

Aquaculture Site Register
RE# 9001

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|---------------------------------------|----------------------|-------------------------------|--------------------|
| Registry File Number: | RE#9001 | Type: | Marine |
| Location: | Marie Joseph Harbour | Size: | 29.23 HA |
| County: | Guysborough | Site Map / Boundaries: | Refer to map below |
| Prior Issued Aquaculture Site: | AQ#0027 | | |

| Previously Authorized Species and Methods of Cultivation | | |
|---|----------------------------------|--------------------------------|
| Species Type: | Common Species Name(s): | Methods of Cultivation: |
| Shellfish | Blue mussel Giant sea scallop | Suspended |

| Additional Species and Methods of Cultivation Eligible for Consideration¹ | | |
|---|---|--------------------------------|
| Species Type: | Common Species Name(s): | Methods of Cultivation: |
| Shellfish | American oyster Bay scallop European oyster Other species native to this water body are eligible but must be specified in a proposal | Suspended |
| Marine Plants | Sugar kelp Dulse Nori Other species native to this water body are eligible but must be specified in a proposal | Suspended |

¹ Subject to consultation with Federal and Provincial agencies per Subsection 40(1) of the *Aquaculture Licence and Lease Regulations*.

Location:

Approximate center coordinates (NAD83): Latitude: 44° 57' 7.208", Longitude: -62° 5' 9.333"

This site (**Figure 1**) is located approximately 110m from the Northwestern shoreline of Turners Island, in the Marie Joseph Harbour. The site is approximately 1.3km due Southwest of the local Harbour Authority. Proponents should engage with local harbormasters (or equivalent) to discuss opportunities and capacity to use those facilities.

The nearest site is approximately 430m northwest of this site, AQ#1308, which is currently issued a licence and lease to Bill & Stanley Oyster Company Ltd. and is authorized for the suspended cultivation of several species of shellfish and marine plants. There are a total of three (3) sites within the area known as “Marie Joseph Harbour”, of which two (2) currently have an existing aquaculture licence/lease issued to them as of the date of this report.

This site is in a relatively remote location that sees greater exposure to wind and waves in comparison to other sites closer to shore. The high energy of the environment is to be taken under consideration when submitting a proposal for reallocation.

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, any proposed gear must have at least a 3-metre spacing between each longline.

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 May 23, 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:

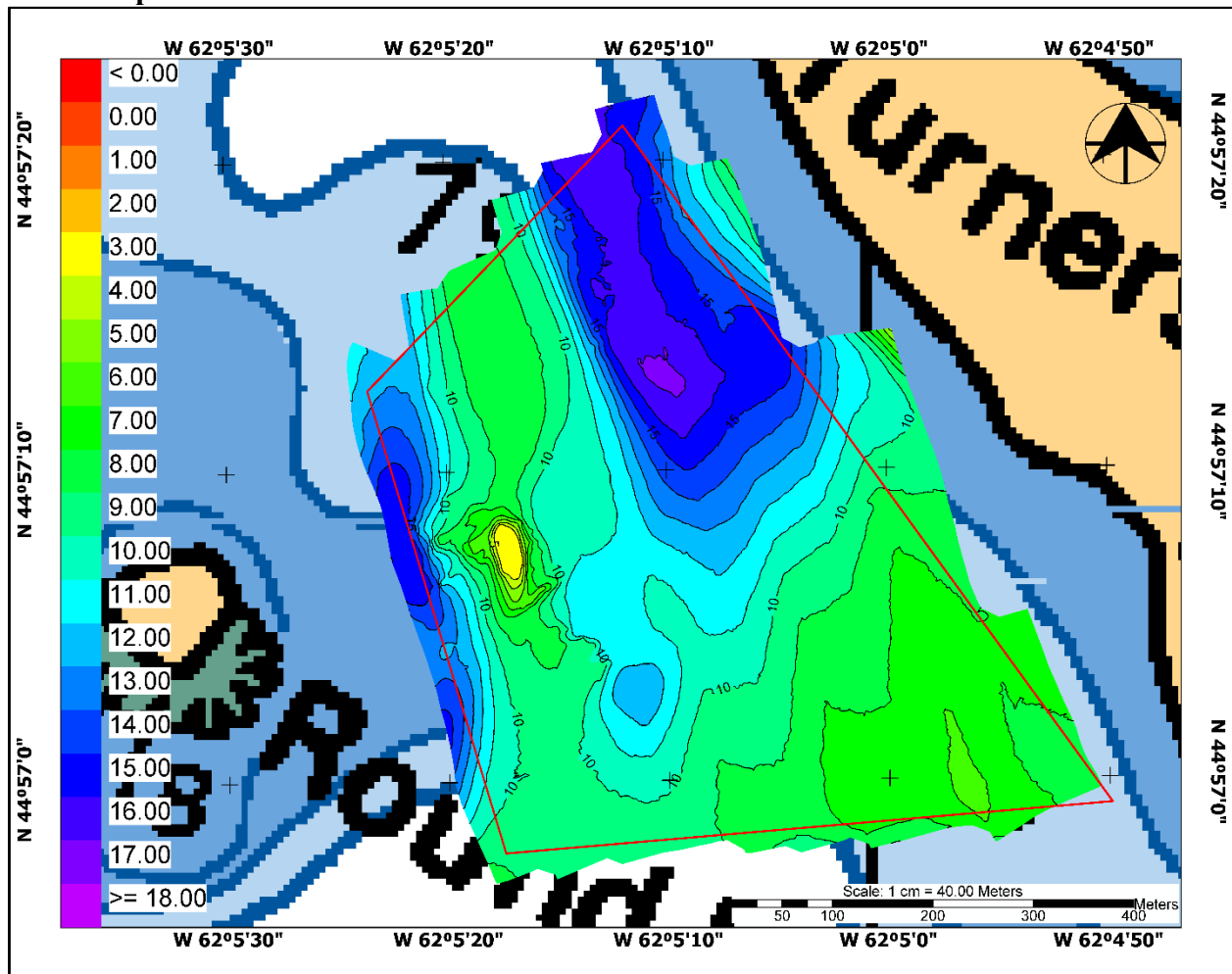


Figure 2. Site map with depth

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 2** 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 near the northern end where depths reach as much as 17m. The site shallows gradually to the south and more quickly to the east and west. A steep shoal is present near the western edge of the site, where depths area as low as 3m. According to predictions from the nearest CHS tide station, depths in this area will vary by as much as 2m 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:

The Eastern Shore Islands Wilderness Area exists for Round Island which is approximately 180m west of this site, and for the collection of islands known as “Dogfish Head” which is approximately 140m south of this site. The site is approximately 1.2km South of the Marie Joseph Provincial Park.

Sea Ducks are known to be present within the vicinity. Proponents should include plans on how to mitigate the impact of predation on their aquaculture operation within their proposal.

Invasive tunicate species are known to be present in the marine environment. Proponents should include plans on how to mitigate the impact of tunicates on their aquaculture operation within their proposal.

Gear Present:

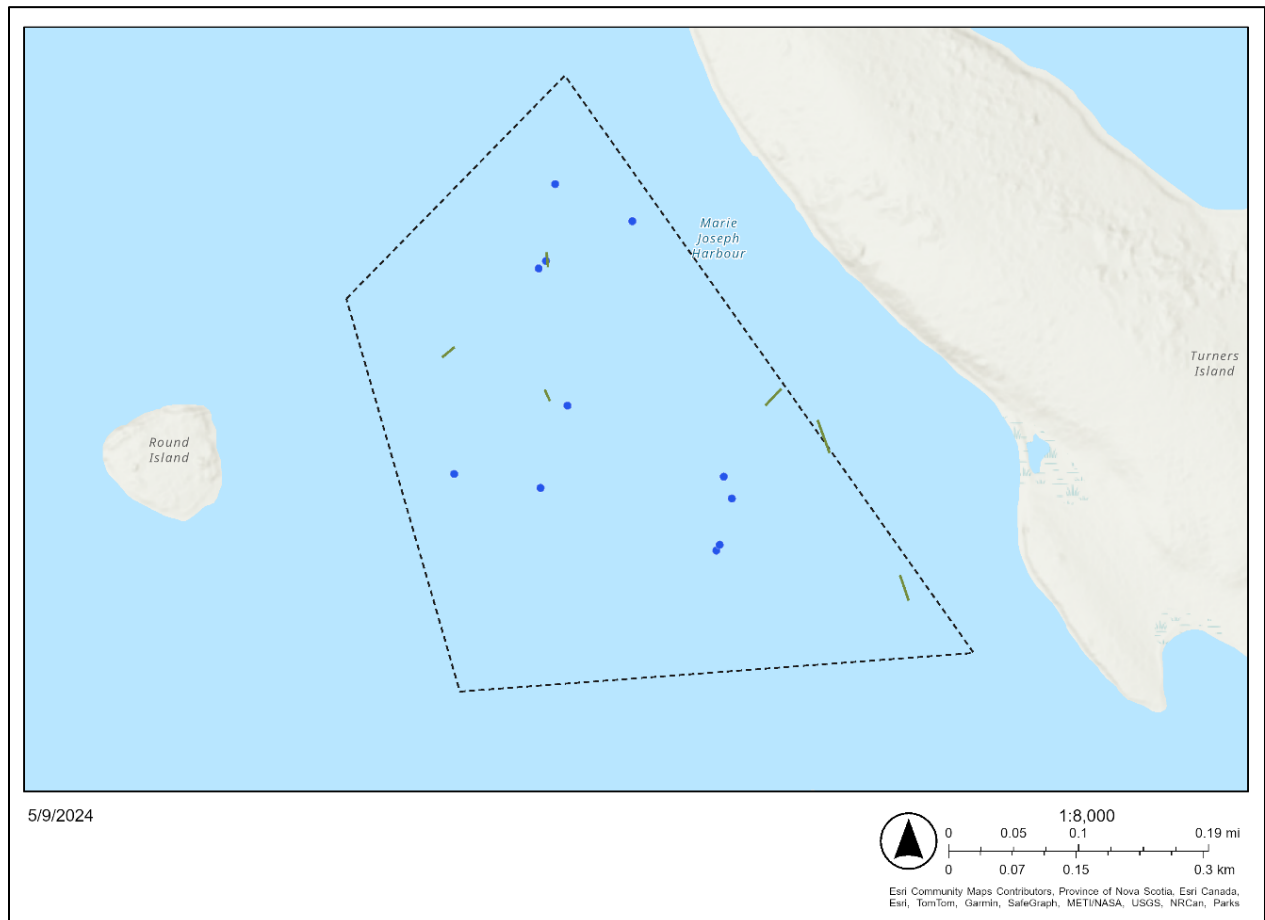


Figure 3. Site map of existing gear. Green lines indicate continuous targets, anchored at each end. Blue dots indicate the location of single point targets, typically clusters of floating rope or submerged buoys.

The Department is aware of the presence of pre-existing aquaculture gear in and around this site. Refer to **Figure 3** for details regarding the estimated location and type of gear present. Proponents are expected to include plans on how they will remediate the site (to either remove and safely dispose of the gear and/or to restore the gear to working condition) prior to the introduction of any product.

Site History:

An aquaculture licence and lease was first issued for site AQ#0027 in 1987. The licence and lease were consecutively renewed until January 1, 2018, when the site was discontinued.

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.

Performance Reviews Conducted by Administrator:

A performance review was conducted on the aquacultural operation of site AQ#0027, pursuant to Sections 71-72 of the *Aquaculture Licence and Lease Regulations* (the “Regulations”). Any concerns raised during the Performance Review have been added to the above site details.

Based on the performance review conducted above, AQ#0027 has been entered into the registry of aquaculture sites available for reallocation in the Province of Nova Scotia under Reference Number RE#9001.

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| Robert Ceschiutti Aquaculture Administrator Nova Scotia Department of Fisheries and Aquaculture | Date |