

Site Report

Site Number:	AQ#8010		
Location:	Indian Sluice Bay, Yarmouth County	Size:	89.23 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

Aquaculture Development Area Site: 8010

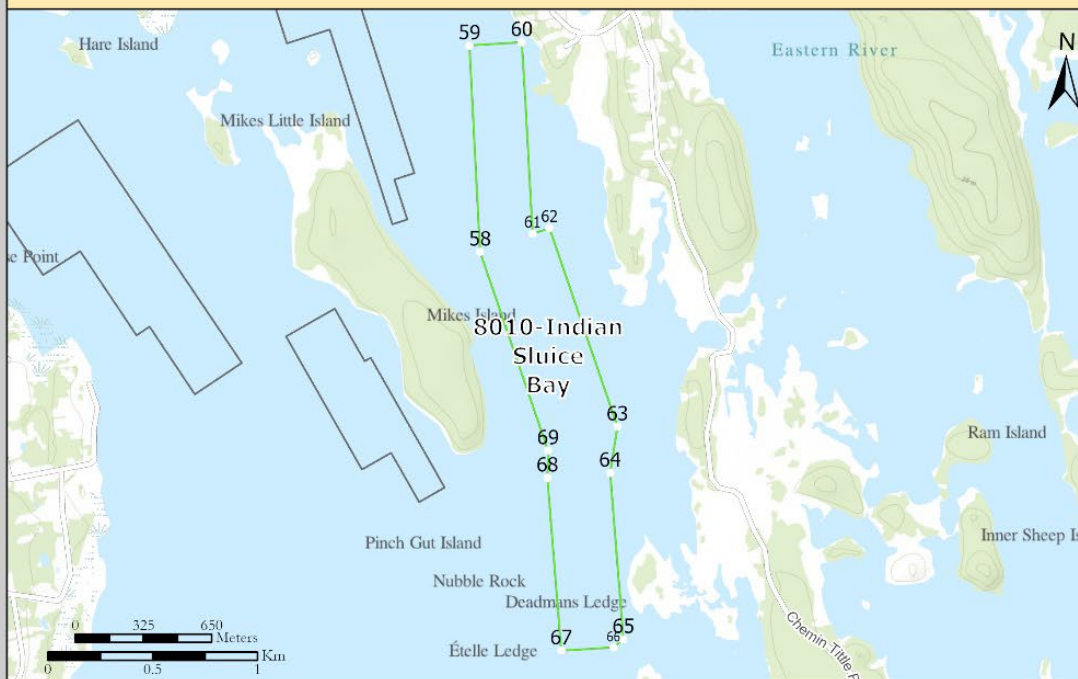
8010 Site Location:



8010 Site Coordinates:

Corner ID	Latitude	Longitude
58	43° 45' 7.246"	-65° 56' 32.581"
59	43° 45' 39.035"	-65° 56' 36.399"
60	43° 45' 39.817"	-65° 56' 25.278"
61	43° 45' 10.316"	-65° 56' 21.519"
62	43° 45' 11.299"	-65° 56' 17.974"
63	43° 44' 41.047"	-65° 56' 2.003"
64	43° 44' 33.879"	-65° 56' 3.212"
65	43° 44' 8.267"	-65° 55' 59.135"
66	43° 44' 6.951"	-65° 56' 1.163"
67	43° 44' 6.169"	-65° 56' 12.292"
68	43° 44' 32.764"	-65° 56' 16.528"
69	43° 44' 36.995"	-65° 56' 16.608"

8010 Site Detail:



Disclaimer: This map should not be used for navigation or legal purposes. It is intended for general reference use only.

Province of Nova Scotia, Esri, Canada, Esri, TerraNova, Garmin, InfoGraph, FAG, METI/NASA, USGS, USFWS, NRCan, Parks Canada, Province of Nova Scotia, Esri, TerraNova, Garmin, InfoGraph, GeoTechnology, Inc, METI/NASA, USGS, US Geologic Bureau, USFWS, NRCan, Parks Canada, Esri, NASA, NGA, USGS, CHE, Esri, Garmin, NaturalVue



2024

Coordinate System: NAD 1983 CSRS UTM Zone 20N

- ADA Call for Proposal Site
- Other Approved ADA Site
- Issued Shellfish Lease outside ADA
- Proposed Shellfish Lease outside ADA
- Issued Finfish Lease outside ADA
- Proposed Finfish Lease outside ADA

Figure 1. Vicinity map

Location:

Approximate centre coordinates: N 43° 44' 51.6457" W 65° 56' 17.2971"

This site is part of a designated Aquaculture Development Area (**Figure 1**) and is situated within Indian Sluice Bay, between Mikes Island on the West and Surettes Island on the East. The shape resembles an irregular rectangle oriented in an approximate North to South fashion, which is likely how the gear would be best oriented.

The nearest site is approximately 290m West of this site, AQ#8011, which is not currently issued an aquaculture licence or lease. There are a total of 2 sites within the area known as “Indian Sluice Bay”, 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 Sluice Point (about 1.5 km north) and Lower Wedgeport (about 3.5km southwest). Proponents should engage with local harbormasters (or equivalent) to discuss opportunities and capacity to use those facilities.

Bottom Characteristics:

In August, 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 0m to 8m relative to Chart Datum (Lowest Low Tide) from the nearest tidal station. Eelgrass was observed at two locations at the southern portion within the site. It was rare to see free-floating strands of eelgrass. Bottom type observations were relatively consistent throughout the northern and central regions of the site, consisting primarily of cobble and boulder. Sediment composition transitions to hard-packed sandy bottom throughout the southern portion of the site with infrequent observation of soft mud 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 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:

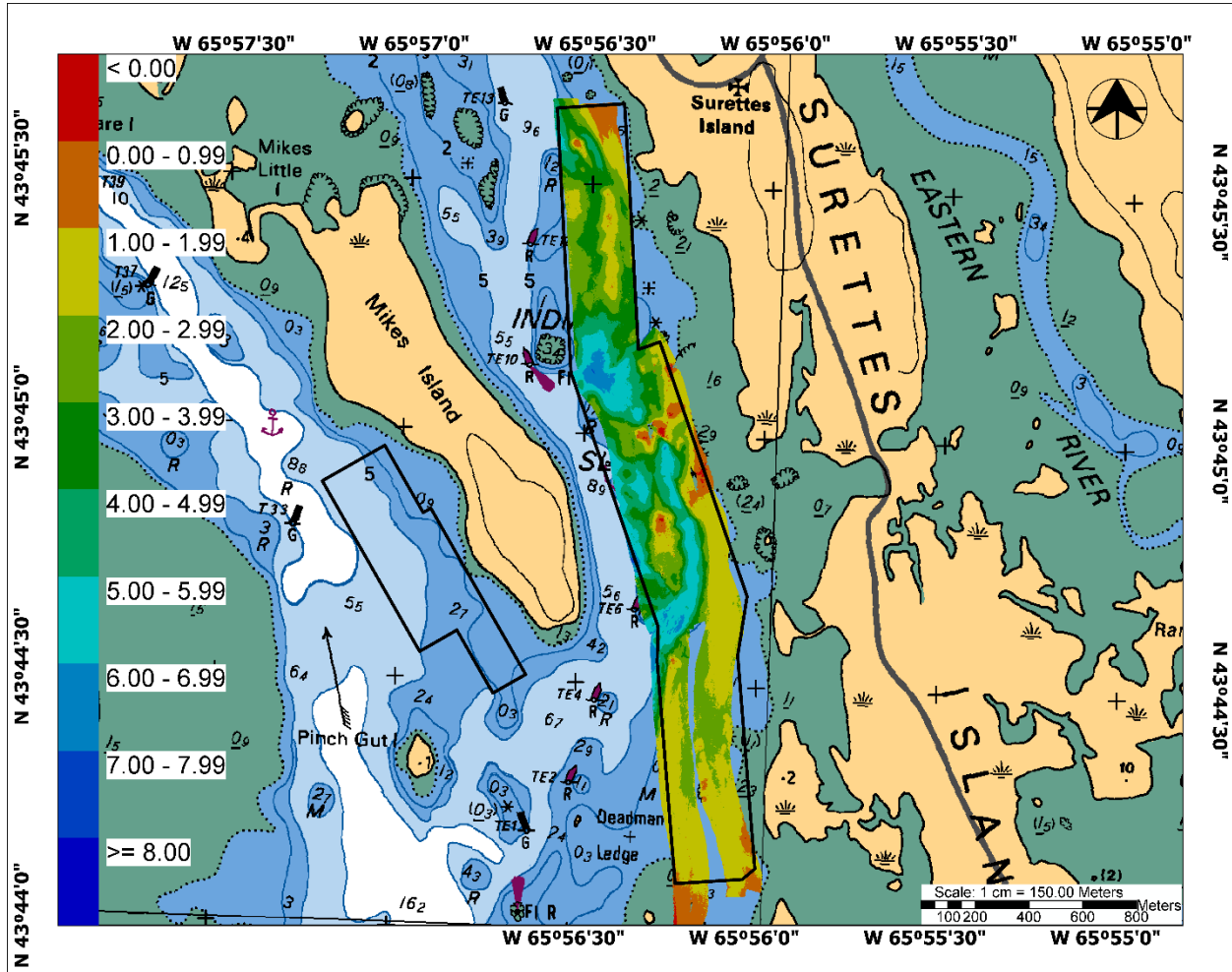


Figure 3. Site map with depth

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 western side in the centre of the area, at approximately 8m and becomes shallower moving eastward where minimum depths reach 0m. 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 either side of this site (East and West). This site is situated outside of this habitat. Migratory bird colonies have previously been observed at Pinch Gut Island located West of this area. This site is situated at least 800m 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 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.

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