

# **MY OPINION ON THE PROPOSED OYSTER FARM DEVELOPMENT IN ANTIGONISH HARBOUR**

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The proposed oyster farm project has been brewing in our community for several years. I was a latecomer to the process and engaged peripherally with the Friends of the Antigonish Harbour (FOAH) at the outset. Believing that due process had not been properly followed, I wrote a demanding letter and sent it to the Minister of Fisheries and Aquaculture, MP Sean Fraser, Antigonish MLA Randy Delorey and others in the political realm. I also posted my letter on my Facebook page asking readers to respond as they saw fit.

After some external comments I recognized that my letter was written in haste – a reaction to information received at face value. Once I took it upon myself to research the project further, my view of the project was altered significantly. For this reason, I feel it's my responsibility to weigh in on the issues facing the proponent of the project, Town Point Consulting and the Porter family and the concerns of the Friends of the Antigonish Harbour.

In my opinion, the FOAH have taken on the cause to protest the oyster farm with the best of intentions. Following their website, I was convinced that some serious issues needed to be addressed and that there were strong reasons for concern. After sending off the letter, I prepared three pages of questions and went to visit the Porters at their home (and site) of their business - Town Point Consulting and the proposed oyster farm.

The Porters welcomed my friend and I and gave very generously of their time to address my questions and provide further insight into the project. Ernie Porter walked us through parts of the application processes and there appeared to have been one misunderstanding that has captured the ire of many opponents. It pertains to the application that was submitted for the nursery project describing a land-based oyster seed nursery to be constructed on the Porter property. Simply put, the misunderstanding that emerged led to three pipes being laid by TPC when the approval process subsequently only allowed for two.

Here's how it worked: The components of the project include the water flow rate, maximum mass of oysters, location and footprint of the facility, the biophysical characteristics of the water source and how the facility would operate. The drawings provided with the application showed the general arrangement of the proposed facility which was constructed in accordance with the proposed general arrangement. The important factor regarding the number of supply pipes is that the water flow rate is unchanged. The government is aware that the facility is served by three pipes. Officials from three government departments have been on site, reviewed the construction, and have expressed no concerns.

We toured the facility on land and viewed the blueprints and diagrams and various and sundry paperwork that supported the project. Most reassuring was the design of the harbour portion of the farm that features rotating cylindrical bins or growth units that are called BOBRs (Benefits of Being Round) that barely show from the surface of the water. It turns out that Ernie Porter (a retired engineer from Halifax) worked with Philip Docker (a veteran oyster farmer) to design a new system that has the potential to be an industry unto itself with a view to dramatically improve conventional oyster farm design and practices. The BOBR's are more economical and less obtrusive in the water, and are considerably more efficient in terms of labour. The business plan includes manufacturing BOBR units in Nova Scotia and exporting them worldwide.

This is how Ernie Porter described the system:

“We chose a cylindrical form mainly because it would be easily mechanized and designed an economical growth unit, we call BOBR (Benefit Of Being Round). It is deployed on two static lines instead of one, which significantly reduces risk of storm loss. The units are suspended by placing one or more of our BOBR floats within the unit. BOBR is more dynamic in response to wave action causing motion that both helps with optimal shell shape and in reducing shading impact on sea plants below. This enables both buoyancy adjustment and very low profile – 2-3” vs 9-16”. With our BOBR system, all husbandry tasks may be conducted on the lease sites eliminating repeated shore trips for tumbling and sorting. Our machine is essentially a floating work platform that we call *Oyster-Matic*. It simply slips under the two static lines and drives slowly along the lines forcing BOBR units to successively rise up a ramp, cross a worktable that runs the length of the vessel, and drop down another ramp back into the water. In a single pass of *Oyster-Matic*, oysters in BOBR units can be tumbled, de-fouled, sorted, or harvested depending on the current task required. This vessel also very easily performs the sinking and refloating operations necessary to avoid winter ice and intense storms. During overwintering, the BOBR lines are weighted and sunk but the growth unit remains buoyant so the area occupied on the seafloor is much reduced and less impactful.”

As someone who has made her career promoting entrepreneurship and economic development, it was not lost on me that this oyster farm is a demonstration project that has the potential to become an industry unto itself with far-reaching and positive consequences. In Ernie Porter's words he explains;

“With this system, the farmer isn't providing all the physical effort, instead he is operating a machine that is doing most of the work. By using heated seawater for de-fouling instead of the usual air-drying process, this system reduces the task to one minute per unit from the two days currently required in conventional oyster farming practices. Thereby, farm productivity is increased by about 15% while enabling greater frequency of de-fouling for more optimal growth conditions. Tumbling is very quick, efficient, and far less labour intensive, again increasing productivity while enabling more optimal frequency which leads to a higher quality product.

Our preliminary and conservative productivity comparison of the BOBR system to the systems in common use in Atlantic Canada (and beyond) is that each farmer who converts to BOBR, given the same footprint, and with the same labour, will nearly double productivity. BOBR will produce a consistently higher quality product with less effort and less fuel consumption. The environmental benefits from reduced shore trips alone will be significant. Then there are the other benefits of less gear loss, lower visual profile, reduced bird roosting, broader employment recruitment cohort, etc.”

To this I say – Wow! This is exactly the type of initiative that responds to the spirit and letter of the **Ray Ivany Report** - *a plan to revitalize Nova Scotia's economy*. But economic opportunity should not take place at any cost to the environment.

So what about the impact of the oyster farm on our harbour?

Oysters feed on plankton which is naturally overabundant in the harbour. No added feed is necessary – as in salmon farms. Oysters have the ability to actually help purify the water. Dated this past July 26, 2021, National Geographic published an article titled: ***Your love for fresh oysters can help the planet***. It contends that “Farmed oysters don’t harm or rely whatsoever on their wild cousins. In fact, they help seed wild populations, clean waterways and feed many species of fish.” I encourage all stakeholders to have a thorough read. You can find the link on the Town Point Oysters Facebook page: <https://www.facebook.com/TownPointOysters>

The nursery portion of the oyster farm sits in front of the Porter home in Seabright. It consists of a double layer of 11 concrete cylinders – for a total of 22, that are no more than 3’-6” feet in height. Ernie Porter explains;

“My chosen path, after much due diligence is to leverage the natural ecological benefits of filter-feeding oysters by providing this industry with growth systems that minimize labour and carbon inputs while improving productivity and product quality. We plan our farm to be both a model of sustainability and a demonstration site for the BOBR growth system that may become an integral component of an industry headed in a very positive direction.

Our land-based nursery was constructed last summer and ran on a trial basis throughout the fall. It is now ready for a production run this season. The nursery relies on two electric water pumps to flow water through the silos containing oyster seed. It is a flow-through system with no feed or treatments added. The oyster seed filter suspended solids from the water and that water flows safely back into the harbour. We plan, in the near future, to build sufficient solar capacity to enable this facility to run without carbon inputs. At this point, all the carbon sequestered in the growing shells will be a net benefit and in a small way push back on global warming.”

I for one, love this attention to environmental details! Further to this, the Porters have landscaped the area with a long hedge of rose bushes to help block the view from the harbour.

This is consistent with the home they built employing fundamental sustainability principles. The home gains energy efficiency with a ground source geothermal heating system, fluid to fluid heat pumps, and in-floor radiant heating. Ernie Porter is one of a growing majority who believe in climate change and the dire consequences that follow. He explains that his challenge, broadly speaking, is to try to do something about it.

As for the application process that I initially believed was flawed, I received multiple responses to my letter from government officials, the most notable from the Honourable Keith Colwell, Minister of Fisheries and Aquaculture. He assured that the three proposed marine sites are currently in the *Review Phase* of the Adjudicative Application Process. See [www.novascotia.ca/fish/aquaculture/public-information](http://www.novascotia.ca/fish/aquaculture/public-information). The letter states;

“During this stage, the department will review the applications to make sure they provide all the documentation required, including the results of the public engagement from the *Scoping Phase*. The applications will be shared with the necessary federal and provincial departments for their input. Consultations with First Nations may also be required during this stage of the process. Following the *Review Phase*, complete applications will be referred to the Nova Scotia Aquaculture Review Board. The Nova Scotia Aquaculture Review Board provides an opportunity for members of the public to participate in the public hearing process. **Your specific comments on the application should be submitted to the Aquaculture Review Board at that time.** Notification of the date of the public hearing will be made through the department’s website. The Nova Scotia Aquaculture Review Board will issue a decision on the applications and the decisions will be posted on the department’s webpage.”

From this letter I’m satisfied that due processes are in place. Everyone’s doing their job.

Further information can be found at [www.novascotia.ca/fish/aquaculture/licensing-leasing](http://www.novascotia.ca/fish/aquaculture/licensing-leasing).

And now to the science of the project: Town Point Consulting teamed up with the StFX Aquatic Resources Department, Paqtnkek first Nation and ShanDaph Oyster farm to conduct scientific studies of areas in Antigonish Harbour, and Pomquet and Merigomish Harbours. The object is to examine environmental impacts of suspended oyster aquaculture. The study is designed to establish baseline conditions within proposed lease sites with multi-year follow up studies. I was in touch with Professor Garbary at StFX who graciously answered my questions and provided me with a brief description of the project. This is an excerpt of his reply:

“The long-term objective of the study is to evaluate the impact of oyster aquaculture on the plant and algal (and animal) communities in the harbour. The eelgrass is critical to the system, and we will be looking at how the eelgrass populations react i.e. eelgrass

health, when the aquaculture cages are put into the system. There is a disease of eelgrass that is systemic in our estuaries and I want to know if this is exacerbated or alleviated by oyster cultivation. Given the new technology that Town Point Oysters is using, this will be a real opportunity to compare traditional oyster grow cages and the new technology. The short-term objective is to assess fouling on the two types of cages and any differences in oyster growth rates inside them.”

In my estimation this further demonstrates a willingness among all parties to work with the resources available for a positive outcome for science, the harbours and the business.

It continues to be clear to me that the Porters are doing all they can to engage and educate the community. They have dedicated valuable resources to executing and maintaining an iterative online presence. Through those channels, the public will find invitations to tour the facility and experience a first hand view.

And, the TPC initiated the formation of a Community Liaison Committee (CLC) to provide a forum for the community to access relevant scientific facts about the operation and to provide feedback to the company. The CLC publicly posts responses to community feedback and concerns on their website. In fact, there is another **public meeting this Monday, August 23 at the Legion from 7 – 9 pm**. I certainly plan to be there.

The risks, as stated by members of FOAH are many, the prime one being the displacement of the BOBR units in the event of a storm. The project proposes 23,000 units. I haven't pursued an answer to this concern but it's one that I'm sure will be raised at the public meeting.

I hope we have a good turn out with a spirit of openness and willingness to learn and adapt.

**At this stage my take away on the project is as follows:**

In the big picture, oysters are food. People need food. Oysters are abundant in Antigonish Harbour. Unfortunately, they can't be eaten off the shore because they are too toxic in these waters. I for one would welcome an oyster farm that naturally detoxifies the oysters and helps to clean the water. I live on the harbour and I am not opposed to some bumps in the horizon line from the BOBRs. I welcome progress, economic development and positive innovation.

Natural resources are the mainstay of our economy in Nova Scotia. Relative to the size of the harbour, the oyster farm will occupy less than 2% of its area leaving 98% of the harbour unencumbered. Boating on the harbour will remain safe. The BOBR growth units are spaced such that one can even kayak through them. I believe we will continue to enjoy the beauty and function of our harbour. I understand that some lobster fishermen have objected to the farm with concerns that their boats could get caught up in the units but I contend that experienced boaters know how to navigate the challenging shallow waters of this harbour. The parameters of the oyster farm would be clear.

In conclusion, I believe we are a community that welcomes opposing views constructively and with kindness all the while keeping our eye on future prospects that will enrich our province and lead us forward. Innovation is at the forefront of positive economic development for Nova Scotia but not at any cost. When we can be assured that environmental impacts are mitigated with excellent technology then that is the way to go.

I would like to express my support of this well-conceived and innovative project, not because I have anything to gain personally, but because I believe in supporting the future of this province especially when the entrepreneurs at the helm are as creative, thorough and conscientious as the Porters are. If only all of our industries exhibited such a high level of integrity and responsibility.

More information, photographs and diagrams can be found online:

<https://www.townpointoysters.com>

<https://friendsofantigonishharbour.com>

<https://www.antigonishoysterclc.com>

More questions can be addressed at the public meeting this Monday. August 23 as noted above. I encourage everyone to research the facts.