

Burke, Ruth A

From: Jeff Shula <shulafamily@gmail.com>
Sent: Monday, February 17, 2020 11:35 AM
To: DEP, Nordic Aqua Farms
Subject: nordic aquafarms

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To BEP members:

As residents of Belfast, we are very concerned about the potential impacts of Nordic Aquafarms' proposal to build a facility here.

The proposed project would likely adversely affect the bay through discharges and raising water temperatures at a time when the Gulf of Maine is already seeing exaggerated effects of climate change. The proposed buildings and associated power use also would leave a huge carbon footprint (see below), using sensitive riverine wetlands in the process.

Following is a list of the many negative effects that could be produced. Any potential benefits of the plant in the way of producing food and jobs is far outweighed by these threats to the environment. Nordic's plan is just too big for this area. Please vote to deny the permit(s).

Thank you,
Jeff and Kris Shula, 11 John Robinson Way, Belfast, Maine 04915h

- Nordic will discharge 7.7 million gallons of effluent into shallow waters west of Islesboro every day directly into lobstering grounds, and endangered salmon and shortnose sturgeon habitat.

Nordic's discharge will create a continuous plume of approximately 108 million gallons of wastewater.

- Nordic's daily discharge will contain 1,484 pounds of nitrogen, 408 lbs of solids (fish feces and food waste), 13 lbs of phosphorous and 0.2 lbs of Ammonia.

- Testing for pharmaceuticals or contaminants usually associated with fish feed and disease prevention are not being suggested.

- Excess nutrients in seawater can cause algal blooms leading to fish-kills and damage to local, small-scale aquaculture operations to the south, and fouling of near shore water and beaches.

- Nordic's limited monitoring indicates that the area near the discharge may be at its limit for nitrogen, and diminished oxygen levels.

- Pipeline construction required for Nordic's three pipelines (two intake and one outflow) could stir up and re-suspend mercury deposited 50 years ago by HoltraChem.

Sediment samples taken found at least one with a mercury concentration of 239 nanograms/gram (ng/g).

Intake pipes will also suck in and kill small marine creatures and fish eggs.

- The factory is massive. It equals the size of Gillette Stadium, Fenway Park, and two TD Gardens. It requires 8 diesel generators, each with a 67 foot smoke stake, and an on site cement plant, and waste disposal facility.
- Water temperatures are rising. Nordic's discharge will be on average over a year, 10 degrees C (18 degrees F) warmer than the bay.

This will add to rising water temperatures which are already impacting lobsters, and marine life in general. Warm waters with effluent also promote the growth of viruses and pathogens. Climate change requires that we do not add any additional heat to the ocean and bays. The heat capacity of the 7.7 million gallons/day of effluent being 18 degrees F warmer corresponds to the heat generated by 10,000 gallons of gasoline a day.

- What the salmon eat, they will excrete. Nordic calculates it will need hundreds of thousands of pounds of fish food a day.

Nordic has not supplied any information on specific fish food. If we do not know what they will be fed, we do not know what will accumulate in their flesh, or concentrate in the solid and liquid wastes produced. No viable alternatives yet exist to replace the use of at least some amount of forage fish in the feed. Forage fish are staple foods for many poor people, and indispensable to marine life. Current fish foods contain toxins and soy.

- Nordic's discharge will also contain vaccines, antibiotics, and other drugs, along with industrial cleaners. Many of these are toxic to both fish and humans. They will not be fully filtered out by the filtration and UV systems.
- Nordic is carbon intensive – a business-as-usual model. The factory will have a huge carbon footprint. It will be a large, net energy consumer, and most of the energy used will be carbon-based.
- The factory will add between 550,000 and 759,000 metric tons of carbon dioxide equivalents to the atmosphere each year. This corresponds to adding 120,000 to 165,000 cars to our roads.
- Electricity use alone will equal that of Belfast, Northport, Lincolnville, Camden, Rockport and Rockland combined.
- It will make meeting Belfast's climate targets impossible. It will make meeting state targets very difficult. It will place an unfair burden for reductions on residents and businesses.
- Forest liquidation, and the removal of all soils, 8 to 20 feet deep, will equal a loss of 13,465 metric tons of carbon above and below ground.
- The Little River habitat is classified as a significant Wildlife Habitat under Maine's Natural Resources Protection Act. This riverine habitat shelters:

19 wetlands, nine of which are classified as Wetlands of Special significance, and includes Tidal Water/Wading Bird Habitat (TWWH), and Inland Waterfowl/Wading Bird Habitat (IWWH).

If the Nordic factory gets built 10 wetlands and 4 streams will be eliminated, as will a maturing forest, and meadow lands that provide essential habitat for birds, bats and numerous other creatures.

The forest is sequestering approximately 13,465 metric tons of carbon above and below ground (in the trees, the soils and wetlands).

Currently the forest is absorbing about 42.9 metric tons of carbon each year.

State Endangered Little brown bats, and Eastern small-footed bats, including the Federally threatened Northern Long-eared Bats and State Endangered are *expected* to be at this site, but no studies were conducted.

14 bird and bat Species of Concern and 9 Species of Greatest Conservation Need are expected to be in the forest and using the shoreland, but no onsite studies have been done. Federally protected Bald Eagles are known to be present at the site.

- No comprehensive studies were conducted for additional mammals, amphibians or reptiles.

3 Attachments