

July 11, 2019
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Board of Environmental Protection
c/o Ruth Ann Burke
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In re: Nordic Aquafarms

Name of Petitioner: Lawrence Reichard

Group or Organization Affiliation: None

Description of the effect of the proposed activity on the petitioner and the manner in which the petitioner is or may be, or is a member of a class which is or may be, substantially and directly affected by the proceeding:

First and foremost, I have been a resident of Belfast for more than five years, and I have been a resident of midcoast Maine for most of the last 35 years. I am also a swimmer. I swim in, among other places, the small beach by the Boathouse in Belfast and from the Northport pier, which lies in very close proximity to the effluent discharge pipe proposed by Nordic Aquafarms.

As a result of all this, I would be directly affected by Nordic Aquafarms' plans to discharge into Belfast Bay 1,600 pounds of nitrogen and 7.7 million gallons of effluent every day. One reason I live in Belfast is the opportunities for swimming in natural waters that Belfast provides, and those opportunities would be destroyed by such large amounts of pollution and discharge.

I am also an avid hiker, and another reason I live in Belfast is the hiking opportunities that Belfast affords. Chief among those opportunities is the beautiful Little River Trail.

Nordic's fish tanks – the largest in the world – would be built just a few yards from the Little River Trail, thus destroying the trail aesthetically and as a true woods experience.

Nordic's proposed project would also clearcut and pave over dozens of acres of what are affectionately known as the Belfast Woods. These beautiful woods belong to the people of Belfast. They are our natural heritage, our public commons, and as such they should not be destroyed for the benefit of a for-profit corporation or for the benefit of high-end consumers hundreds of miles away.

I am a human being living in a world that is just beginning to be wracked and devastated by the effects of climate change. If we, as humans, are to stave off climate disaster, we must make adjustments to how we live our lives. One of those adjustments is in the way we produce our food. Nordic Aquafarms claims that its land-based fish-farm model is an efficient, green and sustainable way to produce protein, but this is false.

The fishmeal fed to farm salmon is approximately 70% soy, and that number has been climbing. The bulk of soy used in fish farms comes from Brazil, where the Amazon forest - “the world's lungs” - is being destroyed to make way for soy farms, and there soybeans are laced with pesticides. And large amounts of carbon are produced by transporting that soy to fish farms.

The fishmeal used in fish farms also contains what are known as forage fish. These are small fish that form the bottom of the fish food chain. If forage fish populations are harmed or wiped out, then the rest of the fish food chain is harmed or wiped out. And that is exactly what is happening. Peru, the world's largest forage fish producer, has had to close its vast anchoveta harvest because of overfishing for the benefit of foreign fish farms.

And there is an 84% protein loss from forage fish to fish-farm final product, giving lie to the assertion that land-based fish farms are efficient protein producers.

Then there is the destruction of the Belfast Woods. This would destroy 14-18 tons of carbon sequestration per yer.

As a person living in a world gravely threatened by climate change, I would be directly affected by the propagation of this inefficient, environmentally destructive and unsustainable form of food production.

As a resident of midcoast Maine and as a salt-water swimmer, I would be directly affected by an effluent discharge pipe that would attract lice, which would then infect aquatic life in the vicinity of, and passing by, Nordic's effluent discharge pipe.

As a resident of midcoast Maine I would be affected algae blooms directly caused by the introduction of 1,600 pounds of nitrogen per day.

And as a resident of midcoast Maine I would be affected if there were fish escapes. Fish that have escaped from land-based fish farms can mate with wild fish and create offspring that are unable to survive the rigors of open-water life. Escaped fish also compete with wild fish for spawning grounds; they destroy the spawn of wild fish; and they infect wild fish with diseases to which wild fish have never been exposed and are thus unable to defend against.

Nordic Aquafarms has alternately said that fish can and cannot escape from land-based fish farms. As a freelance journalist, I have documented how Nordic Aquafarms misled the Maine Legislature's Joint Standing Committee on Agriculture, Conservation and Forestry by saying that fish cannot escape from land-based fish farms – and my documentation of this is attached to this application.

Escaped fish affect me because they affect the entire ecosystem.

For all these reasons, I ask that you grant me intervener status.

Thank you,

Lawrence Reichard

To members of the Joint Standing Committee on Agriculture, Conservation and Forestry:

Greetings. As you know, on February 28, the Agriculture, Conservation and Forestry Committee held a public hearing on LD 620. At that hearing, I testified that I had, as a journalist, spoken with aquaculture experts who said that fish can escape from land-based fish farms and by doing so wreak havoc with wild-fish populations. I also said that Nordic Aquafarms, which wants to be build large land-based fish farm in Belfast, had itself said that such escapes were possible.

After I testified, Marianne Naess of Nordic Aquafarms testified, and when she finished her prepared remarks, Rep. Hickman asked Ms. Naess whether fish could escape from land-based fish farms. Naess said, unequivocally, "No."

As this answer by Ms. Naess directly contradicts what I said in my testimony, I think it's important to set the record straight, which I have done below in four parts.

1. The first part is a video of a Nordic Aquafarms public information meeting held May 9, 2018 in the University of Maine Hutchinson Center in Belfast. In the video I ask Nordic Aquafarms about the potential for fish escape, and Nordic Aquafarms CEO Erik Heim answers by saying, in part, that fish escape is indeed possible. The entire exchange takes less than two minutes and it can be found at 1:26:30 of the video. Here is the link:

<https://belfastme.swagit.com/play/05102018-530>

2. The second part is a statement, quoted below and made by Nordic Aquafarms in a Question and Answer section of the company's website. While Nordic's statement suggests that the risk of fish escape is unlikely, it nonetheless establishes that escape is possible, which conflicts with what Nordic's Marianne Naess stated in her testimony at the February 28 public hearing. From the Nordic Aquafarms website:

What is the risk of fish escape?

There is virtually no risk. We are farming Atlantic Salmon, in safe indoor systems. Land-based salmon farming is widely recognized as a solution to the problem of fish escape, due to its location on land. Bad weather and storms will not result in escape. A number of mechanical barriers in the indoor production modules prevents escape. For this reason, land-based operators internationally are allowed to work with a range of species that are not native to their location, as is the case with our Danish facility Sashimi Royal working with Yellowtail Kingfish. These species would normally be forbidden for ocean farming in many locations.

The Question and Answer part of the website can be found at:

http://www.nordicaquafarms.com/portfolio_page/belfast-questions-and-answers/

3. The following link is to a video of a February 21, 2018 Nordic Aquafarms public information meeting, also held at the University of Maine's Hutchinson Center in Belfast. At 12:00 minutes into the video, Nordic Aquafarms CEO Erik Heim states that it would be hard for fish to escape from Nordic's proposed Belfast fish farm - but he does not rule out the possibility. (The segment in question lasts less than 30 seconds.)

<https://belfastme.swagit.com/play/02212018-1358>

4. The fourth part is the below excerpt from an email I received from Anders Karlsson-Drangsholt, an

aquaculture expert with the Bellona Foundation in Oslo, Norway. This statement also suggests that fish escape may be unlikely, but it too establishes that fish escape is nonetheless possible.

Fish can escape from land based facilities. Human errors and technical issues can happen, despite implemented security measures and automated systems. The advantage of land based systems are less potential for mechanical damage from operations in the net pens and easier installation of secondary barriers to escape. However, the statistics from Norway clearly show that fish also escape from land based facilities. Land based facilities are the norm for producing small salmon for ongoing in the sea, and escape events occur from time to time in those facilities in Norway.

Caveat: The Nordic Aquafarms technology may be different from the normal land based facilities used in Norway. If they don't have any substantial water outlet to a water body, the effect of any escape events will be negligible as escapees will simply die after exiting the facility.

Given all this, the evidence is clear and unequivocal: fish can escape from land-based fish farms, and even Nordic Aquafarms admits this. Thus I urge you to not take at face value the statement made by Marianne Naees of Nordic Aquafarms at the February 28 public hearing on LD 620 to the effect that fish cannot escape from land-based fish farms.

And to recap my testimony, this is important because fish that escape from land-based fish farms can and in all likelihood will breed with wild fish and create offspring that are weaker and less able to survive in the rigors of open water. They will also compete with wild fish for prime spawning grounds; they will in all likelihood destroy wild-fish eggs; and they can spread to wild fish disease that are unknown to wild fish and for which wild fish have little or no resistance.

Thank you very much for your time and attention. Please contact me if you have any questions.

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