) 340-6330