

November 26, 2024

To: USEPA

Subject: Docket ID number EPA–R04-OW-2024-0113; NPDES permit number FL0A00001

Please accept these comments on behalf of the organizations, signed below, on the draft modified National Pollutant Discharge Elimination System (NPDES) permit to Ocean Era, LLC (current permit number FL0A00001) (Docket ID number (EPA–R04-OW-2024-0113)). The draft modified NPDES permit authorizes the discharge of industrial wastewater from a marine net-pen aquaculture facility located in federal waters of the Gulf of Mexico approximately 45 miles southwest of Sarasota, Florida. The facility includes a support vessel and a single cage in a water depth of approximately 130 feet. The project would culture a cycle of approximately 20,000 Red Drum (*Sciaenops ocellatus*) and produce a maximum annual harvest of 55,000 lbs.

We note that EPA requests that comments on the draft modified permit be limited to only the four portions of the permit that have been modified from the draft permit. We intend to comment on two significant elements of the modified permit:

- 1) the maximum fish production level has been changed from 88,000 lbs to 55,000 lbs; and
- 2) a provision clarifying that the intentional or negligent release of produced fish is prohibited.

However, we also hereby incorporate by reference all prior objections to approval of this permit raised in the prior comment period(s), as well as the stayed litigation FOOD AND WATER WATCH, et al., Petitioners, v. U.S. ENVIRONMENTAL PROTECTION AGENCY, et al. (Case No. 22-1253 (consolidated with Case No. 23-1092)) over potential violations of the Clean Water Act. The limited scope of these alterations do not in any way remedy those permit failings, which continue to exist.

Maximum fish production level

The proposed facility will add nitrogen pollution from fish waste and uneaten feed to a region that already suffers from devastating red tide events, often linked to nitrogen. A reduction in the number of fish and the species raised under the draft modified permit does not change this in any significant way.

Scientists have found that red tides can last longer in coastal waters due to additional nitrogen from human activities.¹ The complex conditions offshore that lead to the start of red tide events are still being studied, but this proposed fish farm would be located within the offshore area where red tide events usually begin, leading to concerns that it could contribute to the formation, extent or duration of red tide events. According to the FL Fish and Wildlife Conservation Commission:

“We now know that Florida's red tides begin in nutrient-poor water 18 to 74 kilometers (11 to 46 miles) offshore.”² This proposed facility would be 45 miles off the coast of Florida.

The state of Florida is acting to reduce the flow of nutrients into coastal waters through basin management action plans (BMAP) for specific water bodies that outline actions to reduce nutrients. This includes a number of bodies of water that, while not immediately adjacent to the project area, are along Florida's west coast in the region of the proposed facility.

Florida is acting to reduce nutrients in coastal waters due to their negative impacts on water quality and ecosystem health.³ Florida's actions provide further evidence that any proposed open water finfish aquaculture project that could increase nutrients in surface waters, as the proposed facility would do, is contrary to these efforts and should not be permitted.

Prohibition on the intentional or negligent release of produced fish

While the draft permit forbids the intentional or negligent release of farmed fish due to the potential harm to wild fish, this permit condition cannot be met in an area so highly subject to hurricanes and tropical storms. Such storms are likely to damage or destroy cage systems and cause the release of farmed fish. These escapes of farmed fish are so common to fish farms worldwide as to be considered ubiquitous to the industry.

¹ *Nitrogen-enriched discharges from a highly managed watershed intensify red tide (Karenia brevis) blooms in southwest Florida*, [Science of The Total Environment Volume 827](https://www.sciencedirect.com/science/article/abs/pii/S0048969722012414?dgcid=author), 25 June 2022, 154149
<https://www.sciencedirect.com/science/article/abs/pii/S0048969722012414?dgcid=author>

² *About Red Tides in Florida*, FL Fish and Wildlife Conservation Commission,
[https://myfwc.com/research/redtide/general/about/#:~:text=We%20now%20know%20that%20Florida's,11%20to%2046%20miles\)%20offshore.](https://myfwc.com/research/redtide/general/about/#:~:text=We%20now%20know%20that%20Florida's,11%20to%2046%20miles)%20offshore.)

³ *Nutrient Basin Management Action Plans*, FL Department of Environmental Protection,
<https://floridadep.gov/dear/water-quality-restoration/content/nutrient-basin-management-action-plans>

A European study showing the impact and breadth of various farmed finfish escapes over a 3-year period in Europe. A total of 8,922,863 fish were reported to have escaped during 242 incidents in 6 countries.⁴

Recognizing the regularity of fish escapes from ocean-based net pens, the U.S. Council on Environmental Quality has stated that it “must be assumed that escapes will occur” from net pens.”⁵

Farmed fish are raised in hatcheries and are widely known to be genetically distinct from fish hatched in the wild, including the fact that the hatchery fish reproduce at lower rates than wild fish. This phenomenon of reduced fecundity of hatchery-raised fish in the wild has been reported for multiple species. Therefore, escaped fish could breed with wild fish and reduce the ability of wild fish populations to sustain themselves.

For example, scientists studying wild and hatchery salmon have found that “when hatchery fish are released into the wild, they generally have reduced reproductive success and decreased survival rates compared to their wild counterparts. This poses a risk to wild populations if hatchery-reared individuals interbreed with wild individuals.”⁶

Additionally, the release of hatchery fish could contribute to the spread of disease in native fish populations. As can occur in finfish aquaculture with any species, the red drum proposed for culture are known to be subject to disease caused or exacerbated by the unnatural conditions inherent to industrial-scale fish farms like that proposed, and such disease has been noted in red drum aquaculture in the Gulf of Mexico.⁷

⁴ *A pan-European valuation of the extent, causes and cost of escape events from sea cage fish farming*, *Aquaculture Volume 436*, 20 January 2015, Pages 21-26
<https://www.sciencedirect.com/science/article/pii/S0044848614005481>

⁵ Council for Environment Quality & Office of Science and Technology Policy, Case Study No. 1: *Growth-Enhanced Salmon*, at 23 (2001), <https://clintonwhitehouse5.archives.gov/media/pdf/salmon.pdf>; CEQ and OSTP Assessment: Case

⁶ *Cracking the Code: Scientists Use DNA to Examine Differences between Hatchery and Wild Chinook Salmon in Southeast Alaska*, NOAA Fisheries
<https://www.fisheries.noaa.gov/feature-story/cracking-code-scientists-use-dna-examine-differences-between-hatchery-and-wild-chinook#:~:text=However%2C%20when%20hatchery%20fish%20are,individuals%20interbreed%20with%20wild%20individuals.>

⁷ *First evidence of fish nocardiosis in Mexico caused by Nocardia seriolae in farmed red drum (Sciaenops ocellatus, Linnaeus)* J Fish Dis. 2021 Aug;44(8):1117-1130. doi: 10.1111/jfd.13373. Epub 2021 Apr 13. PMID: 33848372. <https://pubmed.ncbi.nlm.nih.gov/33848372/>

There is no doubt that the proposed facility will increase nutrient flows into adjacent surface waters, which could potentially exacerbate red tide events. It's also true that harm to wild fish from hatchery fish is probable due to the high likelihood of fish escaping from the facility and interbreeding with wild fish. For these reasons we ask that this permit be denied.

Sincerely,

James Mitchell, Don't Cage Our Oceans, jmitchell@dontcageouroceans.org

Christian Wagley, Healthy Gulf, christian@healthygulf.org

Cris Costello, Sierra Club Florida, cris.costello@sierraclub.org

George Kimbrell, Center for Food Safety, GKimbrell@centerforfoodsafety.org

Tarah Heinzen, Food & Water Watch, theinzen@fwwatch.org,

Marianne Cufone, Recirculating Farms, mcufone@recirculatingfarms.org

Alexander Bollag, GreenJustice, contact@greenjusticelegal.org

Matt DePaolis, Sanibel Captiva Conservation Foundation mdepaolis@sccf.org

Abbey Tyrna, Suncoast Waterkeeper, executivedirector@suncoastwaterkeeper.org

Michael Swistara, Animal Legal Defense Fund, mswistara@aldf.org