Andrew E Stevenson "Risky Business, or Remember Beta-Max"

February 11, 2020 comments to the Board of Environmental Protection

Good evening, BEP members, staff, and supporting state agency representatives. And good evening to my fellow citizens here tonight and listening remotely. Thank you for the opportunity to share my concerns with you.

To begin, I want to acknowledge that we are all living today on the occupied lands of Wabanaki Nation, one of the continent's First Nations and I hope to respect and honor that fact with my remarks tonight.

Here is my major concern about Nordic's plan and the permitting processes it depends on. RAS technology is evolving fast. It is one of the youngest branches of commercial aquaculture. Its long-term impacts on surrounding environments is unknown. And no commercial facility of the size and design that Nordic has chosen exists anywhere.

I submit that you cannot reliably assess the long-term impacts of their proposed factory without the right yardstick. This Board, the DEP, and the other state regulatory agencies with responsibility over such enterprises need to be extremely cautious when deciding on RAS applications.

To make matters worse, the track record for land-based RAS proposals is not encouraging. A Nature Conservancy report listed 16 failed projects so far.[1] The authors examined the reasons for each failure. They found that operational and management expertise are critical, warning that financial and technical success depends on – quote –"...modular systems allowing for phased project development and system redundancy in case of failure, technology validation via subscale demonstration projects, and proximity to major markets." Nordic's plan ignores this warning.

Nordic's construction plan is an "all or nothing" strategy. It wants to build *all* its Stage 1 facility for the full-size factory, then build *all* of Stage 2; connect them together; turn on the switch; and see if it – and the team operating it – will all work together without damaging the surrounding community or polluting the Penobscot Bay.

What Nordic should have presented is a plan to build an end-to-end, pilot-scale operation of modules that would complete one working example of a system

that can successfully take a salmon egg and grow it to a market-size fish. Once the bugs have been shaken out of "Version 1.0," so the speak, Nordic could build out the 2nd end-to-end module.

I urge you to postpone any decision on the various permits before you until Nordic provides a better plan, a substantial financial performance guarantee, and a suitable decommissioning bond.

Thank you for your time and attention.

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[1] O'Shea, T., Jones, R., Markham, A., Norell, E., Scott, J., Theuerkauf, S., and T. Waters. 2019. <u>Towards a Blue Revolution: Catalyzing Private Investment in Sustainable Aquaculture Production Systems</u>. The Nature Conservancy and Encourage Capital, Arlington, Virginia, USA.] Link to it on line at: https://www.nature.org/content/dam/tnc/nature/en/documents/TNC EncourageCapital TowardsABlu eRevolution FINAL.pdf