

# Site Report

<b>Site Number:</b>	AQ#8007		
<b>Location:</b>	Tusket River, Yarmouth County	<b>Size:</b>	24.73 HA

<b>Species and Methods of Cultivation Eligible for Consideration</b>		
<b>Species Type:</b>	<b>Common Species Name(s):</b>	<b>Method(s) of Cultivation:</b>
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

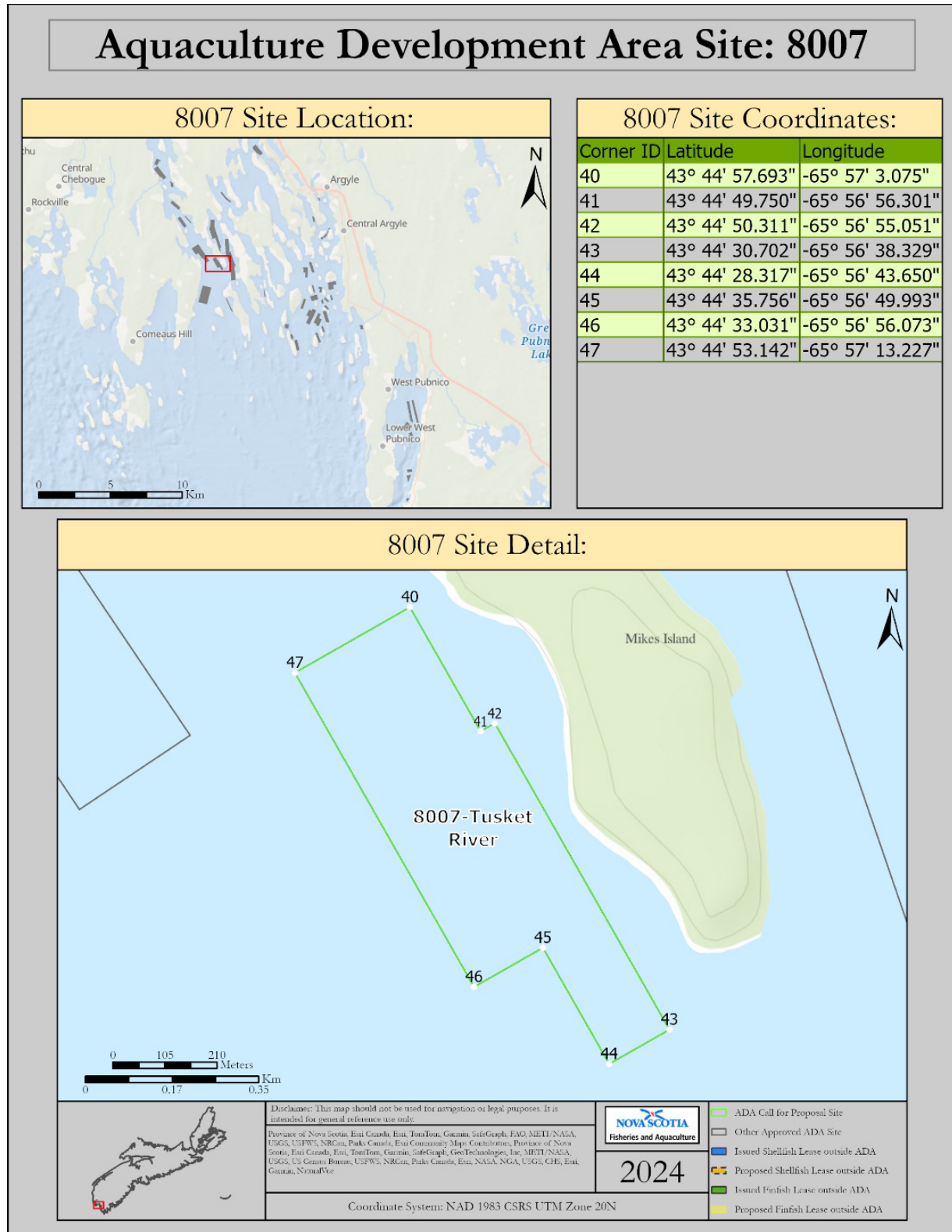


Figure 1. Vicinity map

**Location:**

Approximate center coordinates: N 43° 44' 43.4241", W 65° 56' 56.6843"

This site is part of a designated Aquaculture Development Area (**Figure 1**) is situated near Mikes Island, along the southwest side, and is approximately 1km east of the mainland (Wedgeport). The shape resembles two overlapping rectangles oriented in a northwest to southeast fashion, which is likely how the gear would be best oriented.

The nearest site is approximately 250m northwest of this site, AQ#8006, which is not currently issued as an aquaculture licence or lease. There are a total of 9 sites within the area known as “Tusket River”, of which none (0) currently have an existing aquaculture licence/lease issued to them as of the date of this report.

There are no docking facilities, public or private, observed within the immediate vicinity of this site. The nearest wharves or small craft harbours are located in Lower Wedgeport (about 3.5km southwest) and Sluice Point (about 3km north). Proponents should engage with local harbormasters (or equivalent) to discuss opportunities and capacity to use those facilities.

**Bottom Characteristics:**

In June, 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 0.5 to 11m relative to Chart Datum (Lowest Low Tide). There was no indication of eelgrass meadows within the site, and it was rare to see free-floating strands of eelgrass. Bottom type observations within the site consisted primarily of soft, fine silty sediment with areas of sandy and rocky substrate occurring at several stations.



**Figure 2. Map displaying baseline video sampling station locations**

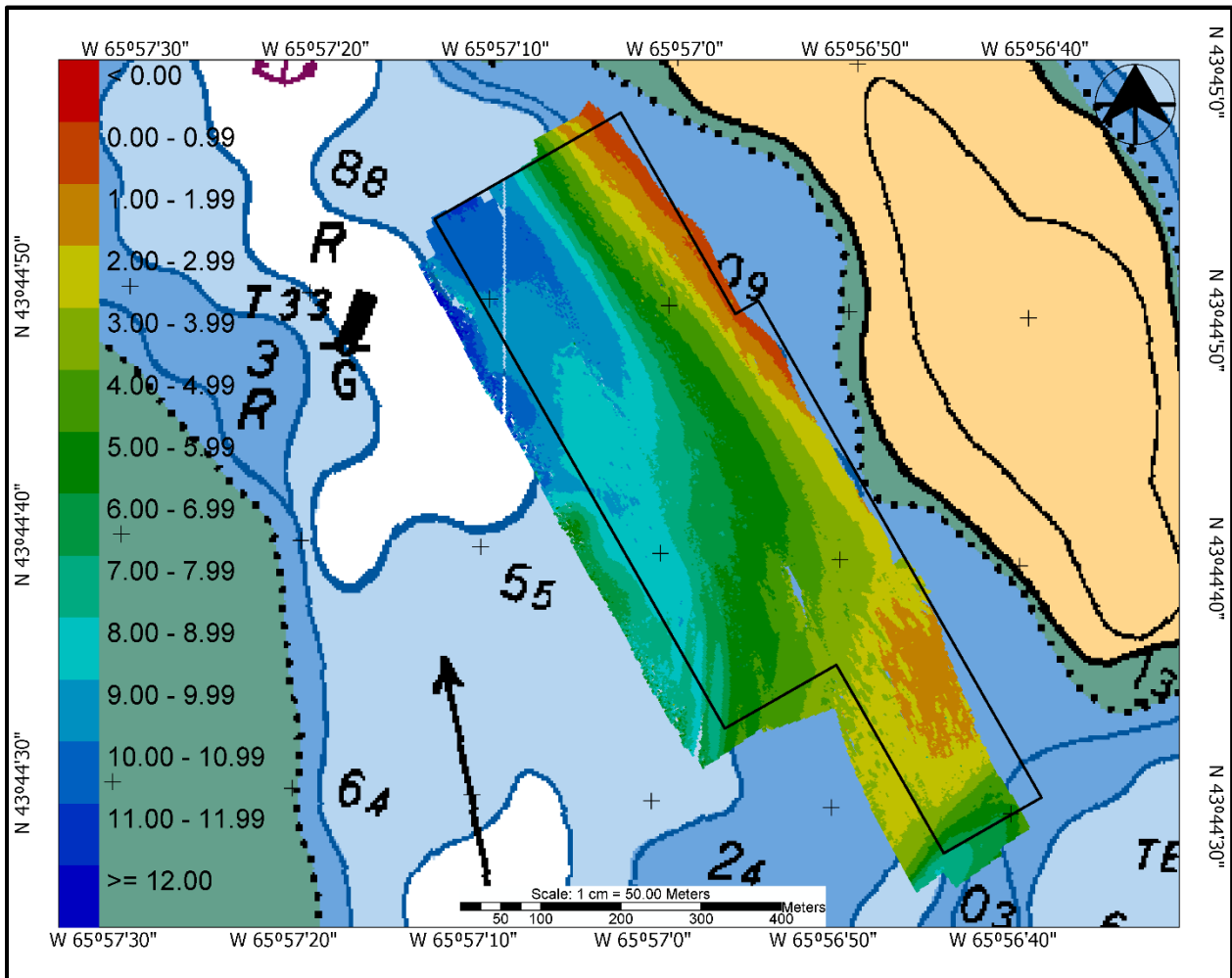
**Eelgrass:**

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, on a regular basis, 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, 2022, 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 is deepest along the western side, at approximately 10-11m and becomes shallower moving eastwards towards Mikes Island where minimum depths reach 1m or less. The southeast portion of the site is also approximately 2m or less. According to predictions from 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 on the Northern portion of Mikes Island. This site is situated at least 300m from this habitat. Migratory bird colonies have previously been observed at Pinch Gut Island. This site is situated at least 300m from this habitat. 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 ADA, 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.

Prepared By:	Robert Ceschiutti, Manager, Licensing & Leasing	
	Name / Title	Signature / Date