

Planning Board Meeting
Belfast, Maine

Nordic Aquafarms Inc
June 26th, 2019



Our Fredrikstad Seafoods Facility



What is the Belfast proposal really all about?

- A project that takes leaps in defining a new generation of food systems and ocean protection standards in the US and internationally – with tried and proven technologies.
- A project that ultimately will produce approx. 7 percent of US salmon consumption on a 30-acre footprint.
- A project that connects Maine and Europe's seafood industries with many more opportunities to come.
- A project that has spent considerable resources on achieving local low-impact solutions.
- Many economic development benefits for Belfast and Maine.
- A production approach supported by major environmental organizations in the US.



Several regional and national NGO's support the advancement of Land-based RAS technology as a sustainable method for food production. In addition, Conservation Law Foundation and Gulf of Maine Research Institute have written project specific letters of support for the Nordic Belfast proposed project.

Benefits to Belfast and Maine

- A multi-phased development that the community can follow step-by-step
- Approx. 100 direct jobs + many indirect jobs
- Workforce development initiatives
- Good paying full-time jobs, good benefits, and career opportunities
- Tax revenue from a 500 Mill USD investment
- Upgrade of the Water District infrastructure
- Various community support initiatives
- Attraction of additional investment projects to Maine, and possibly Belfast

Types of jobs

Engineers
Biologists
Quality managers
Production staff
Processing staff
Maintenance staff
Administrative staff
Vocational jobs
Internships

Project Layout



Buffers, footprint and viewsheds all maintained since first submission.



Only significant revision is a set of taller chimneys added at the request of DEP to allow for better emissions dispersal.

Visual Assessment

View From US1

Southern Gateway to Belfast



As stated upon submission, there is no adverse impact to the protected view shed along Route 1 at the Little River Bridge. Rendering on the right has not changed throughout the project

Architectural Narrative

Entry to Site



Architectural Narrative and Treatment

Building 8



Architectural Narrative and Treatment

Building 9



Architectural Narrative and Treatment

Trail Parking
towards
Building 8



No changes have been made to the profile or footprint of Building 8 (nor any other building), closest new structure to Route 1

Architectural Narrative and Treatment

Trail Parking
towards
Salmon Pond and
Building 10



Visual Impact Assessment: Additional Viewpoints

View: Perkins Road East
Between 34 and 38 Perkins



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Visual Impact Assessment was revised in Dec, 2019 to indicate location of the chimneys on building 5. Buffer shown on “day one” before understory and trees have grown.

Visual Assessment

View from Perkins Road
Between 38 and 52 Perkins



Visual Assessment

View from US1
Little River Church



Construction Planning and Management

CIANBRO

- Intake/Discharge pipe installation
- Saltwater pump station
- History of successful heavy civil & marine projects
- Local Maine General Contractor

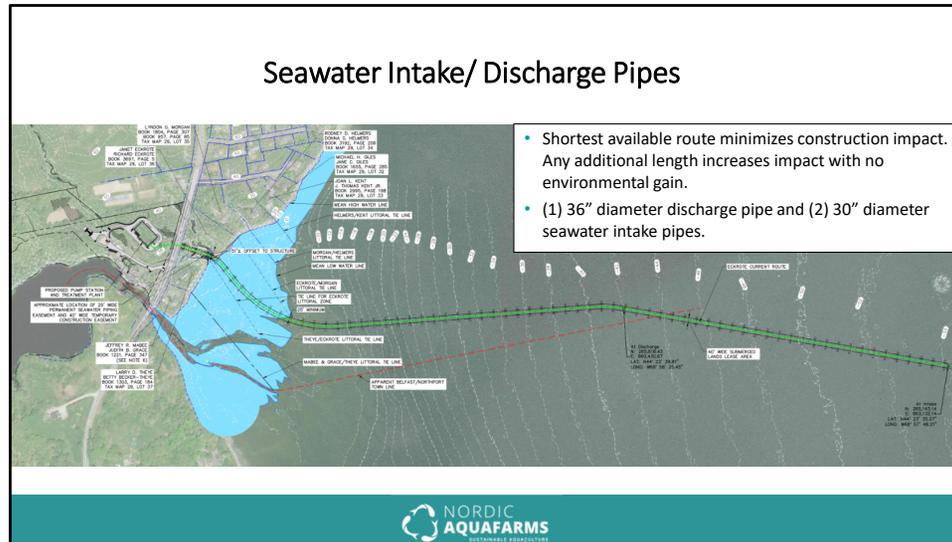
Gilbane

- Upland site Construction Manager
- Procurement of local trade contracts
- Industry leader in Safety and Sustainability
- Landry/French local Maine partner

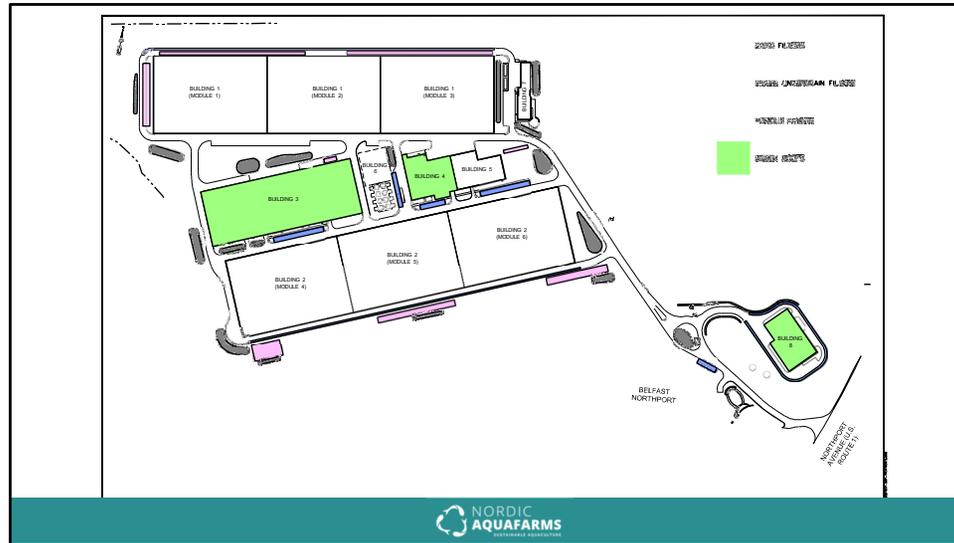


Construction teams have been taking calls from local subcontractors for over a year and are looking forward to getting started.

Seawater Intake/ Discharge Pipes



The pipe route and length submitted in the applications have never changed. Preliminary routes for the DEP required for the alternative analyses were considered earlier and were eliminated prior to application submissions. Discharge and intake locations were identified in October, 2018 and have not changed.



Green roofs and all low-impact stormwater treatment systems have remained the same.

Stormwater

- 95.5% (95% is requirement) treatment of runoff from new impervious surfaces
- 86% (80% is requirement) treatment of all developed areas
- Proposed treatment of stormwater meets Maine DEP's Stormwater Management Design Manual and Chapter 500 of Maine Regulations for stormwater.



Water will come from four sources

Belfast Bay ➤ 3,925 gpm

Belfast Water District ➤ 500 gpm

➔ **Wells on Property** ➤ 455 gpm

➔ **Surface water** ➤ 250gpm



Water withdrawal limits proposed in the application have remained consistent and allow the proposed development a resilient combination of sources for all needs. Flexibility allowed by the processes and sources will ensure the ability of the applicant to proceed well within proposed limits at all times.

Finding the truth!

<u>Recent Statements</u>	<u>Facts</u>
<ul style="list-style-type: none"> • Nordic's application has been fraught with changes and lack of clarity. Many changes to DEP applications with no notice to City or other parties • Pipe route and length has changed • Solar array was in, then out, then in again. • Water usage projections keep changing • NAF not advising City of Belfast of revisions 	<ul style="list-style-type: none"> • As with any complex project, the DEP has asked the applicant for several clarifications. • The pipe length and layout <u>has not changed</u> since preliminary alternative analysis was complete. • Solar arrays <u>have always been</u>, and still are, part of the project. • The water usage projections in the application <u>have never changed</u>. Multiple sources provide resiliency and flexibility in operations • All DEP RFI responses were issued to the City. In two instances these requests resulted in design changes to improve the project: <ul style="list-style-type: none"> • Routing of existing storm water from above the site was revised per DEP recommendations, all documentation is on Planning Dept. site. • Air emissions RFI response changed chimney heights and is on Planning Dept. site. Revised VIA presented.



Despite public statements to the contrary, the project elements have remained unchanged throughout the application review to date, with the exception of some minor revisions at the request of DEP to improve the project. This is indicative of a complete, well designed project which meets regulatory requirements.

Finding the truth!

Recent Statements

- Inappropriate level of detail in the discharge modeling
- Nordic lacks the technical capabilities to operate such a facility

Facts

- Modelling completed for this application was performed based on best procedures in place today for all discharge permits. The DEP discussed and agreed with modelling procedures. Project intervenors' experts state that the applicant should have used other modeling that the expert is currently developing *and is not yet available*.
- Nordic Aquafarms developed and currently operates 2 of the worlds largest RAS facilities for Salmon and Yellowtail in the world and have more land-based production capacity than anyone in Europe.
- NAF has 55 employees with broad cross functional experience, including 15 in-house engineers.



Finding the truth!

Recent Statements

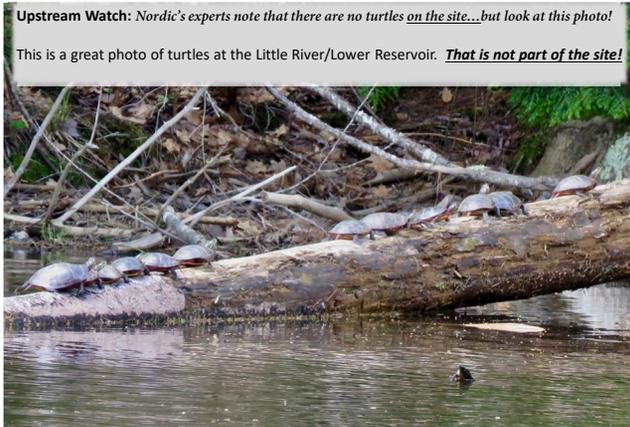
- Nordic's facility will greatly impact the gateway to the City
- Soil Conditions never considered
 - Chose site with poor soils
 - Bring in fill to replace poor soils



Facts

- A Visual Impact assessment has been completed and presented that shows the facility to blend with the character of the area, with no impacts to the view of significance at Little River
- There are no perfect development sites. The soils at the proposed site are typical of the area and were not a surprise. Very few areas can handle industrial building loads.
 - Excavation activities are considered in our planning, traffic, and schedule calculations
 - Building design is adjusted to lower tanks and nearly eliminate need for replacement soils
 - Site grading designed to limit use of retaining walls, and to best match existing general slope of the site

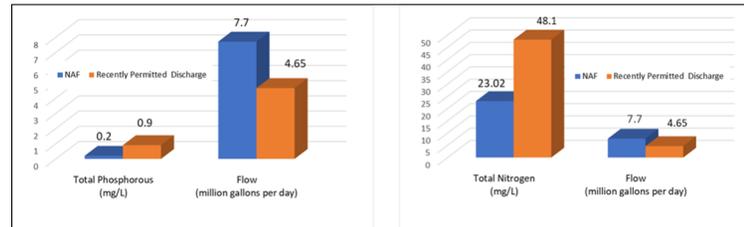
Finding the truth!



There are turtles and other species in the reservoir that are noted by parties in interest. It is important to note that the project Natural Resource Report lists species noted *on the proposed development site*, which does not include the reservoirs.

Finding the truth!

NAF discharge comparison

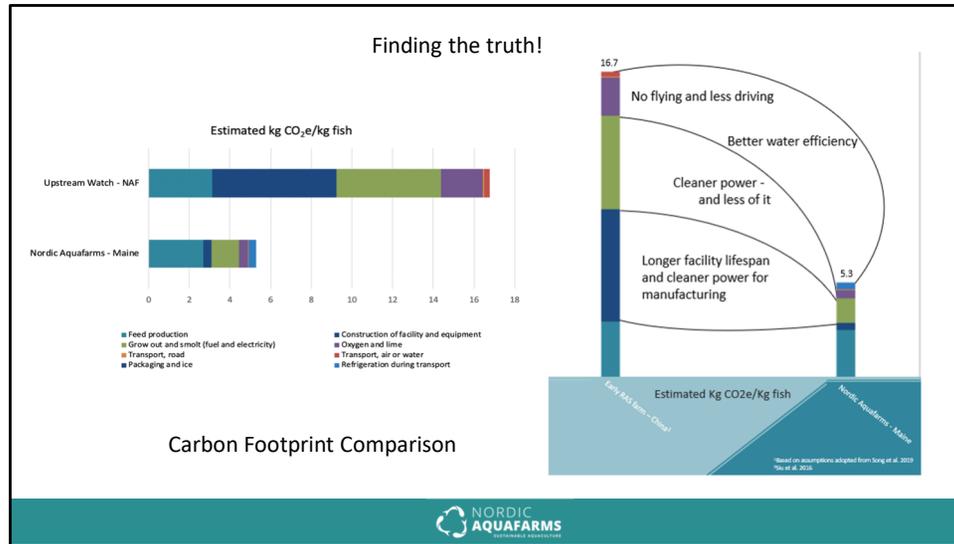


33 MT of product for NAF vs. 5 MT for competitor

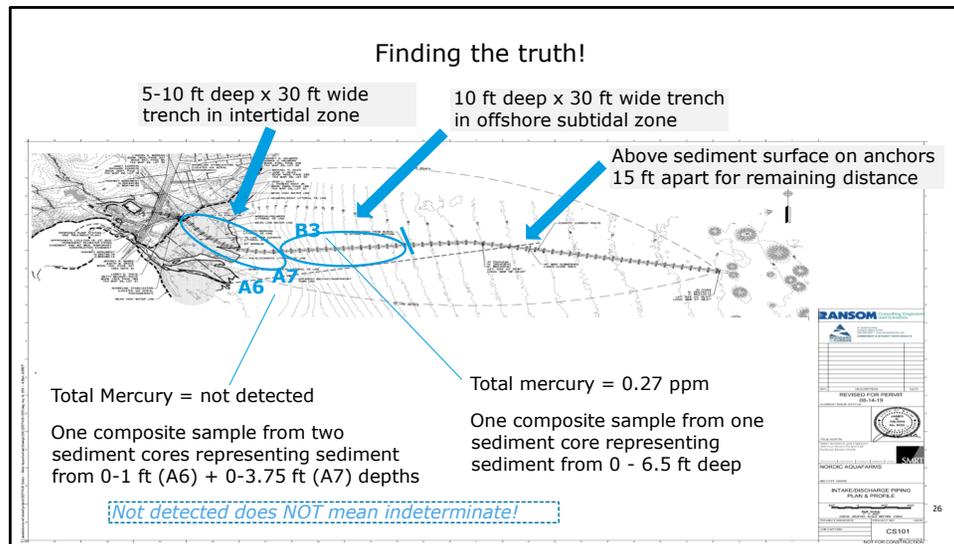
**That means more than twice the nutrients for 1/6 of the production
Multiply orange stacks by 6!**



Compared to recently approved discharge licenses, NAF is an order of magnitude ahead for nutrient treatment and removal, as well as much better water use efficiency.



Parties of interest submitted testimony on their own carbon footprint model that used several incorrect parameters to model the NAF project. Bottom line is that this project is carbon reversing compared to the current fresh fish model for the US.



Preliminary samples were taken at both an alternate route as well as the final pipe route. Mercury levels found to date using standard testing procedures do not indicate Mercury levels that reach action limits. Opponents have used interchangeably the thresholds for soil contamination, and that of readings in seafood tissues. These are different conditions and are not comparable.

Thank you for your time



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