**From:** John Krueger [mailto:jkrueg1@gmail.com]   
**Sent:** Wednesday, October 17, 2018 8:33 AM  
**Subject:** Nordic AquaFarm Applications

Dan, I am a Northport resident and am concerned that the large salmon farm proposal is providing Belfast with all the tax benefits and Northport and Isleboro most of the risk.  I have attached a short summary of some of the concerns that have recently come to light about the waste water discharge.  There is even some concern about the availability of water for Northport residents.

I'd be delighted if you would make some reference to these issues as there may be time for more people to get involved.

Your readers might also wish to join a group of scientists and educators that can be accessed through Upstream Watch,

[www.upstreamwatch.org](http://www.upstreamwatch.org) 

Contact me if you have any questions

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Some information about the proposed Nordic Aquafarm waste water.

It is difficult to provide exact information about much of the NAF waste water effluent because the salmon farm is experimental in nature, with many unknowns. Unknowns include the feed itself, the filtering systems, the effects of size (there are few if any of this size anywhere in the world at this time), the use of antibiotics and pharmaceuticals to reduce disease, conditions for disposal of solid waste, and the ability to breakdown pollutants in the water discharge.

What we understand at this time:

1. 7.7 million gallons/day of effluent will be discharged somewhere between Northport and Islesboro, less than perhaps as little as a ½ mile from the Little River outlet. 7.7 million gallons of day will also be required in the input.
2. Water source is a concern to Belfast neighbors as documents signed by the City of Belfast and the Public Utilities Commission state that the industry has first priority should water resources prove insufficient.
3. The effluent will pass through membrane filters that should remove most larger bacteria and a large percentage of solids. The filters will probably not remove viruses or dissolved chemicals. UV light may or may not destroy viruses, but have little effect on chemicals
   1. We do not know all the chemicals (cleaning agents, disinfectants, and pharmaceuticals etc.) that will be discharged. Testing for toxics is not being offered in the permit application.
   2. The amounts of Nitrogen discharged will be 16 times that of the City of Belfast

* Phosphate 12.75 lb/day NAF has attempted to compare this number to 10 lawns, NO!
* Nitrogen 1477.75 lb/day
* Total suspended solids. 406.5 lb/day
* Biological Oxygen Demand 356.4 lb /day
  1. Pheromones (a chemical substance produced and released into the environment by an animal, especially a mammal or an insect, affecting the behavior or physiology of others of its species) that salmon produce would not be removed and their effects on other organisms is poorly understood. There is some scientific evidence that a pheromone would seem like an “odor” to crustaceans and repeal lobsters.
  2. There is little information regarding the effect of this effluent on other aquatic life.

1. Currents and the dispersal of the effluent is not totally understood, only untested models have been offered at this time. There is modelling that suggests that the effluent will not be rapidly flushed out of the bay. The position of the effluent pipe is being changed from earlier locations to be shorter and closer to Northport due to costs.