



## Natural Resources Council of Maine

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Mr. Gregg Wood  
Department of Environmental Protection (DEP)  
Via Electronic Mail

October 29, 2018

RE: Whole Oceans Bucksport  
Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0037478  
Maine Waste Discharge License (WDL) #W009190-6F-A-N  
Proposed Draft Permit

Dear Mr. Wood:

I am writing on behalf of the Natural Resources Council of Maine (NRCM) in opposition to the draft permit for the proposed Whole Oceans facility in Bucksport. NRCM recognizes the potential of land-based aquaculture to reduce the environmental damage associated with net pen aquaculture by reducing escapees, pollutant discharge, and the use of chemicals to control parasites such as sea lice. However, we cannot support this permit as it currently stands for the following reasons:

**1) The proposed levels of BOD, TSS, and nutrient discharges are too high (Special Condition A (1-3)).**

This became clear after we reviewed the application<sup>1</sup> for the proposed Nordic Aquaculture salmon facility in Belfast. That facility, although much larger, has proposed to meet far lower license limits than the Whole Oceans facility. For example, Whole Oceans has proposed TSS and BOD limits of 4654 pounds per day for its phase three permit for production of 10,000 to 20,000 metric tons of salmon annually. In contrast, Nordic Aquaculture has stated it would discharge only 407 pounds per day of TSS and 356 pounds per day of BOD at an annual production rate of 33,000 metric tons of salmon. For nitrogen, Whole Oceans has proposed a discharge level of 1865 pounds per day for its phase 1 operations, which would produce less than 5,000 tons of salmon annually. In contrast, Nordic Aquaculture has stated it would discharge only 1480 pounds per day of nitrogen at its full production level of 33,000 tons per year annually.

If DEP accepts Nordic Aquaculture's numbers as true, it should not approve the Whole Oceans permit as written. Instead, DEP should at least require Whole Oceans to meet comparable numbers to those Nordic Aquaculture has proposed. DEP may also need to do further research on what it is reasonable to expect land-based aquaculture facilities to discharge.

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<sup>1</sup> Proposed discharge limits for Nordic Aquaculture come from the transcript of their October 4, 2018 public meeting in Belfast, which Nordic Aquaculture attached to its recent application for a Maine Pollutant Discharge Elimination System permit. Application and supporting materials accessed at [https://www.maine.gov/dep/ftp/projects/nordic/MEPDES%20Permit%20Application\\_Final\\_Oct%202019,%202018.pdf](https://www.maine.gov/dep/ftp/projects/nordic/MEPDES%20Permit%20Application_Final_Oct%202019,%202018.pdf), P. 148.



**2) The proposed level of fish escapees is unacceptable (Special Condition L).** DEP should require Whole Oceans to prevent the escape of any fish and report the escape of even a single fish.

**3) DEP should require year-round monitoring and limits for nutrients (Special Condition A (1-3)).** Nutrients may accumulate in sediments in winter months, and this accumulation may affect water quality in warmer months.

**4) DEP should require monitoring at at least one site very close to the Whole Oceans outfall (Special Condition G).** The site should be at least as close to the Whole Oceans facility as Monitoring Station P3 In Attachment D is to the Bucksport sewage treatment plant. Monitoring near the proposed outfall should include searching for *beggiatoa* mats in its vicinity. NRCM understands that significant *beggiatoa* growth has occurred under salmon pens when they are poorly run.

**5) DEP should require Whole Oceans should monitor all parameters it can with sondes rather than just turbidity (Special Condition G).** With the right probes, sondes can monitor at least temperature, pH, and dissolved oxygen, and DEP would benefit from having continuous monitoring of these parameters.

In closing, NRCM sees potential benefit form land-based aquaculture when compared to net pen aquaculture. This draft permit, however, raises more questions than it answers, and we cannot support it in its current form.

Sincerely,



Nick Bennett  
Staff Scientist

