BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In re:	)	
	)	
Ocean Era, Inc. National Pollution Discharge Elimination System Permit No. FL0A00001 for the Velella Epsilon Facility in the Gulf of Mexico	)	PETITION FOR REVIEW

Meredith Stevenson
Sylvia Shih-Yau Wu
Center for Food Safety
303 Sacramento Street, 2nd Floor
San Francisco, CA 94111
Phone: (415) 826-2770
Emails: swu@centerforfoodsafety.org
mstevenson@centerforfoodsafety.org

Attorneys for Petitioners

Date: October 30, 2020

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Page(s)

Federal Cases

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

Federal Statutes

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

State Statutes

Regulations

Regulations (Cont'd) **Page(s)**

Regulations (Cont'd) **Page(s)**

Other Authorities

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), Friends of the Earth (FOE), Recirculating Farms (RecircFarms), Tampa Bay Waterkeeper (TBWK), Suncoast Waterkeeper (SCWK), Healthy Gulf, Sierra Club Florida, the Center for Biological Diversity (CBD), and Food & Water Watch (FWW) (collectively, Petitioners) petition for review of the conditions of National Pollution Discharge Elimination System Permit No. FL0A00001, issued to Ocean Era, Inc. on September 30, 2020, by the Regional Administrator, U.S. Environmental Protection Agency Region IV (EPA). U.S. EPA, NPDES Permit No. FL0A00001–Ocean Era, Inc. (2020) (NPDES permit or the Permit).[1] This Permit authorizes Ocean Era, Inc., 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, FL—and to discharge untreated, industrial wastewater from the facility directly into the surrounding ocean. Final EA at 13. The Region's issuance of the Permit is illegal for a variety of reasons, under at least four 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), and the Marine Mammal Protection Act (16 U.S.C. § 1361 *et seq.*) (MMPA).

First, EPA's issuing of the permit violates the Ocean Discharge Criteria (ODC) of the Clean Water Act by failing to assess numerous pollutants under

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

mandatory criteria and failing to assess relevant factors. *See* EPA, Final Ocean Discharge Criteria Evaluation: Ocean Era, Inc.–Velella Epsilon, Sep. 30, 2020 (ODCE). The permit issuance thus cannot guarantee 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 Environmental Assessment: National Pollutant Discharge Elimination System Permit for Ocean Era, Inc.–Velella Epsilon Offshore Aquaculture Project – Gulf of Mexico, September 2020 (Final EA). Additional assessment is needed to fully evaluate the impacts of the project.

Third, EPA's permit process violates the Endangered Species Act through failing to assess numerous impacts of the project on endangered species in the Biological Evaluation. *See* Biological Evaluation, EPA and USACE, Final Biological Evaluation: Ocean Era, Inc.–Velella Epsilon, Sep. 30, 2020 (BE). A Biological Opinion (BiOp) is 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 the National Marine Fisheries Service (NMFS).

The EPA thus based its approval on clearly erroneous conclusions. First, the EPA erroneously concluded that this facility may discharge antibiotics, pathogens, escaped fish, fish feed, and copper without causing "unreasonable degradation" to the marine environment under the ODC. ODCE at 48. In approving discharges of escaped fish, pathogens, and copper without evaluating these discharges under the ODC, the EPA unlawfully permitted unreasonable degradation in violation of the CWA. Second, the EPA concluded that Ocean Era Inc.'s discharges are unlikely to significantly impact the human environment because the agency's assessments overlooked key discharges, avoided assessing these discharges for the full duration of the permit, and insisted that conditions of the NPDES permit would mitigate impacts without explanation. 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 because it did not sufficiently assess discharges, nor did it evaluate whether those discharges could adversely affect endangered species and the marine environment.

As set forward herein, Petitioners contend that EPA committed numerous substantive and procedural errors prior to issuing the NPDES permit. Based on the errors listed below, Petitioners request that the Environmental Appeals Board (EAB or the Board) grant this petition for review and remand the NPDES 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 have been completed and the permit has been corrected.

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 it filed timely public comments with the Region. *See* 40 C.F.R. § 124.19(a)(2). Petitioners CFS, FOE, FWW, CBD, Sierra Club, and Healthy Gulf submitted joint comments on September 29, 2019. Ex. A, Petitioners' Comments. Petitioners CFS, CBD, FWW, FOE, Sierra Club, and Suncoast Waterkeeper also filed supplemental joint comments on February 4, 2020. Ex. D, Petitioners' Supplemental Comments.
2. Petitioners' written comments raised the issues in this petition, preserving them for review. *See* Ex. A at 1-13; Ex. D at 1-17. Citations to the relevant comments are included below.

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.

FOE fights to protect our environment and create a healthy and just world by promoting clean energy and solutions to climate change, keeping toxic and risky technologies out of the food we eat and products we use, and protecting marine ecosystems and the people who live and work near them. FOE's sustainable aquaculture campaign specifically focuses on highlighting the dangers of industrial ocean fish farming and supporting sustainable seafood production alternatives. The organization has nearly 1.7 million members and activists across all 50 states working to make these visions a reality. The organization is part of the Friends of the Earth International federation, a network in 74 countries working for social and environmental justice.

The Recirculating Farms Coalition 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, RecircFarms 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.

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.

CBD is a nonprofit corporation headquartered in Tucson, Arizona, with offices across the country, including in St. Petersburg, FL. The Center has 81,843 members throughout the United States, including Florida (and 1.7 million members and online activists). CBD works through science and environmental law to advocate for the protection of endangered, threatened, and rare species and their habitats both in the United States and abroad. CBD has been actively involved in protecting Florida's and the Gulf of Mexico's wildlife for decades. CBD's Oceans Program focuses specifically on conserving marine wildlife and habitat.

STATUTORY AND REGULATORY FRAMEWORK

I. The Clean Water Act

The Congressional goals of the Clean Water Act 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 Clean Water Act 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)).

Permits issued by EPA typically include two types of specific limitations on the discharge of pollutants: a) technology-based effluent limitations, 33 U.S.C. § 1314(b), and b) water-quality based effluent limitations, 33 U.S.C. § 1311(b). However, sources operating beyond the territorial seas are not subject to state water quality standards, and environmental quality-based conditions in permits are based on the "ocean discharge criteria" established under Section 403 of the Clean Water Act. 33 U.S.C. § 1343.

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. Ocean Discharge Criteria

As noted, the CWA prohibits the discharge of any pollutants, unless in compliance with certain sections of the statute. 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 Ocean Discharge Criteria, 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 § 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, a NPDES permit cannot be issued. 33 U.S.C. § 1343 (a). However, if the EPA decides to issue a 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. In order that both federal agencies and the public 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. The Endangered Species Act

The Endangered Species Act, 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" in nature. 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. During an informal consultation, the action agency requests information from the consulting agency as to whether any listed species may be present in the action area. If listed species may be present, the action agency is required by Section 7(c) of the ESA to prepare and submit to the consulting agency a "biological assessment" that evaluates the potential effects of the action on listed species and critical habitat. As part of the biological assessment, the action agency must make a finding as to whether the proposed action may affect listed species and submit the biological assessment to the consulting agency for review and potential concurrence with its finding. 16 U.S.C. § 1536(c). 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, on the other hand, 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 the consulting agency's analysis of the best available scientific data on the status of the species and how it would be affected by the proposed action.[2] 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 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. Marine Mammal Protection Act

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

[2] 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).

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 Net Pen Ocean Aquaculture Generally

The Permit would allow Ocean Era, Inc. 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, FL—and discharge untreated, industrial wastewater from the facility directly into the surrounding ocean. 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 net pens, pods, and cages, which can have devastating environmental and socio-economic impacts. As detailed in our comments and the citations therein, industrial aquaculture in the Gulf of Mexico, such as the Velella Epsilon project, are 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. *See also* Ex. B, Friends of the Earth, Fact Sheet: Industrial Ocean Fish Farming. 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. *See* Ex. A, Petitioners' Comments and citations therein; *see* Ex. B.

II. History of Offshore Aquaculture in the Gulf of Mexico

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 each year in the Gulf. *Id.*

In response, Petitioners CFS and Recirculating Farms Coalition, along with other conservation and fishing groups, successfully challenged NMFS's authority to regulate aquaculture under 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 types of harms than

traditional 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 to vacate the nation's first commercial aquaculture permitting scheme 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's Involvement in Velella Epsilon

During this litigation, Velella Epsilon nevertheless 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 Velella Epsilon 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." Florida Sea Grant, *Integrated Projects to Increase Aquaculture Production in the U.S. - Project Summaries*, https://seagrant.noaa.gov/News/Article/ArtMID/1660/ArticleID/1656/Sea-Grant-announces-93-million-for-aquaculture-research-and-industry-support. In a May 7, 2020 email to officials at NOAA, the CEO of Velella Epsilon, Neil Sims, wrote that

Velella Epsilon is "funded under the SeaGrant project to use the goodwill generated from the Velella Epsilon demonstration pen to pioneer the permitting process for a commercial offshore fish farm." Ex. C at 2. Neil Sims works as a researcher for Florida Sea Grant, which has an explicit Gulf Aquaculture Plan to place twenty offshore aquaculture facilities in the Gulf over ten years, beginning with Velella Epsilon. Florida Sea Grant, *Offshore Aquaculture*, https://www.flseagrant.org/aquaculture/openocean/. Neil Sims admitted that "We intend to begin the commercial permit application process as soon as we have the demonstration net pen permit in hand." Ex. C at 2.

IV. The Draft Permit

With funding support from Florida Sea Grant, on November 9, 2018, Ocean Era, Inc. (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 Clean Water Act for a NPDES permit for a "pilot" fish farm project off the coast of Sarasota, Florida in the federal waters of the Gulf of Mexico.

In April 2019, EPA/USACE made available a draft Environmental Assessment on the Velella Epsilon project, and on August 30, 2019, EPA issued the draft Clean Water Act 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 also extended to February 4, 2020. *Id.* The EPA received over 40,000 oral and written comments during the comment period.

V. Petitioners' Comments

Petitioners CFS, FOE, CBD, Sierra Club, FWW, and Healthy Gulf along with numerous other organizations, submitted comments on the draft permits on September 29, 2019, pursuant to 40 C.F.R. § 124.11. *See* Ex. A. Petitioners challenged the EPA's failure to assess numerous significant impacts in the EA, *id.* at 3-5, the EPA's omission of several pollutant discharges from its Ocean Discharge Criteria Evaluation, *id.* at 9, and the agency's failure to complete a BiOp under the ESA. *Id.* at 10-13. 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. *Id.* at 3-13.

Petitioners CFS, CBD, FWW, FOE, Sierra Club, and Suncoast Waterkeeper also filed supplemental joint comments on February 4, 2020. *See* Ex. D. These comments challenged EPA's failure to assess risks to human health, *id.* at 1-2, risks to environmental health from pathogens and parasites, *id.* at 2-3, the project's contribution to harmful algal blooms, *id.* at 13-16, and the threat of extreme storms.

Id. at 16-17. These comments also expressed concern over impacts to endangered species and marine mammals. *Id.* at 3-13.

VI. Designation of the Gulf of Mexico as an Aquaculture Opportunity Area

While the draft NPDES permit was pending, several changes took place in regards to future plans for offshore aquaculture in the Gulf of Mexico. First, on May 7, 2020, the Trump Administration passed an Executive Order on Promoting American Seafood Competitiveness and Economic Growth (EO). Executive Office of the White House, Promoting American Seafood Competitiveness and Economic Growth, Executive Order 13921 (May 7, 2020). This EO aimed to aid the commercial aquaculture industry and increase seafood production by streamlining the aquaculture regulatory permitting process. Notably this EO mandated that the Secretary of Commerce identify "Aquaculture Opportunity Areas," 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 and Southern California regions as Aquaculture Opportunity Areas (AOAs). NOAA, Press Release, NOAA Announces Regions for First Two Aquaculture Opportunity Areas under Executive Order on Seafood (Aug. 20, 2020). As a result of this designation, NOAA is planning to designate a portion of the Gulf

of Mexico into a parcel that can host 3-5 offshore aquaculture operations for finfish, plants, bivalves, or a combination of species. *Id.*

VII. The Final Permit

The EPA released its final Environmental Assessment on September 2020, along with the final Biological Evaluation. 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.

The Permit allows Ocean Era, Inc. to place a copper alloy mesh submersible circular, 17 meter in diameter and 7 meter in height, floating "net-pen" cage in water depth of approximately 130 feet (40 meters) in the Gulf of Mexico 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 allows Ocean Era, Inc. to raise approximately 20,000 fish (almaco jack, or kampachi; *Seriola rivoliana*) over approximately 12 months. *Id.* The total harvest weight would be around 80,000 pounds, which is significantly more than the total annual catch in Florida in recent years. *Id.*, Florida Fish and Wildlife Conservation Commission, *Commercial Fisheries Landing Summaries*, *available at* https://public.myfwc.com/FWRI/PFDM/ReportCreator.aspx (last accessed Oct. 19, 2020). The maximum amount of feed *per month* is estimated to be over 27,000 pounds. Fact Sheet at 1.

The Fact Sheet explains that, "[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 concerns monitoring requirements, specifically regarding water quality, sediment, and benthic monitoring, *Id.* at 3, while Part IV requires 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 requires environmental monitoring and implementation of an environmental monitoring plan (EMP) to meet the requirements of specific provisions of the Clean Water Act, and Part VI requires 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 concerns implementation of quality assurance procedures and a quality assurance project plan (QAPP) to ensure water quality data by the permittee is reliable.

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 NPDES permit is illegal under the Clean Water Act.

The overarching objective of the Clean Water Act "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 NPDES does not attain these three goals for the Gulf of Mexico. Water pollution has already caused massive harm to the Gulf of Mexico and other ecosystems that rely on the Gulf of Mexico, from Taylor Energy in 2004 to the Deepwater Horizon spill in 2010. Historic harmful algal blooms in 2018 threatened both public health and ecosystem health, harming the tourism industry and killing marine life. In light of these recent events, the region is only beginning to recover. Approval of the 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 Ocean Discharge Criteria provisions of the Act 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 Ocean Discharge Criteria 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 *American 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 982n.39 (citing *Citizens to Preserve Overton Park v. Volpe,* 401 U.S. 402, 416 (1971)). In order to consider all of 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 a document entitled Ocean Discharge Criteria Evaluation 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.

1. **EPA must evaluate the threat to human health caused by the project's contribution to harmful algal blooms.**

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 harmful algal blooms. *See* Ex. D at 13-16. 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 harmful algal blooms, but dismisses it because "quantitative direct links to marine aquaculture are lacking in the scientific literature." *Id.* at 15.

Yet 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 harmful algal blooms from the discharge in the Gulf as part of its determination of "no unreasonable degradation to the marine environment." EPA's ODCE does not discuss the potential impacts on health from the discharge of phosphorus or nitrogen, nor address in any way the specific impacts of harmful algal blooms on human health. EPA's failure to consider and evaluate threats to human health from the impacts of the discharge on contributing to harmful algal blooms is arbitrary and capricious, and as such the EPA's determination under the Ocean Discharge Criteria is clearly erroneous.

In fact, contrary to EPA's assertion, EPA cited a source in its EA warning of health threats from harmful algal blooms. EPA's draft EA cited Florida Fish and Wildlife Conservation Commission's website as its source regarding the contributions of nitrogen and phosphorus to harmful algal blooms. Draft EA at 16 n.3. This website specifically provides information about the numerous human health effects of harmful algal blooms, including respiratory irritation, skin irritation, and burning eyes. Florida Fish and Wildlife Conservation Commission, *Red Tide FAQ*, https://myfwc.com/research/redtide/faq/. Further, numerous commenters expressed concern and submitted information on the human health impacts of harmful algal blooms. Accordingly, the need for a specific evaluation of the location of the discharge and the impacts on harmful algal blooms and human health was demonstrated. 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 another threat to human health in the form of antibiotic resistance due to the 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 again the ODCE failed to discuss the human health impacts under the mandatory ten factors and entirely failed to provide any location specific evaluation for the impacts of antibiotic use at this facility. *See* Ex. D at 1; Ex. A at 4-5.

In promulgating the Ocean Discharge Criteria, the EPA recognizes the importance of the location of the discharge as a factor to be considered in assessing health risks. *See* Ocean Discharge Criteria, 45 Fed. Reg. 65,945 (1980) ("The director must also consider the potential impacts of the discharge on human health 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 regards to 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 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 as set forth in the Ocean Discharge Criteria is similarly flawed and incomplete. Ex. A at 9. EPA agreed that the CWA broadly defines "pollutants" and admitted that the scope of the NPDES permit covers "the indirect discharges from marine finfish aquaculture operations such as fish escapes, pathogens, and parasites." EPA, Final Response to Significant Comments–Velella Epsilon Offshore Aquaculture Project 19 (Sept. 30, 2020) (Final Agency Response to Significant Comments). Yet the ODCE completely leaves out evaluations for escaped fish, pathogens and parasites, and copper. Each of these omissions is a legal error, and violates the Ocean Discharge Criteria of the CWA.

The EPA is required by the CWA and implementing regulations to certify that *any* ocean discharge allowed by its permit will not cause an unreasonable degradation of the marine environment. 33 U.S.C. § 1343(a). 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) (emphasis added). *See Am. Petroleum Inst. v. E.P.A.*, 787 F.2d 965, 981 (5th Cir. 1986). The Ocean Discharge Criteria only provide exceptions for discharges in compliance with section 301(g), 301(h), or 316(a) variance requirements or State water quality standards, which do not apply here. *See* 40 C.F.R. § 125.122 (a), (d). Thus EPA's failure to assess copper, escaped fish, pharmaceuticals, and pathogens/parasites under the Ocean Discharge Criteria

violates the CWA's anti-degradation policy and is also arbitrary and capricious, in violation of NEPA.

1. EPA failed to evaluate pathogens under the ODC.

Regarding pathogens, Petitioners commented that EPA must assess the project's discharged pathogens under the ODC prior to making a determination of no unreasonable degradation. Ex. A at 9. EPA's only explanation for their omission is that limited to no information exists about finfish disease transfer from cultured fish to wild fish in the Gulf. Final Agency Response to Significant Comments at 19. The agency stated that it can be challenging to accurately estimate disease impacts on wild populations, especially considering pelagic species. *Id.* However, the CWA specifically instructs that in situations where EPA does not have sufficient information on a proposed discharge to make a reasonable determination about the impacts of such discharges on the environment, EPA cannot issue the permit. 33 U.S.C. § 1343(c)(2); *Am. Petroleum Inst.*, 787 F.2d at 981. The agency did not even acknowledge this lack of information in the ODCE. And while the agency did point to the NPDES permit, which addresses these issues through BMPs, 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 copper in the ODCE.

Regarding copper, the agency acknowledged that the NPDES permit includes water quality monitoring for copper, Final Agency Response to Significant Comments at 15, but the agency failed to even mention copper in the ODCE. The

use of copper net pens can result in heavy metals being released into the environment and subsequent bioaccumulation, which the agency must assess under 40 C.F.R. § 125.122(a)(1). The agency's failure to evaluate the release of copper under the ten factors renders its determination clearly erroneous.

3. EPA failed to include escaped fish in the ODCE.

EPA also failed to assess escaped fish under the Ocean Discharge Criteria, but pointed to the EA as its assessment, which already lacks analysis by leaning on unsupported mitigation measures. Petitioners commented that escaped fish increase competition with wild stocks for food, habitat, and spawning areas. Ex. A at 3. 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. EPA's failure was clear legal error.

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

It is clear that EPA did not evaluate the discharges as required by the Ocean Discharge Criteria, and on that basis alone, the permit should not have been issued. EPA's ODCE failed to consider the potentially harmful impacts of pathogens/parasites, escaped fish, and copper. Without considering the impacts of these discharges, EPA cannot properly determine the potential for the pollutants to

bioaccumulate, the potential effects of the discharges on species listed under the Endangered Species Act, 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 NPDES permit unlawful.

Significantly as well, the permit violates the law by allowing numerous discharges that will cause "unreasonable degradation." The Ocean Discharge Criteria specifically prohibit 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 harmful algal blooms 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 permit or include conditions with the 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 Ocean Discharge Criteria. 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 in 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'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 Ocean Discharge Criteria in this case.

II. EPA's inadequate analysis of the NPDES permit application violates the National Environmental Policy Act.

The National Environmental Policy Act, 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. Ex. A at 7-9. 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 five year term of the project, assessments of this project in relation to future aquaculture projects in the Gulf, and assessment of addition impacts such as fish escapes, pathogens and parasites, and antibiotic use. Ex. A at 3-5. None of this information was included in the EA.

Instead, EPA issued a FONSI, which is flawed for numerous reasons. First, the agency's assessment of cumulative impacts is outdated in light of the Gulf's designation as an Aquaculture Opportunity Area and NOAA's plans to streamline permitting for 3-5 additional facilities. Second, the EA fails to cover the full five year term of the permit, which could be renewed as soon as the 18 month pilot project ends without addition environmental review. And third, the agency fails to consider numerous impacts of the project. Ex. A at 8. These shortcomings render the FONSI arbitrary and capricious and contrary to law.

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

The cumulative impacts section of the EA is legally insufficient and factually incorrect. 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)).

1. **The cumulative impacts analysis is outdated and fails to take into account cumulative impacts of the project in relation to other planned offshore aquaculture projects in the Gulf.**

The EA is insufficient in this instance. The EA 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 operate this small scale facility "while concurrently pursuing an application for a commercial aquaculture permit" and using this facility to "document the process for future applicants to follow." Florida Sea Grant, *Integrated Projects to Increase Aquaculture Production in the U.S. - Project Summaries*, https://seagrant.noaa.gov/News/Article/ArtMID/1660/ArticleID/1656/Sea-Grant-announces-93-million-for-aquaculture-research-and-industry-support. These plans were in place in 2017 when Florida Sea Grant funded the VE facility; thus, they existed even during the early stages of the permitting process. *Id.* VE's CEO, Neil Sims, confirmed in a May 2020 email that VE's plan to "pioneer the permitting process for a commercial offshore fish farm" still exists. Ex. C at 2. The Florida Sea Grant website still includes its long term Gulf Aquaculture Plan to place twenty

offshore aquaculture facilities in the Gulf in ten years. Florida Sea Grant, *Offshore Aquaculture*, https://www.flseagrant.org/aquaculture/openocean/.

Further, on August 20, 2020, NOAA announced the designation of federal waters in the Gulf of Mexico and Southern California regions as Aquaculture Opportunity Areas (AOA), with the intention of announcing more AOAs by 2025. NOAA, Press Release, NOAA Announces Regions for First Two Aquaculture Opportunity Areas under Executive Order on Seafood (Aug. 20, 2020). NOAA made these AOA designations in response to a non-legislative mandate contained in the May 7, 2020 Executive Order on Promoting American Seafood Competitiveness and Economic Growth, Executive Office of the White House, Promoting American Seafood Competitiveness and Economic Growth, Executive Order 13921 (May 7, 2020), and is planning to designate a portion of each named region into a parcel that can host 3-5 offshore aquaculture operations for finfish, plants, bivalves, or a combination of species.

In light of 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 current 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 explicit long term plans beyond Velella Epsilon. Further, with the Gulf's designation as an AOA, 3-5 additional offshore aquaculture operations will be announced during the NPDES five-year term, by 2025. 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 expansion of marine aquaculture industry in the Gulf is clearly erroneous.

2. The EPA violated NEPA by limiting its environmental review to 18 months and failing to examine the effects of the full permit term 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 the implementing regulations by illegally limiting the temporal scope of its analysis. The EPA refused to examine the effects of this project for its full five year permit term in direct defiance of the USACE's 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).

In defiance of these NEPA implementing regulations, the EPA limited its analysis to the short-term effects of 18 months instead of the full five year NPDES term, which may be renewed without additional NEPA analysis. *See* 33 U.S.C. §1371(c)(1). EPA failed to sufficiently analyze cumulative impacts of the proposed facility for the full possible duration of five years by using the permit's initial 18-month approval to excuse sufficient analysis of several significant 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 (5 years). Draft EA at 48. Yet, EPA fails to sufficiently analyze cumulative impacts such as interference with migration, entanglements, and ocean noise disturbance over the full potential five year duration of this permit in the final EA.

An analysis of the full duration is essential for migration because cumulative impacts of the facility on migration over a five-year period greatly differ from impacts over an 18-month period. Here, 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 period of 18 months. Final EA at 36. This dismissal does not address whether the project will unduly affect their migration over the full potential five-year period or subsequent renewals. Additionally, the Draft EA states that sea turtles are "highly migratory" throughout the Gulf, but does not address whether the project will interfere with their migration over the potentially five-year span of this permit. Final EA at 22.

Additionally, the Draft EA fails to provide a significant analysis of the risks of entanglement and ocean noise disturbance, dismissing these impacts due to the short 18-month period, despite the possibility of a five-year period. Final EA at 41, 42. 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 in the flexible mooring and net pen connection lines. Final EA at 42. The draft EA also acknowledges that underwater noise disturbance could affect these species. Final EA at 41. However, the EA dismisses these impacts as unsubstantial over an 18-month period while failing to analyze these impacts over the possible five-year deployment. *Id.*

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

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

Further, the farming of finfish at this facility, and eventually on an industrial scale, will require an incredible amount of fish feed, which will have cumulative impacts on the environment and public health. *See* Petitioners' Comments at 5; *See* 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"). Most industrially farmed finfish, such as the fish that will be raised at the facility,

are carnivorous and need protein in their feed. *Id.* This often consists of lower-trophic level "forage fish," which are at risk of collapse. *Id.*

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 various products, like pharmaceuticals and notably pet and fish feeds. Monterey Bay Aquarium, *Atlantic Menhaden, Gulf Menhaden* 8 (June 4, 2015), https://www.seafoodwatch.org/-/m/0590004cbae64cc593dbd54530940c56.pdf. 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. *Id.* at 50. Further, the industry admits it has a bycatch rate of up to 2.8%, with no catch cap and no regular monitoring, which causes major disruptions to the Gulf ecosystem. *Id.* at 24. 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.

B. EPA unlawfully relied on mitigation measures without explanation, instead of 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 claims that permit conditions will render significant impacts from fish escapes, pathogen spread, and antibiotic use insignificant without supporting these conclusions with assessment. Such conclusions are thus arbitrary and capricious and contrary to law.

1. **Pathogen spread and antibiotic use remain unassessed.**

For example, the agency acknowledged the potential of antibiotic use to create antibiotic resistance and harm public health, yet failed to assess the impacts of approved antibiotics in the NPDES permit on the surrounding environment due to permit conditions. Petitioners commented that housing large populations of animals inevitably breeds pests and disease, which agriculture and aquaculture sectors respond to with a pharmacopeia of chemicals – and in the open ocean, residues of these drugs are discharged and absorbed into the marine ecosystem. Ex. A at 4. For farmed fish, Petitioners expressed concern that antibiotic use at this facility will leave residue in the seafood produced, as well as leach into the ocean, contaminating nearby water and marine life. *Id.* Specifically, Petitioners commented that up to 75% of antibiotics used by the industrial ocean fish farming industry are directly absorbed into the surrounding environment. *Id.*

The agency's only response to Petitioners' concerns stated that antibiotics will not likely be used during the proposed project due to the strong currents expected at the proposed action area and the low fish culture density, but if they are, administration of drugs will be performed under the control of a licensed veterinarian and will be reported to the agency. Final EA at 33. However, the "feasibility of mitigation measures is not self-evident." *O'Reilly* at 234. The NPDES permit allows for the use of antibiotics, Permit at 6, and the EA fails to discuss impacts of antibiotics on wild species. Further, the EA fails to explain how the control of a licensed veterinarian will prevent antibiotic resistance and reduce impacts on wild species and public health.

EPA also impermissibly relies on unassessed permit conditions to avoid assessing the impacts of pathogen spread from the facility to wild fish. The agency claims that parasites and pathogens will be managed with BMPs under the NPDES permit, but does not discuss impacts of parasites and pathogens on wild populations. Final Agency Response to Significant Comments at 20. These BMPs require an Official Certificate of Veterinary Inspection signed by a licensed and accredited veterinarian attesting to the health of the organisms to be stocked and conditions to control or minimize the transfer of pathogens to wild fish. *Id.* No further discussion of these measures is included, nor is there any explanation of how these measures will prevent pathogen spread.

2. **Fish escapes remain unassessed.**

The agency also relies on unsupported mitigation measures to avoid assessing the significant impacts of fish escapes. Marine finfish aquaculture routinely results in a massive number of farmed fish escapes that adversely affect wild fish stocks. For example, Petitioners pointed in their comments to an incident where a Cooke Aquaculture facility in Washington State spilled more than 263,000 farmed Atlantic salmon into Puget Sound. Long after the escape, many of these non-native, farmed fish continued to thrive and swim free–some were even documented as far north as Vancouver Island, west of the Strait of Juan de Fuca, and south of Tacoma, traveling at least 100 miles from the farm. Ex. A at 3. Escaped fish increase competition with wild stocks for food, habitat, and spawning areas, and escaped farmed fish will likely spread a multitude of parasites and diseases to wild stocks, which could prove fatal when transmitted. *Id.* at 3-4.

Instead of assessing these key impacts, the agency explained, without support, that escape is unlikely because the copper mesh cage to be used is impact resistant and designed to survive storm events while being completely submerged. Final EA at 37. Despite relying so heavily on the cage design, the agency failed to explain how this design would be differenct than previous designs that have resulted in breakage, such as in Kona Blue and Cooke.

Second, the agency claims that, even if they escape, they would not pose a competitive risk to wild stock or result in genetic contamination because the farmed species, almaco jack, is native and common to the Gulf and is not genetically

modified or selectively bred. Final EA at 37. The EA explains that the fingerlings for the project will be sourced from brood stock that are located at Mote Marine Aquaculture Research Park and were caught in the Gulf near Madeira Beach, Florida. Final EA at 61. However, nowhere in the NPDES permit does the agency require that the facility use local or native eggs; thus, the permit provides no mechanism for the EPA to enforce this claim. Escaped fish will increase competition with wild stocks for food, habitat, and spawning areas. Ex. A at 3-4. This reliance on conditions not even included nor enforceable by any agency in the permit is unlawful, rendering discussion of this impact arbitrary and capricious, and the agency's conclusion is thus legal error.

C. 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 adverse 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 into surrounding waters. Ex. D at 16-17; Ex. A at 8. EPA has information that strong storms caused by climate change will eventually affect facilities, eliminating the effectiveness of some of the habitat mitigation efforts listed in the NPDES permit, but failed to consider or analyzed that information in the EA. Ex. A at 8. Instead the agency again relied on indistinct mitigation measures without any support. Final Agency Response to Significant Comments at 32.

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 Endangered Species Act (examples include the oceanic whitetip shark, giant manta ray, and a variety of seabirds and sea turtles) and the Marine Mammal Protection Act (examples include the Atlantic spotted dolphin, the common bottlenose dolphin). 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.

D. 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). Here, 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. Ex. A at 7.

E. 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. 40 CFR § 1508.27 (b)(5); *See* Ex. C 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.

III. The Endangered Species Act requires EPA to conduct formal consultations and prepare a Biological Opinion 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, including two seabird species, four fish species, seven invertebrates, six whales, and five reptiles. 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. Ex. A at 13.

Specifically, 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, potentially

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 has been identified as a Biologically Important Area for the Bryde's whale, meaning this area is essential for 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.

In this instance, EPA unlawfully failed to sufficiently evaluate these 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 of Mexico in particular, presents serious threats to these species, including fish escapes; the discharge of industrial wastewater, pharmaceuticals, heavy metals, and excess nutrients; nets and entanglement; and the spread of parasites and disease. *See* Ex. A at 9-13. Further, it is readily apparent based on Florida Sea Grant's plans and the CEO's emails, *see* Ex. C, that the construction and operation

of this pilot project will not be the only one in this newly designated AOA. 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 two 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 of releasing feed into the water as a food source on endangered species, 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.

Second, the BE fails to assess impacts to species in light of the Gulf's current status as an Aquaculture Opportunity Area and Ocean Era, Inc.'s ability to renew its NPDES permit. Instead, the BE leaves out meaningful assessment of impacts on migration, insisting that the project will consist only of 18 months of disturbance and will thus have no impact. 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 several 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. Ex. A at 13. As noted, the BE concedes that numerous species are at risk of entanglement, including whales, sea turtles, and fish species. Yet 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 Response to Significant Comments at 35. 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 through again referring to a mitigation measure it plans to take that is not even included in the NPDES permit. Final Agency Response to Significant Comments at 38. Nowhere in the NPDES permit does the EPA require

VE to source from native fish species. Beyond this mitigation measure, the agency's only explanation for its failure to assess this impact is that, because almaco jack are not endangered, no evaluation of genetic impacts to almaco jack is required. *Id.* However, Petitioners commented that the agency needs to assess the impact on listed species, not on almaco jack. Ex. A at 12, 13. The agency acknowledged the presence of numerous fish species in the proposed area, including the giant manta ray, Nassau grouper, smalltooth sawfish, and oceanic whitetip shark, yet failed to mention or evaluate competition from escaped fish in its BE. This is arbitrary and capricious.

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 18 month span of the project. Ex. A at 8. 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 of approximately 18 months." 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 18-month length. *Id.* at 21, 22. Yet Velella Epsilon may renew this NPDES permit without further assessment of risks to species, *See* 33 U.S.C. §1371(c)(1), and this facility is intended to be the first of many. A longer time span is needed to ensure that listed species remain unharmed.

C. EPA must complete formal consultation.

Despite the project's adverse effects to these 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 regarding the indirect or cumulative impacts to listed species that will occur considering this facility will be one of many in this newly designated 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, although it is apparent that marine finfish aquaculture indisputably harms myriad such species in various ways.

D. EPA must complete at Biological Opinion.

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 Biological Opinion 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. Ex. A at 13. EPA has not met this burden.

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

Marine mammals in the project area are protected by the MMPA, 16 U.S.C. §§1361-1407; Ex. D at 5-9. 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, USACE must obtain proper authorization from NMFS before authorizing this permit. EPA acknowledges that twenty-two marine mammal 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; Ex. D at 6. EPA must complete an accurate assessment of risks posed by this project to marine mammals and obtain proper authorization from NMFS.

RELIEF SOUGHT

Petitioners respectfully requests that the Board hold the NPDES permit invalid and remand the Permits 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 30th day of October, 2020,

/s/ Meredith Stevenson
Meredith Stevenson
Sylvia Shih-Yau Wu
Center for Food Safety
303 Sacramento Street, 2nd Floor
San Francisco, CA 94111
Phone: (415) 826-2770
Emails: swu@centerforfoodsafety.org
mstevenson@centerforfoodsafety.org

Attorneys for Petitioners

Hallie Templeton
Friends of the Earth

Joseph McClash
Suncoast Keeper

Megan Eakins
Tampa Bay Waterkeeper

Zach Corrigan

Food & Water Watch

Raleigh Hoke
Healthy Gulf

Cris Costello
Sierra Club Florida

Marianne Cufone
Recirculating Farms Coalition

Jacki Lopez
Center for Biological Diversity

STATEMENT OF COMPLIANCE WITH WORD LIMITATION

This document contains 13,923 words, including headings, footnotes, and quotations.

/s/ Meredith Stevenson
Meredith Stevenson
Center for Food Safety
303 Sacramento Street, 2nd Floor
San Francisco, CA 94111
Phone: (415) 826-2770
Email: mstevenson@centerforfoodsafety.org

Attorney for Petitioners

LIST OF ATTACHMENTS

Exhibit A Petitioners' Comments

Exhibit B Friends of the Earth, Fact Sheet: Industrial Ocean Fish Farming

Exhibit C Emails from VE CEO, Neil Sims

Exhibit D Petitioners' Supplemental Comments

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 30th day of October, 2020:

Mary S. Walker
Administrator
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, SW
Atlanta, GA 30303
Phone: (404) 562-9900
Email: walker.mary@epa.gov
tyler.kip@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

/s/ Meredith Stevenson
Meredith Stevenson
Center for Food Safety
303 Sacramento Street, 2nd Floor
San Francisco, CA 94111
Phone: (415) 826-2770
Email: mstevenson@centerforfoodsafety.org

Attorney for Petitioners