

Site Report

Site Number:	AQ#8038		
Location:	Pubnico Harbour, Yarmouth County	Size:	23.15 HA

Species and Methods of Cultivation Eligible for Consideration		
Species Type:	Common Species Name(s):	Method(s) of Cultivation:
Shellfish	American oyster, Giant sea scallop, Bay scallop. Other species native to this water body are eligible but must be specified in a proposal	Suspended Cultivation
Marine Plants	Sugar kelp. Other species native to this water body are eligible but must be specified in a proposal	Suspended Cultivation

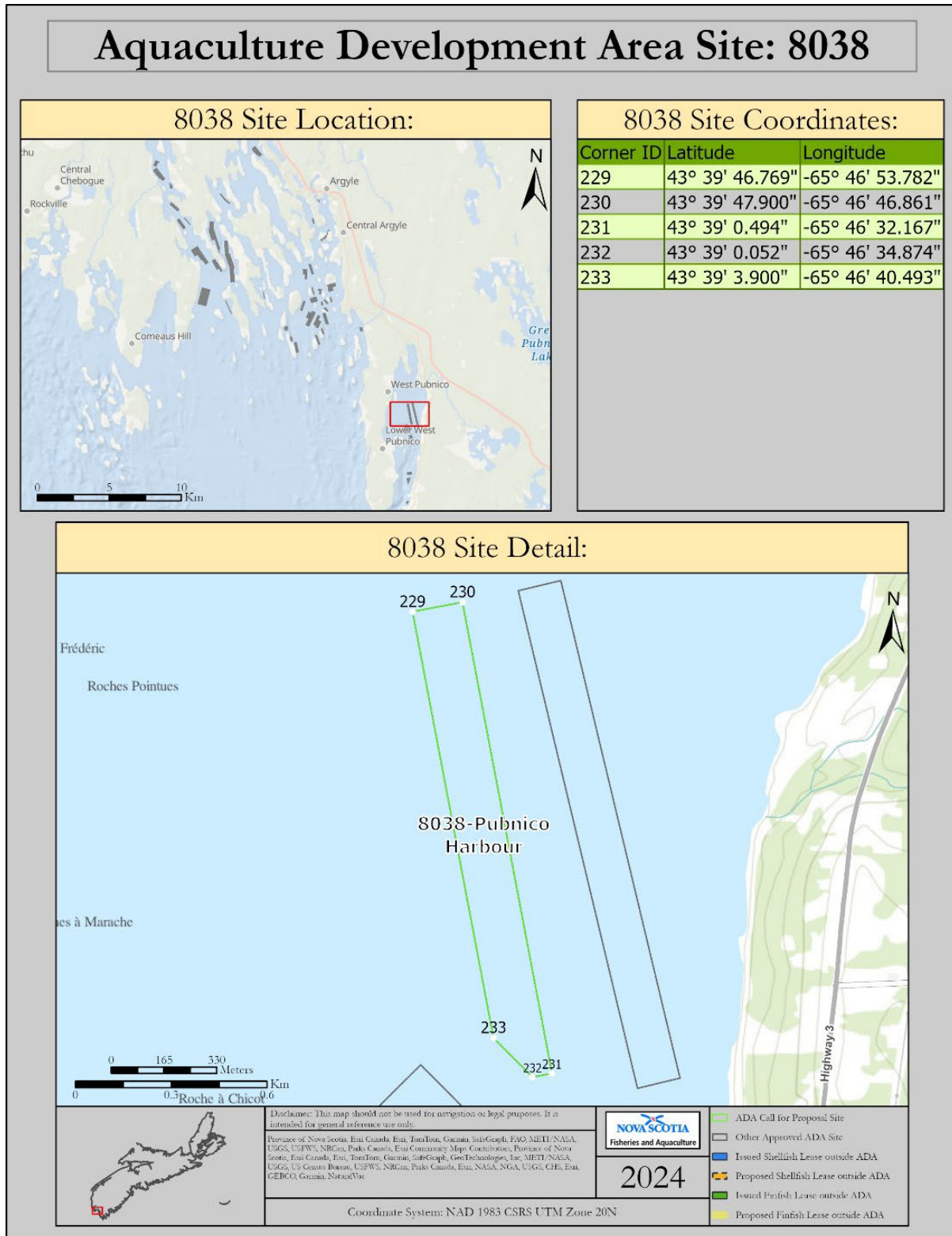


Figure 1. Vicinity map

Location:

Approximate centre coordinates: N 43° 39' 24.3077", W 65° 46' 43.1181"

This site is part of a designated Aquaculture Development Area (**Figure 1**) and is situated within Pubnico Harbour, due east of Middle West Pubnico. The shape resembles a relatively narrow rectangle running in a northwest to southeast direction, which is also likely the direction that gear would be placed.

There are several sites within the vicinity: East of this site is AQ#8039 which runs parallel approximately 175-250m apart. AQ#8040 is approximately 220m to the southwest and AQ#8024 is approximately 680m to the south. There are a total of 9 sites within the area known as "Pubnico Harbour", of which one (1) currently has an existing aquaculture licence/lease issued to them as of the date of this report. The nearest aquaculture site with an issued licence and lease is located approximately 4.5km southwest of this site, AQ#0955, which is currently authorized for the marine cage cultivation of Rainbow trout (and is not part of the designated Aquaculture Development Area).

There is a wharf or small craft harbour approximately 2.3km to the southwest, Pont du Marais, and another located at Dennis Point, approximately 3.5km south. There are several private access points within Pubnico Harbour. Proponents should engage with local harbormasters (or equivalent) to discuss opportunities and capacity to use those facilities.

Bottom Characteristics:

In July, 2023, Nova Scotia Department of Fisheries and Aquaculture scientists collected underwater video baseline footage of the area using a submersible drop camera (**Figure 2**). The overall depth of the site ranged from 1m to 3m relative to Chart Datum (Lowest Low Tide). There was no indication of eelgrass meadows or free-floating strands of eelgrass within the site. Bottom type observations throughout the site consisted of soft, fine mud sediment at all stations.

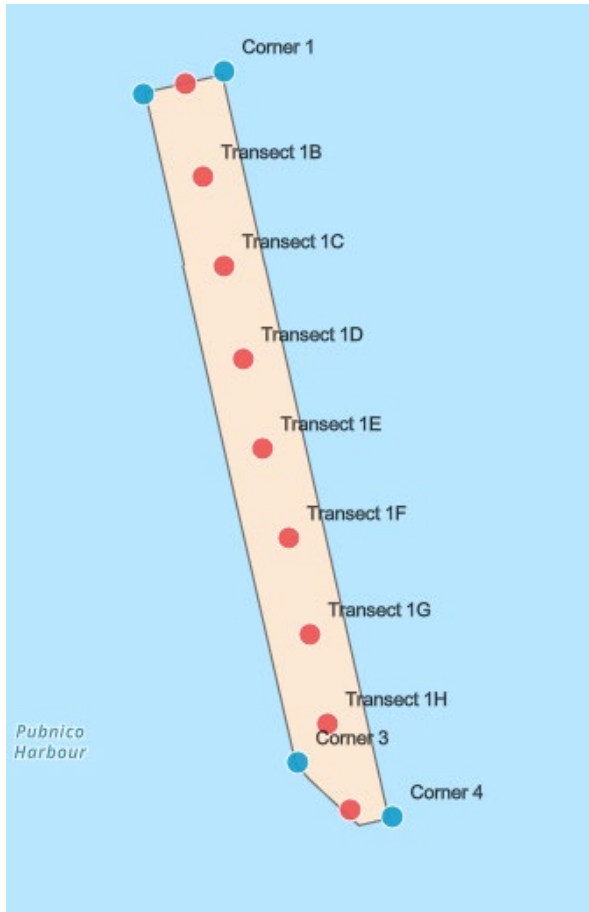


Figure 2. Map displaying baseline video sampling station locations

Eelgrass:

Eelgrass is an ‘Ecologically Significant Species’ (ESS) and is present along the marine coast of Nova Scotia at varying degrees of abundance, with many factors contributing to its growth, survival and reproduction. The type and spacing of suspended aquaculture gear can influence the amount of light reaching the water column and the sea floor where eelgrass is present. Proponents are expected to include plans on how to eliminate or mitigate the impact of their aquacultural operation on any eelgrass present within and near to the site, where applicable. In addition, rows of gear should be spaced at least 3 metres apart.

Water Quality:

This site is located within an area classified as “approved” for harvesting of all species of bivalve mollusks by the Canadian Shellfish Sanitation Program as of March 31, 2024. Proponents are expected to check with the Department of Fisheries and Oceans Canada for the most current classification status (<https://www.dfo-mpo.gc.ca/shellfish-mollusques/cssp-map-eng.htm>).

Water Depth:

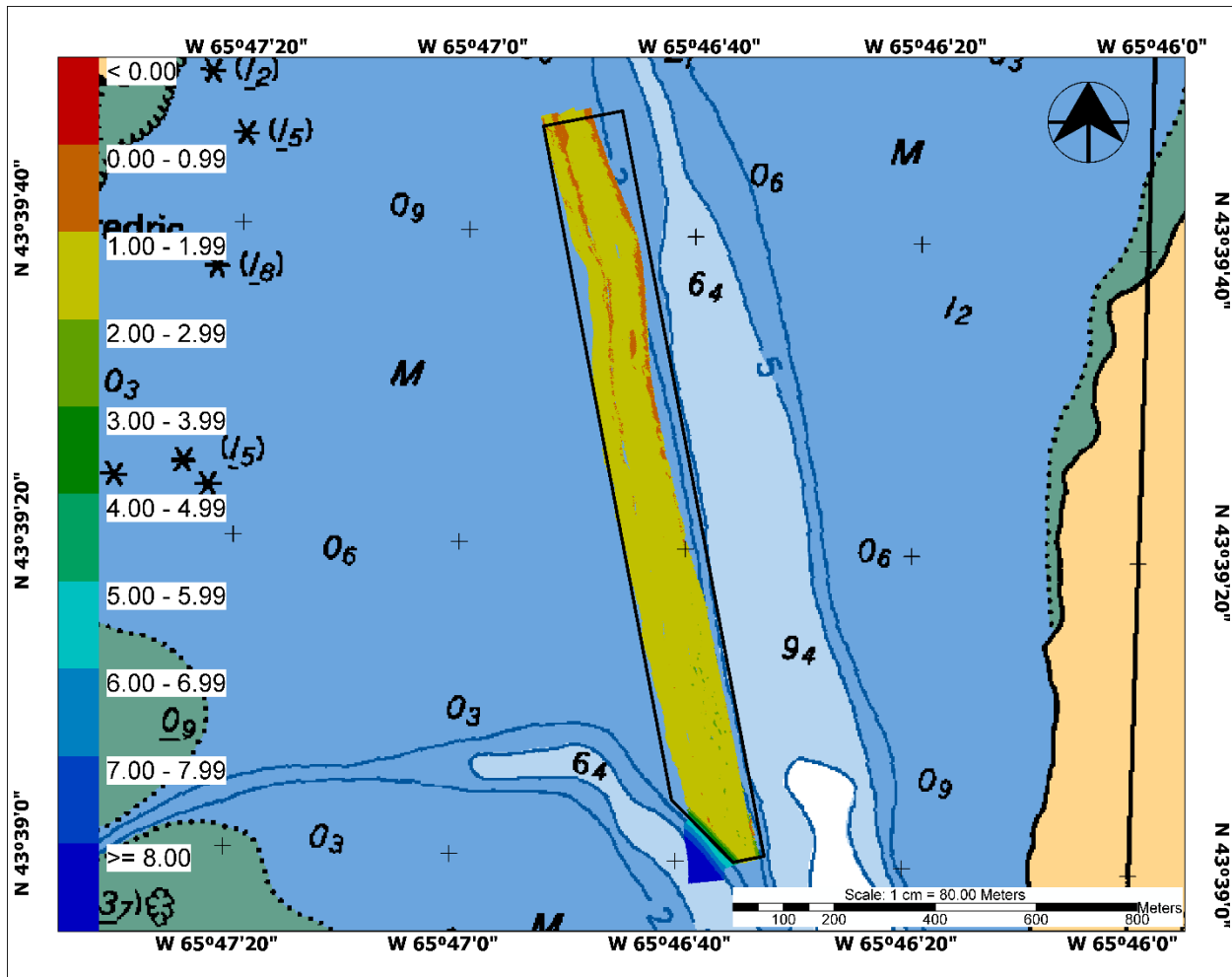


Figure 3. Site map with depth

In June, 2023 Nova Scotia Department of Fisheries and Aquaculture scientists collected bathymetry data throughout the prospective area using a 3D side-scan sonar system. **Figure 3** displays a representation of the resulting depth data collected, corrected to chart datum (depth at lowest low water during large tide). Based on data collected, the site has a relatively consistent depth of around 1-2m. According to predictions from the nearby CHS tide stations, depths in this area will vary by as much as 4m or more between high and low tides. In general, shallow areas and areas with lower current speeds can expect seasonal ice build-up and ice movement. Proponents should include plans on how to mitigate the impact of ice on their aquaculture operation where applicable, within their proposal.

Wildlife:

A saltmarsh habitat exists along the northern coastline of Pubnico Harbour and along the coastline surrounding Lower West Pubnico. This site is situated outside of these habitats. Migratory bird colonies have previously been observed at Île Chesapeake (over 1.2km north), Ile Ferré (over 1km southwest) and at Île à Picote (over 1.6km south).

There are currently no known designated provincial parks, nature reserves or wilderness areas in the vicinity of this site.

Accuracy and Currency of Data:

The Nova Scotia Department of Fisheries and Aquaculture strives to provide accurate and up-to-date information in this report. However, this report is not a peer-reviewed scientific publication and is instead intended to be a summary representing the general conditions regarding the site’s suitability for the type of aquaculture under consideration by a Proponent interested in responding to a call for proposals (and subsequent application for an aquaculture licence and lease) for this site.

The Department does not make any guarantees as to whether or not an aquacultural operation would be successful at this site, nor does it absolve a person from ensuring that they obtain any additional necessary permits, approvals or licenses from the relevant Municipality, Provincial or Federal agency prior to conducting aquaculture.

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	Name / Title	Signature / Date