

Site Report

Site Number:	AQ#8023		
Location:	Lobster Bay, Yarmouth County	Size:	7.13 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

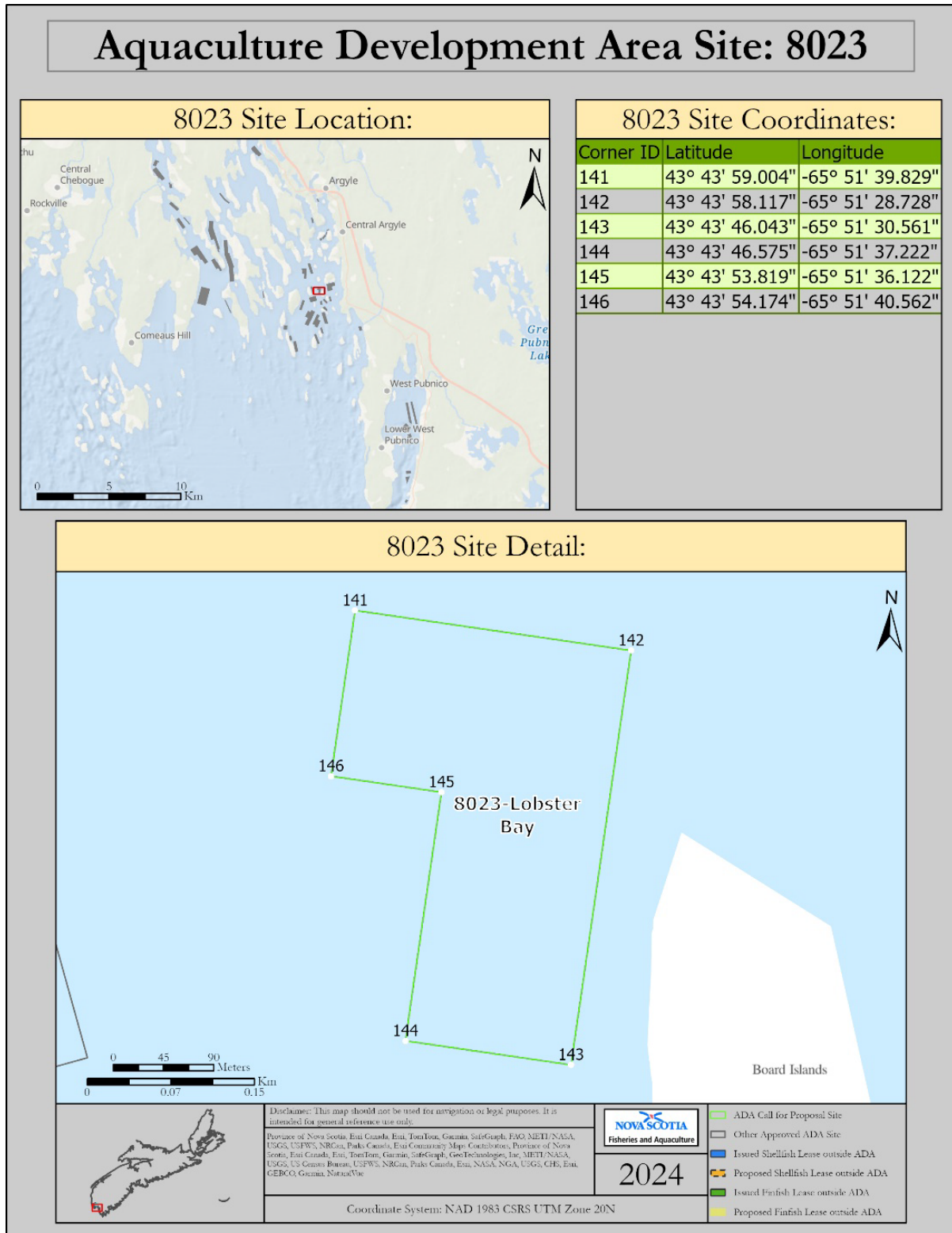


Figure 1. Vicinity map

Location:

Approximate centre coordinates: N 43° 43' 53.2019", W 65° 51' 34.0274"

This site is part of a designated Aquaculture Development Area (**Figure 1**) and is situated within Lobster Bay, between several islands nearby. The site is approximately 40m from the western shoreline of the Board Islands. Bonds Island is approximately 430m to the west of the site. To the north, Gordons Island and Rankins Island are both approximately 420m and 460m from the site respectively. The shape resembles two overlapping and perpendicular rectangles.

There are several sites within the vicinity: AQ#8025 is approximately 230m southwest, AQ#8022 is approximately 270m to the west and AQ#8024 is approximately 420m to the northeast. There are a total of 25 sites within the area known as “Lobster Bay”, of which none (0) currently have 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 2.3km northeast of this site, AQ#1428, in La Grande Passe, which is currently authorized for the suspended cultivation of American oyster.

There is a wharf or small craft harbour approximately 1.5km to the southeast (Camp Cove) and another located on Morris Island, approximately 2km west. 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 2m to 12m relative to Chart Datum (Lowest Low Tide) from the nearest tidal station. There was no indication of eelgrass meadows within the site, and it was rare to see free-floating strands of eelgrass. Bottom type observations throughout the site consisted primarily of hard-packed, fine sediment interspersed with occasional cobble and boulder sized rocky substrate.



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:

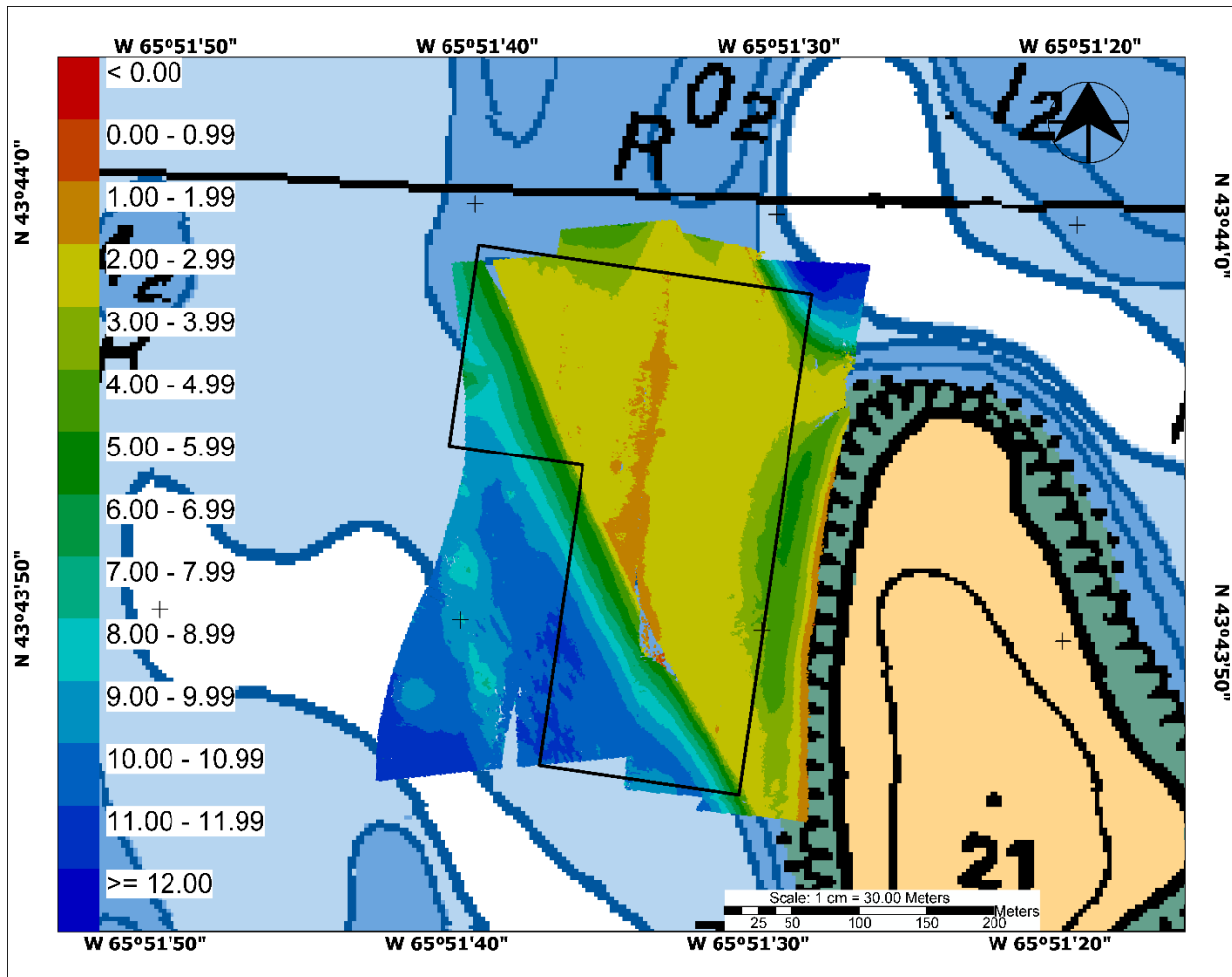


Figure 3. Site map with depth

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 is deepest along the outer corners of the site boundaries, at approximately 12m and becomes shallower moving inward where minimum depths reach 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 surrounds Gordons Island to the north. This site is situated outside of this habitat. Migratory bird colonies have previously been observed at Bonds Island located West of this area. This site is situated approximately 400m from this habitat.

A designated Wilderness Area surrounds Channel Island, which is located approximately 1km south of this site. Another designated Wilderness Area is present on Potato Island, which is approximately 1.4km north.

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