

August 10, 2018



Public Services and Procurement Canada
Environmental Services Atlantic Region
33 Weldon Street (3rd floor)
Moncton, N.B.
E1C 0N5

Attention: Mr. Jason Keys
Environmental Specialist, Environmental Services

RE: Underwater Benthic Habitat Survey (Final), Maces Bay Department of Fisheries and Oceans Canada Small Craft Harbour (DFO-SCH), Maces Bay, Charlotte County, New Brunswick, SCH No. 2588, DFRP No. 04031, RPIS No. MS 02588

Dillon Consulting Limited (Dillon) is pleased to provide the following letter report summarizing the results of an underwater benthic habitat survey (UBHS) at the Maces Bay Fisheries and Oceans Canada Small Craft Harbour (DFO-SCH) (DFRP No. 04031; SCH No. 2588; RPIS No. MS 02588) located in Maces Bay, Charlotte County, NB.

Dillon was retained by Public Services and Procurement Canada (PSPC) to conduct the UBHS to characterize the substrate, document any macrofaunal and macrofloral species presence and abundance, and confirm the presence and extent, if any, of eelgrass beds within the extent of the proposed decommissioning activities, which are anticipated to include partial removal of a portion of the dilapidated wharf structure and encasement of the remaining structure within an armour-stone breakwater. The UBHS was conducted at the Maces Bay DFO-SCH on June 22, 2018.

SCOPE OF WORK

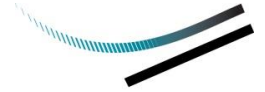
The DFO-SCH wharf structure in Maces Bay constructed in 1950 is now in a state of disrepair and poses a safety concern to the general public. As such, the structure is proposed for decommissioning. The footprint of the current wharf structure is approximately 2,130 m², while the anticipated footprint of the proposed armour-stone breakwater would be approximately 7,375 m², for an expanded footprint of approximately 5,245 m². PSPC, on behalf of DFO-SCH, has requested that Dillon complete a UBHS in the area of the expanded footprint in order to characterize the benthic habitat in the project site (**Figure 1**).

UBHS METHODOLOGY

On June 22, 2018, qualitative and quantitative observations were obtained from the proposed footprint of the armour-stone breakwater at the Maces Bay DFO-SCH using

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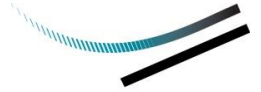
video survey techniques to map substrate type and document macrofaunal and macrofloral species presence and abundance. Dominator Marine Services of Carters Point, NB, was contracted by Dillon to perform the diving and video services required for the UBHS. A Dillon biologist was on site to assist and direct the divers throughout the field program and to document the findings and diver observations.

A total of 12 lead-line transects marked at every 5 meters (m) were laid on the harbour bottom. The survey was divided into twelve transects; nine transects measuring 25m each and one measuring 50m were spread at equal distances to cover either side of the wharf structure and were directed horizontally (west to east), the other two transects, measuring 115m and 125m were extended vertically, covering the length of the wharf structure on either side (south to north) and crossed each of the transects at the start or end points (**Figure 1**). The transect locations were visually referenced in the field and coordinates were recorded using a handheld Global Positioning System (GPS) to mark the start and end points of the transects. The coordinates are listed below in **Table 1**.

TABLE 1 – UBHS TRANSECT COORDINATES, MACES BAY SCH

Transect	Start (UTM NAD 83 Zone 19)		End (UTM NAD 83 Zone 19)	
	Easting	Northing	Easting	Northing
T-1	698220.675	4999108.644	698267.857	4999123.23
T-2	698228.282	4999082.986	698247.633	4999090.058
T-3	698259.059	4999094.233	698275.967	4999100.409
T-4	698243.184	4999048.55	698259.32	4999063.826
T-5	698268.33	4999072.359	698281.501	4999084.843
T-6	698263.477	4999031.298	698277.825	4999048.1
T-7	698285.781	4999057.411	698297.522	4999071.151
T-8	698304.588	4999040.674	698316.658	4999054.804
T-9	698323.191	4999024.401	698335.453	4999038.757
T-10	698245.083	4999116.192	698251.009	4999097.016
T-11	698263.477	4999031.298	698220.675	4999108.644
T-12	698335.453	4999038.757	698267.857	4999123.23

A Canadian Standards Association (CSA)-certified diver using SCUBA was equipped with an underwater video camera and swam the length of each transect to record the substrate, macrofloral and macrofaunal communities along these transects. Where possible, the underwater video surveillance covered approximately 1m on either side of the transect line. Seabed characterization included field observations made by the



field crew and a review of the video footage by a Dillon biologist. Observations were recorded for every 5m segment along each transect. Specific observations made by the Dillon biologist during the UBHS included the following:

- Interpretation of site specific information on the substrate type and marine macrofaunal/faunal species present;
- Detailed descriptions of biological presence (especially fish) and/or habitat that are related to commercial, recreational or aboriginal fisheries;
- Examination of the proposed project area for shellfish presence and abundance, including siphon holes; and,
- General characterization and delineation of substrate types (i.e., rippled sand/rock/gravel) and a general characterization (i.e., what percentage of area is sand).

UNDERWATER BENTHIC HABITAT SURVEY RESULTS

The results of the transect surveys (i.e., Transect Nos. 1 to 12) are presented in **Table 2** (attached). These detailed results include:

- visual determination of substrate type;
- macrofaunal species identification and abundance; and
- macrofloral species identification and percent coverage.

Substrate: According to the video surveillance, the predominant substrate types for the individual transects are as follows:

Transect 1 (T-1):

- 0-50m: Sand (100%)

Transect 2 (T-2):

- 0-25m: Sand (100%)

Transect 3 (T-3):

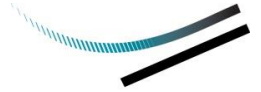
- 0-25m: Sand (100%)

Transect 4 (T-4):

- 0-25m: Sand (100%)

Transect 5 (T-5):

- 0-25m: Sand (100%)



Transect 6 (T-6):

- 0-5m and 10-15m: Predominantly sand (70%) with gravel (30%)
- 5-10m: Predominantly gravel (80%) with sand (20%)
- 15-20m: Predominantly sand (90%) with gravel (10%)
- 20-25m: Sand (100%)

Transect 7 (T-7):

- 0-25m: Sand (100%)

Transect 8 (T-8):

- 0-25m: Sand (100%)

Transect 9 (T-9):

- 0-5m: Predominantly gravel (80%) with sand (20%)
- 5-10m: Predominantly sand (70%) with gravel (30%)
- 10-15m: Predominantly sand (80%) with gravel (20%)
- 15-20m: Predominantly sand (90%) with gravel (10%)
- 20-25m: Sand (100%)

Transect 10 (T-10):

- 0-25m: Sand (100%)

Transect 11 (T-11):

- 0-100m: Sand (100%)
- 100-105m: Predominantly gravel (80%) with sand (20%)
- 105-115m: Predominantly gravel (90%) with sand (10%)

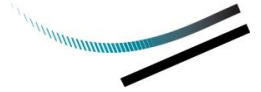
Transect 12 (T-12):

- 0-105m: Sand (100%)
- 105-125m: Predominantly sand (80%) with gravel (20%)

Macrofauna:

During the UBHS, macrofaunal species identification and enumeration was divided into four categories in order to characterize the observed abundances. These categories are as follows:

- Abundant ("A")** - Numerous (not quantifiable) observations made throughout the 5m segment;
- Common ("C")** - Numerous (not quantifiable) observations made intermittently along the 5m segment;



- iii. **Occasional (“O”)** - Quantifiable (number of individuals) observations made intermittently along the 5m segment; and,
- iv. **Uncommon (“U”)** - Quantifiable (number of individuals) observations made infrequently along the 5m segment.

Transect 1 (T-1): Observations of macrofaunal life were very infrequent along the 25m length of T-1. Macrofaunal life noted along T-1 included:

- Hermit crab (*Pagurus* sp.): uncommon occurrence (1 individual) along the 10-15m segment.

Transect 2 (T-2): Observations of macrofaunal life were not noted along the 25m length of T-2.

Transect 3 (T-3): Observations of macrofaunal life were very infrequent along the 25m length of T-3. Macrofaunal life noted along T-3 included:

- Atlantic rock crab (*Cancer irroratus*): uncommon occurrence (1 individual) along the 0-5m segment.

Transect 4 (T-4): Observations of macrofaunal life were not noted along the 25m length of T-4.

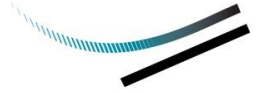
Transect 5 (T-5): Observations of macrofaunal life were very infrequent along the 25m length of T-5. Macrofaunal life noted along T-5 included:

- Ground fish (likely *Paralichthys dentatus*): uncommon occurrence (1 individual) along the 10-15m segment.

Transect 6 (T-6) to Transect 9 (T-9): Observations of macrofaunal life were not noted along the 25m lengths of T-6, T-7, T-8 or T-9.

Transect 10 (T-10): Observations of macrofaunal life were infrequent along the 25m length of T-10. Macrofaunal life noted along T-10 included:

- Common starfish (*Asterias vulgaris*): uncommon occurrence (1 individual) along the 0-5m segment.
- Atlantic rock crab (*Cancer irroratus*): uncommon occurrence (1 individual) along the 15-20m segment.



Transect 11 (T-11): Observations of macrofaunal life were very infrequent along the 115m length of T-11. Macrofaunal life noted along T-11 included:

- Atlantic rock crab (*Cancer irroratus*): uncommon occurrence (1 individual) along the 110-115m segment.

Transect 12 (T-12): Observations of macrofaunal life were not noted along the 125m length of T-12.

Macroflora:

Observations of macrofloral life were noted along each of the transects, as further described below and in **Table 2** (attached). Macrofloral debris (i.e., detritus) was also noted along each of the transects; however, for the purpose of this report the debris was not considered as macrofloral life. A summary of the macrofloral species for each transect is presented below.

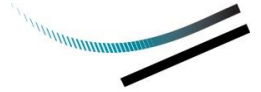
Live eelgrass (*Zostera marina*) beds were not observed within the proposed footprint of the armour-stone breakwater during the UBHS.

Transect 1 (T-1): Observations of macrofloral life were noted intermittently along the 50m length of T-1. Macrofloral life noted along T-1 included:

- Brown algae (*Desmarestia sp.*): observed along the 0-30m (5% coverage) and 30-50m (10% coverage) segments.
- Sea lettuce (*Ulva lactuca*): observed along the 20-25m and 45-50m (5% coverage) segments.
- Irish moss (*Chondrus crispus*): observed along the 30-40m (5% coverage) segments.
- Bladderwrack (*Fucus sp.*): observed along the 30-50m (5% coverage) segments.
- Rock weed (*Ascophyllum nodosum*): observed along the 45-50m (5% coverage) segment.

Macrofloral debris was noted along the 0-45m (5% coverage) and 45-50m (25% coverage) segments of T-1.

Transect 2 (T-2): Observations of the macrofloral life were noted intermittently along the 25m length of T-2. Macrofloral life noted along T-2 included:



- Brown algae (*Desmarestia sp.*): observed along the 10-25m (5% coverage) segments.
- Bladderwrack (*Fucus sp.*): observed along the 15-20m (5% coverage) segment.

Macrofloral debris was noted along the 0-25m (5% coverage) segments of T-2.

Transect 3 (T-3): Observations of the macrofloral life were noted intermittently along the 25m length of T-3. Macrofloral life noted along T-3 included:

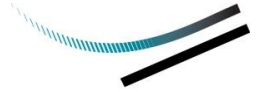
- Brown algae (*Desmarestia sp.*): observed along the 0-25m (30% coverage) segments.
- Bladderwrack (*Fucus sp.*): observed along the 0-20m (10% coverage) and the 20-25m (15% coverage) segments.
- Rock weed (*Ascophyllum nodosum*): observed along the 0-20m (10% coverage) and 20-25m (15% coverage) segments.
- Sea lettuce (*Ulva lactuca*): observed along the 5-20m (10% coverage) and 20-25m (15% coverage) segments.

Macrofloral debris was noted along the 0-5m (40% coverage); 5-20m (30% coverage); and the 20-25m (20% coverage) segments of T-3.

Transect 4 (T-4): Observations of the macrofloral life were noted intermittently along the 25m length of T-4. Macrofloral life noted along T-4 included:

- Bladderwrack (*Fucus sp.*): observed along the 10-15m (10% coverage); 15-20m (20% coverage); and 20-25m (5% coverage) segments.
- Rock weed (*Ascophyllum nodosum*): observed along the 5-10m (5% coverage); 10-15m and 20-25m (10% coverage); and 15-20m (20% coverage) segments.
- Brown algae (*Desmarestia sp.*): observed along the 10-15m and 20-25m (10% coverage); and 15-20m (20% coverage) segments.
- Irish Moss (*Chondrus crispus*): observed along the 20-25m (5% coverage) segment.
- Sea lettuce (*Ulva lactuca*): observed along the 20-25m (5% coverage) segment.

Macrofloral debris was noted along the 0-10m (5% coverage); and 10-25m (10% coverage) segments of T-4.



Transect 5 (T-5): Observations of the macrofloral life were noted intermittently along the 25m length of T-5. Macrofloral life noted along T-5 included:

- Brown algae (*Desmarestia sp.*): observed along the 0-10m (30% coverage); 10-15m (20% coverage); and 15-25m (15% coverage) segments.
- Bladderwrack (*Fucus sp.*): observed along the 0-5m and 10-25m (5% coverage); and 5-10m (10% coverage) segments.
- Rock weed (*Ascophyllum nodosum*): observed along the 0-25m (5% coverage) segments.
- Irish Moss (*Chondrus crispus*): observed along the 0-15m (5% coverage) segments.
- Sea lettuce (*Ulva lactuca*): observed along the 0-10m (20% coverage); and 10-25m (15% coverage) segments.

Macrofloral debris was noted along the 0-10m (30% coverage); 10-15m (20% coverage) and 15-25m (10% coverage) segments of T-5.

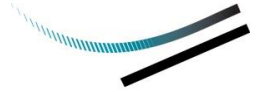
Transect 6 (T-6): Observations of the macrofloral life were noted intermittently along the 25m length of T-6. Macrofloral life noted along T-6 included:

- Bladderwrack (*Fucus sp.*): observed along the 0-5m (25% coverage); and 10-25m (5% coverage) segments.
- Rock weed (*Ascophyllum nodosum*): observed along the 10-25m (5% coverage) segments.
- Brown algae (*Desmarestia sp.*): observed along the 10-25m (5% coverage) segments.
- Sea lettuce (*Ulva lactuca*): observed along the 10-25m (5% coverage) segments.

Macrofloral debris was noted along the 5-15m (10% coverage); and 15-25m (5% coverage) segments of T-6.

Transect 7 (T-7): Observations of the macrofloral life were noted intermittently along the 25m length of T-7. Macrofloral life noted along T-7 included:

- Brown algae (*Desmarestia sp.*): observed along the 0-5m (5% coverage); 5-10m (20% coverage); and 10-25m (30% coverage) segments.
- Bladderwrack (*Fucus sp.*): observed along the 5-25m (10% coverage) segments.



- Rock weed (*Ascophyllum nodosum*): observed along the 5-25m (5% coverage) segments.
- Sea lettuce (*Ulva lactuca*): observed along the 5-25m (20% coverage) segments.
- Kelp (*Laminaria saccharina*): observed along the 5-25m (5% coverage) segments.

Macrofloral debris was noted along the 0-5m (5% coverage); and 5-25m (15% coverage) segments of T-7.

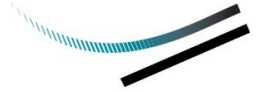
Transect 8 (T-8): Observations of the macrofloral life were noted intermittently along the 25m length of T-8. Macrofloral life noted along T-8 included:

- Bladderwrack (*Fucus sp.*): observed along the 0-15m (25% coverage); and 15-25m (10% coverage) segments.
- Rock weed (*Ascophyllum nodosum*): observed along the 0-15m (20% coverage); and 15-25m (10% coverage) segments.
- Brown algae (*Desmarestia sp.*): observed along the 0-15m (10% coverage); and 15-25m (30% coverage) segments.
- Sea lettuce (*Ulva lactuca*): observed along the 0-5m (15% coverage); 5-15m (20%); and 15-25m (10% coverage) segments.
- Nori (*Porphyra sp.*): observed along the 0-15m (10% coverage) segments.

Macrofloral debris was noted along the 0-15m (5% coverage); and 15-25m (15% coverage) segments of T-8.

Transect 9 (T-9): Observations of the macrofloral life were noted intermittently along the 25m length of T-5. Macrofloral life noted along T-9 included:

- Bladderwrack (*Fucus sp.*): observed along the 0-5m (5% coverage); 10-20m (10% coverage); and 20-25m (10% coverage) segments.
- Rock weed (*Ascophyllum nodosum*): observed along the 5-20m (5% coverage); and 20-25m (15% coverage) segments.
- Brown algae (*Desmarestia sp.*): observed along the 5-20m (5% coverage); and 20-25m (15% coverage) segments.
- Irish Moss (*Chondrus crispus*): observed along the 0-5m (5% coverage) segments.
- Sea lettuce (*Ulva lactuca*): observed along the 5-20m (5% coverage); and 20-25m (15% coverage) segments.



Macrofloral debris was noted along the 20-25m segment (15% coverage) of T-9.

Transect 10 (T-10): Observations of the macrofloral life were noted intermittently along the 25m length of T-5. Macrofloral life noted along T-10 included:

- Brown algae (*Desmarestia sp.*): observed along the 0-20m (10% coverage); and 20-25m (5% coverage) segments.
- Bladderwrack (*Fucus sp.*): observed along the 20-25m (5% coverage) segment.
- Sea lettuce (*Ulva lactuca*): observed along the 5-25m (5% coverage) segments.

Macrofloral debris was noted along the 0-10m (5% coverage); and 10-25m (15% coverage) segments of T-10.

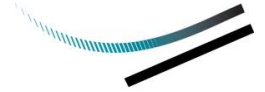
Transect 11 (T-11): Observations of the macrofloral life were noted intermittently along the 115m length of T-5. Macrofloral life noted along T-11 included:

- Brown algae (*Desmarestia sp.*): observed along the 0-5m, 15-30m, 40-65m and 85-100m segments (5% coverage), 5-15m and 75-85m segment (10% coverage), and 65-75m segments (20% coverage).
- Sea lettuce (*Ulva lactuca*): observed along the 5-15m, 50-70, and 75-85m segments (5% coverage), and the 65-75m segments (10% coverage).
- Irish Moss (*Chondrus crispus*): observed along the 50-85m segments (5% coverage).
- Bladderwrack (*Fucus sp.*): observed along the 65-85m and 90-100m (5% coverage) segments.
- Rock weed (*Ascophyllum nodosum*): observed along the 70-75m (5% coverage) segment.
- Kelp (*Laminaria saccharina*): observed along the 90-95m (5% coverage) segment.

Macrofloral debris was noted along the 0-5m, 15-50m and 85-100m (10% coverage); 5-10m, and 100-115m (5% coverage); 10-15m, and 50-65m (15% coverage); and 65-85m (20% coverage) segments of T-11.

Transect 12 (T-12): Observations of the macrofloral life were noted intermittently along the 125m length of T-12. Macrofloral life noted along T-12 included:

- Bladderwrack (*Fucus sp.*): observed along the 0-10m, 15-30m and 115-125m (5% coverage); 30-35m and 105-110m (10% coverage); 35-40m and 80-85m



- (15% coverage); 40-80m (20% coverage); and 85-105m (25% coverage) segments.
- Rock weed (*Ascophyllum nodosum*): observed along the 0-10m and 15-40m (5% coverage); 40-75m and 80-105m (15% coverage); and 75-80m (10% coverage) segments.
 - Brown algae (*Desmarestia sp.*): observed along the 0-10m (10% coverage); 10-15m and 85-100m (20% coverage); 15-20m, 40-85m and 100-105m (30% coverage); and 20-40m (40% coverage) segments.
 - Irish Moss (*Chondrus crispus*): observed along the 120-125m (5% coverage) segment.
 - Sea lettuce (*Ulva lactuca*): observed along the 0-10m and 120-125m (5% coverage); 15-20m and 100-105m (10% coverage); and 20-100m (20% coverage) segments.
 - Kelp (*Laminaria saccharina*): observed along the 90-95m (5% coverage) segment.
 - Red algae (*Porphyra umbilicalis*): observed along the 55-75m (5% coverage); and 75-105m (10% coverage) segments.

Macrofloral debris was noted along the 0-5m, 90-105m and 115-125m (5% coverage); 5-10m (50% coverage); 10-20m (30% coverage); as well as the 20-90m and 105-115m (10% coverage) segments of T-12.

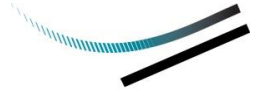
QUALITY ASSURANCE/QUALITY CONTROL

The UBHS field component was conducted by a CSA certified diver using SCUBA, and directed by a Dillon biologist experienced with environmental field data and sample collection. During the UBHS, Dillon was responsible for ensuring that standard operating procedures, best management practices and health and safety measures were maintained throughout the field survey.

SUMMARY

Characterization of the Maces Bay DFO-SCH site, Charlotte County, NB was completed through the combination of visual field observations and underwater video survey techniques.

The dominant substrate type among each of the 12 transects was sand. There was a low abundance of macrofaunal life within the study area. Organisms encountered within the study area included a hermit crab (*Pagurus sp.*), Atlantic rock crabs (*Cancer irroratus*), a common starfish (*Asterias vulgaris*) and a ground fish species (likely *Paralichthys dentatus*).



The macrofaunal life encountered included Bladderwrack (*Fucus sp.*), Rock weed (*Ascophyllum nodosum*), Brown algae (*Desmarestia sp.*), Irish moss (*Chondrus crispus*), Sea lettuce (*Ulva lactuca*), Kelp (*Laminaria saccharina*), and Red algae (*Porphyra umbilicalis*). Macrofloral debris was noted along each of the 12 transects.

Live eelgrass (*Zostera marina*) beds were not observed within the proposed footprint of the armour-stone breakwater during the UBHS.

CLOSURE

This report was prepared exclusively for the purposes, project, and site location(s) outlined in the report. The report is based on information provided to, or obtained by Dillon Consulting Limited ("Dillon") as indicated in the report, and applies solely to site conditions existing at the time of the site investigation(s). Although a reasonable investigation was conducted by Dillon, Dillon's investigation was by no means exhaustive and cannot be construed as a certification of the absence of any contaminants from the site(s). Rather, Dillon's report represents a reasonable review of available information within an agreed work scope, schedule, and budget. It is therefore possible that currently unrecognized contamination or potentially hazardous materials may exist at the site(s), and that the levels of contamination or hazardous materials may vary across the site(s). Further review and updating of the report may be required as local and site conditions, and the regulatory and planning frameworks, change over time.

This report was prepared by Dillon for the sole benefit of Public Services and Procurement Canada and Fisheries and Oceans Canada. The material in it reflects Dillon's best judgment in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibilities of such third parties. Dillon accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

This report was prepared by Alison Smith, B.Sc. The report was reviewed by Shawn Forster, B.Sc., M.Eng., P.Eng.



We trust this report meets your current requirements. If you have any questions or comments, please contact the undersigned.

Yours sincerely,

DILLON CONSULTING LIMITED

Michelle DeGariné, P.Eng.
Senior Project Team Contact (NB/PE)

Shawn Forster, B.Sc., M.Eng., P.Eng.
Project Manager

SAF:acs:scn:trw

Attachments: Site Photographs
Table 2 – UBHS Results for Transects 1 to 12, Maces Bay SCH.
Figure 1 – Underwater Video Transect Locations

Our file: 18-7906

Site Photographs

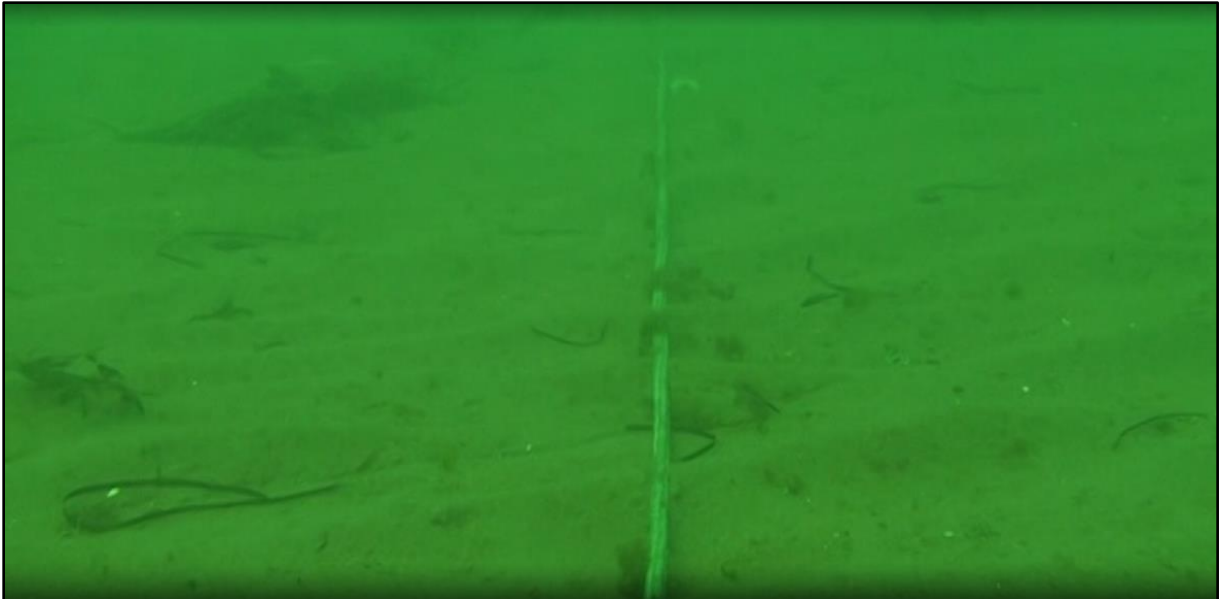


Photo 1: Typical sand substrate (Transect No. 2: 20m). June 22, 2018

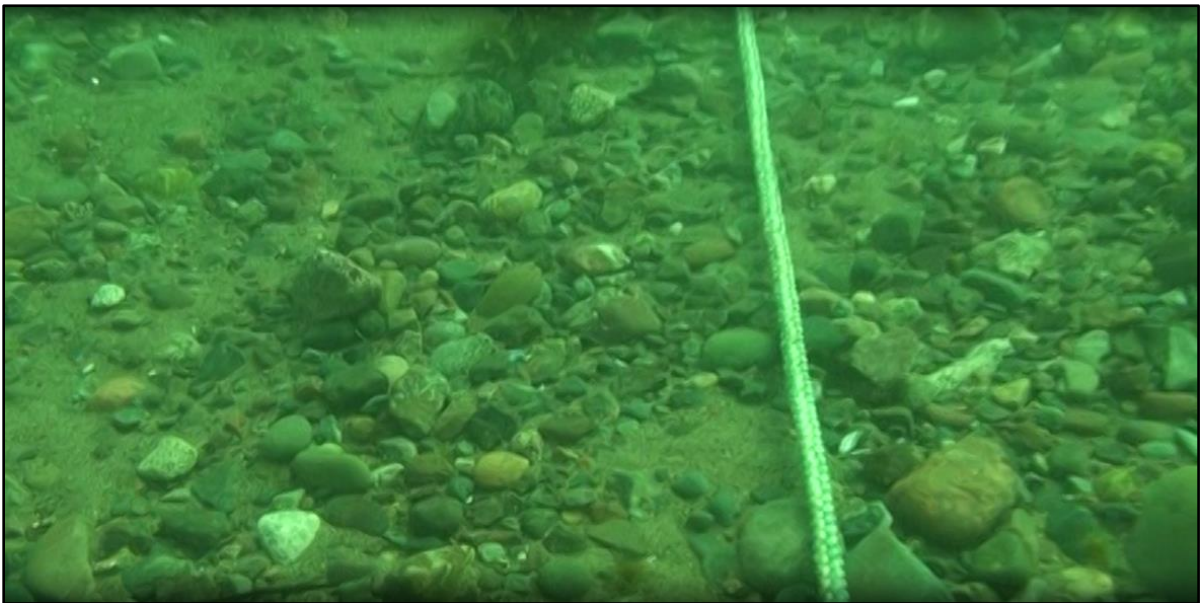


Photo 2: Typical gravel substrate (Transect No. 9: 3m). June 22, 2018).



Photo 3: Macrofaunal life ground fish species (likely *Paralichthys dentatus*) (Transect No. 5: 11m). June 22, 2018.



Photo 4: Typical Macrofloral life (Transect No. 12: 97 m). June 22, 2018.



Photo 5: Maces Bay DFO-SCH looking northwest (June 22, 2018).



Photo 6: Maces Bay DFO-SCH looking northeast (June 22, 2018).



Photo 7: Maces Bay DFO-SCH wharf structure looking northwest (June 22, 2018).

Tables

Table 2 – UBHS Results for Transects 1 to 12, Maces Bay SCH.

Transect 1			
Transect Distance (m)	Substrate (%)	Macrofaunal Life Observed (Estimated Abundances*)	Macrofloral Life Observed (% Coverage)
0-5	Sand (100%)	No life observed	Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (5%)
5-10			Macrofloral debris (5%)
10-15		Hermit crab (<i>Pagurus</i> sp.) (U:1 individual)	Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (5%)
15-20			Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (5%)
20-25			Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (5%), Sea lettuce (<i>Ulva lactuca</i>) (5%)
25-30			Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (5%)
30-35		No life observed	Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (10%), Irish moss (<i>Chondrus crispus</i>) (5%), Bladderwrack (<i>Fucus</i> sp.) (5%)
35-40			Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (10%), Irish moss (<i>Chondrus crispus</i>) (5%), Bladderwrack (<i>Fucus</i> sp.) (5%)
40-45			Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (10%), Bladderwrack (<i>Fucus</i> sp.) (5%)
45-50			Macrofloral debris (25%), Brown algae (<i>Desmarestia</i> sp.) (10%), Sea lettuce (<i>Ulva lactuca</i>) (5%), Bladderwrack (<i>Fucus</i> sp.) (5%), Rock weed (<i>Ascophyllum nodosum</i>) (5%)
Transect 2			
Transect Distance (m)	Substrate (%)	Macrofaunal Life Observed (Estimated Abundances*)	Macrofloral Life Observed (% Coverage)
0-5	Sand (100%)	No life observed	Macrofloral debris (5%)
5-10			Macrofloral debris (5%)
10-15			Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (5%)
15-20			Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (5%), Bladderwrack (<i>Fucus</i> sp.) (5%)
20-25			Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (5%)
Transect 3			
Transect Distance (m)	Substrate (%)	Macrofaunal Life Observed (Estimated Abundances*)	Macrofloral Life Observed (% Coverage)
0-5	Sand (100%)	Atlantic rock crab (<i>Cancer irroratus</i>) (U:1 individual)	Macrofloral debris (40%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (10%), Rock weed (<i>Ascophyllum nodosum</i>) (10%)
5-10		No life observed	Macrofloral debris (30%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (10%), Rock weed (<i>Ascophyllum nodosum</i>) (10%), Sea lettuce (<i>Ulva lactuca</i>) (10%)
10-15			Macrofloral debris (30%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (10%), Rock weed (<i>Ascophyllum nodosum</i>) (10%), Sea lettuce (<i>Ulva lactuca</i>) (10%)
15-20			Macrofloral debris (30%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (10%), Rock weed (<i>Ascophyllum nodosum</i>) (10%), Sea lettuce (<i>Ulva lactuca</i>) (10%)
20-25			Macrofloral debris (20%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (15%), Rock weed (<i>Ascophyllum nodosum</i>) (15%), Sea lettuce (<i>Ulva lactuca</i>) (15%)
Transect 4			
Transect Distance (m)	Substrate (%)	Macrofaunal Life Observed (Estimated Abundances*)	Macrofloral Life Observed (% Coverage)
0-5	Sand (100%)	No life observed	Macrofloral debris (5%)
5-10			Macrofloral debris (5%), Rock weed (<i>Ascophyllum nodosum</i>) (5%),
10-15			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (10%), Bladderwrack (<i>Fucus</i> sp.) (10%), Rock weed (<i>Ascophyllum nodosum</i>) (10%)
15-20			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (20%), Bladderwrack (<i>Fucus</i> sp.) (20%), Rock weed (<i>Ascophyllum nodosum</i>) (20%)
20-25			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (10%), Bladderwrack (<i>Fucus</i> sp.) (5%), Rock weed (<i>Ascophyllum nodosum</i>) (10%), Sea lettuce (<i>Ulva lactuca</i>) (5%), Irish moss (<i>Chondrus crispus</i>) (5%)
Transect 5			
Transect Distance (m)	Substrate (%)	Macrofaunal Life Observed (Estimated Abundances*)	Macrofloral Life Observed (% Coverage)
0-5	Sand (100%)	No life observed	Macrofloral debris (30%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (5%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (20%), Irish moss (<i>Chondrus crispus</i>) (5%)
5-10		No life observed	Macrofloral debris (30%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (10%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (20%), Irish moss (<i>Chondrus crispus</i>) (5%)
10-15		Ground fish species (likely <i>Paralichthys dentatus</i>) (U:1 individual)	Macrofloral debris (20%), Brown algae (<i>Desmarestia</i> sp.) (20%), Bladderwrack (<i>Fucus</i> sp.) (5%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (15%), Irish moss (<i>Chondrus crispus</i>) (5%)
15-20		No life observed	Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (15%), Bladderwrack (<i>Fucus</i> sp.) (5%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (15%)
20-25		No life observed	Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (15%), Bladderwrack (<i>Fucus</i> sp.) (5%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (15%)

Notes:
 * Abundant ("A") – Numerous (not quantifiable) observations made throughout the 5m segment;
 Common ("C") – Numerous (not quantifiable) observations made intermittently along the 5m segment;
 Occasional ("O") – Quantifiable (number of individuals) observations made intermittently along the 5m segment; and,
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Table 2 – UBHS Results for Transects 1 to 12, Maces Bay SCH.

Transect 6			
Transect Distance (m)	Substrate (%)	Macrofaunal Life Observed (Estimated Abundances*)	Macrofloral Life Observed (% Coverage)
0-5	Sand (70%), Gravel (30%)	No life observed	Bladderwrack (<i>Fucus</i> sp.) (25%), Rock weed (<i>Ascophyllum nodosum</i>) (25%)
5-10	Sand (20%), Gravel (80%)		Macrofloral debris (10%)
10-15	Sand (70%), Gravel (30%)		Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (5%), Bladderwrack (<i>Fucus</i> sp.) (5%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (5%)
15-20	Sand (90%), Gravel (10%)		Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (5%), Bladderwrack (<i>Fucus</i> sp.) (5%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (5%)
20-25	Sand (100%)		Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (5%), Bladderwrack (<i>Fucus</i> sp.) (5%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (5%)
Transect 7			
Transect Distance (m)	Substrate (%)	Macrofaunal Life Observed (Estimated Abundances*)	Macrofloral Life Observed (% Coverage)
0-5	Sand (100%)	No life observed	Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (5%)
5-10			Macrofloral debris (15%), Brown algae (<i>Desmarestia</i> sp.) (20%), Bladderwrack (<i>Fucus</i> sp.) (10%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (20%), Kelp (<i>Laminaria saccharina</i>) (5%)
10-15			Macrofloral debris (15%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (10%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (20%), Kelp (<i>Laminaria saccharina</i>) (5%)
15-20			Macrofloral debris (15%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (10%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (20%), Kelp (<i>Laminaria saccharina</i>) (5%)
20-25			Macrofloral debris (15%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (10%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (20%), Kelp (<i>Laminaria saccharina</i>) (5%)
Transect 8			
Transect Distance (m)	Substrate (%)	Macrofaunal Life Observed (Estimated Abundances*)	Macrofloral Life Observed (% Coverage)
0-5	Sand (100%)	No life observed	Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (10%), Bladderwrack (<i>Fucus</i> sp.) (25%), Rock weed (<i>Ascophyllum nodosum</i>) (20%), Sea lettuce (<i>Ulva lactuca</i>) (15%), Kelp (<i>Laminaria saccharina</i>) (5%), Red algae (<i>Porphyra umbilicalis</i>) (10%)
5-10			Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (10%), Bladderwrack (<i>Fucus</i> sp.) (25%), Rock weed (<i>Ascophyllum nodosum</i>) (20%), Sea lettuce (<i>Ulva lactuca</i>) (20%), Red algae (<i>Porphyra umbilicalis</i>) (10%)
10-15			Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (10%), Bladderwrack (<i>Fucus</i> sp.) (25%), Rock weed (<i>Ascophyllum nodosum</i>) (20%), Sea lettuce (<i>Ulva lactuca</i>) (20%), Red algae (<i>Porphyra umbilicalis</i>) (10%)
15-20			Macrofloral debris (15%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (10%), Rock weed (<i>Ascophyllum nodosum</i>) (10%), Sea lettuce (<i>Ulva lactuca</i>) (10%)
20-25			Macrofloral debris (15%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (10%), Rock weed (<i>Ascophyllum nodosum</i>) (10%), Sea lettuce (<i>Ulva lactuca</i>) (10%)
Transect 9			
Transect Distance (m)	Substrate (%)	Macrofaunal Life Observed (Estimated Abundances*)	Macrofloral Life Observed (% Coverage)
0-5	Sand (20%), Gravel (80%)	No life observed	Bladderwrack (<i>Fucus</i> sp.) (5%), Irish moss (<i>Chondrus crispus</i>) (5%)
5-10	Sand (70%), Gravel (30%)		Brown algae (<i>Desmarestia</i> sp.) (5%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (5%)
10-15	Sand (80%), Gravel (20%)		Brown algae (<i>Desmarestia</i> sp.) (5%), Bladderwrack (<i>Fucus</i> sp.) (10%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (5%)
15-20	Sand (90%), Gravel (10%)		Brown algae (<i>Desmarestia</i> sp.) (5%), Bladderwrack (<i>Fucus</i> sp.) (10%), Rock weed (<i>Ascophyllum nodosum</i>) (5%)
20-25	Sand (100%)		Macrofloral debris (15%), Brown algae (<i>Desmarestia</i> sp.) (15%), Bladderwrack (<i>Fucus</i> sp.) (15%), Rock weed (<i>Ascophyllum nodosum</i>) (15%), Sea lettuce (<i>Ulva lactuca</i>) (15%)
Transect 10			
Transect Distance (m)	Substrate (%)	Macrofaunal Life Observed (Estimated Abundances*)	Macrofloral Life Observed (% Coverage)
0-5	Sand (100%)	Common starfish (<i>Asterias vulgaris</i>) (U:1 individual)	Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (10%)
5-10		No life observed	Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (10%), Sea lettuce (<i>Ulva lactuca</i>) (5%)
10-15		No life observed	Macrofloral debris (15%), Brown algae (<i>Desmarestia</i> sp.) (10%), Sea lettuce (<i>Ulva lactuca</i>) (5%)
15-20		Atlantic rock crab (<i>Cancer irroratus</i>) (U:1 individual)	Macrofloral debris (15%), Brown algae (<i>Desmarestia</i> sp.) (10%), Sea lettuce (<i>Ulva lactuca</i>) (5%)
20-25		No life observed	Macrofloral debris (15%), Brown algae (<i>Desmarestia</i> sp.) (5%), Bladderwrack (<i>Fucus</i> sp.) (5%), Sea lettuce (<i>Ulva lactuca</i>) (5%)

Notes:

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Transect Distance (m)	Substrate (%)	Macrofaunal Life Observed (Estimated Abundances*)	Macrofloral Life Observed (% Coverage)
0-5	Sand (100%)	No life observed	Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (5%)
5-10			Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (10%), Sea lettuce (<i>Ulva lactuca</i>) (5%)
10-15			Macrofloral debris (15%), Brown algae (<i>Desmarestia</i> sp.) (10%), Sea lettuce (<i>Ulva lactuca</i>) (5%)
15-20			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (5%)
20-25			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (5%)
25-30			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (5%)
30-35			Macrofloral debris (10%)
35-40			Macrofloral debris (10%)
40-45			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (5%)
45-50			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (5%), Irish moss (<i>Chondrus crispus</i>) (5%)
50-55			Macrofloral debris (15%), Brown algae (<i>Desmarestia</i> sp.) (5%), Sea lettuce (<i>Ulva lactuca</i>) (5%), Irish moss (<i>Chondrus crispus</i>) (5%)
55-60			Macrofloral debris (15%), Brown algae (<i>Desmarestia</i> sp.) (5%), Sea lettuce (<i>Ulva lactuca</i>) (5%), Irish moss (<i>Chondrus crispus</i>) (5%)
60-65			Macrofloral debris (15%), Brown algae (<i>Desmarestia</i> sp.) (5%), Sea lettuce (<i>Ulva lactuca</i>) (5%), Irish moss (<i>Chondrus crispus</i>) (5%)
65-70			Macrofloral debris (20%), Brown algae (<i>Desmarestia</i> sp.) (20%), Bladderwrack (<i>Fucus</i> sp.) (5%), Sea lettuce (<i>Ulva lactuca</i>) (10%), Irish moss (<i>Chondrus crispus</i>) (5%)
70-75			Macrofloral debris (20%), Brown algae (<i>Desmarestia</i> sp.) (20%), Bladderwrack (<i>Fucus</i> sp.) (5%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (10%), Irish moss (<i>Chondrus crispus</i>) (5%)
75-80			Macrofloral debris (20%), Brown algae (<i>Desmarestia</i> sp.) (10%), Bladderwrack (<i>Fucus</i> sp.) (5%), Sea lettuce (<i>Ulva lactuca</i>) (5%), Irish moss (<i>Chondrus crispus</i>) (5%)
80-85			Macrofloral debris (20%), Brown algae (<i>Desmarestia</i> sp.) (10%), Bladderwrack (<i>Fucus</i> sp.) (5%), Sea lettuce (<i>Ulva lactuca</i>) (5%), Irish moss (<i>Chondrus crispus</i>) (5%)
85-90			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (5%)
90-95			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (5%), Bladderwrack (<i>Fucus</i> sp.) (5%), Kelp (<i>Laminaria saccharina</i>) (5%)
95-100			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (5%), Bladderwrack (<i>Fucus</i> sp.) (5%)
100-105	Sand (20%), Gravel (80%)		Macrofloral debris (5%)
105-110			Macrofloral debris (5%)
110-115	Sand (10%), Gravel (90%)	Atlantic rock crab (<i>Cancer irroratus</i>) (U:1 individual)	Macrofloral debris (5%)

Notes:
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Table 2 – UBHS Results for Transects 1 to 12, Maces Bay SCH.

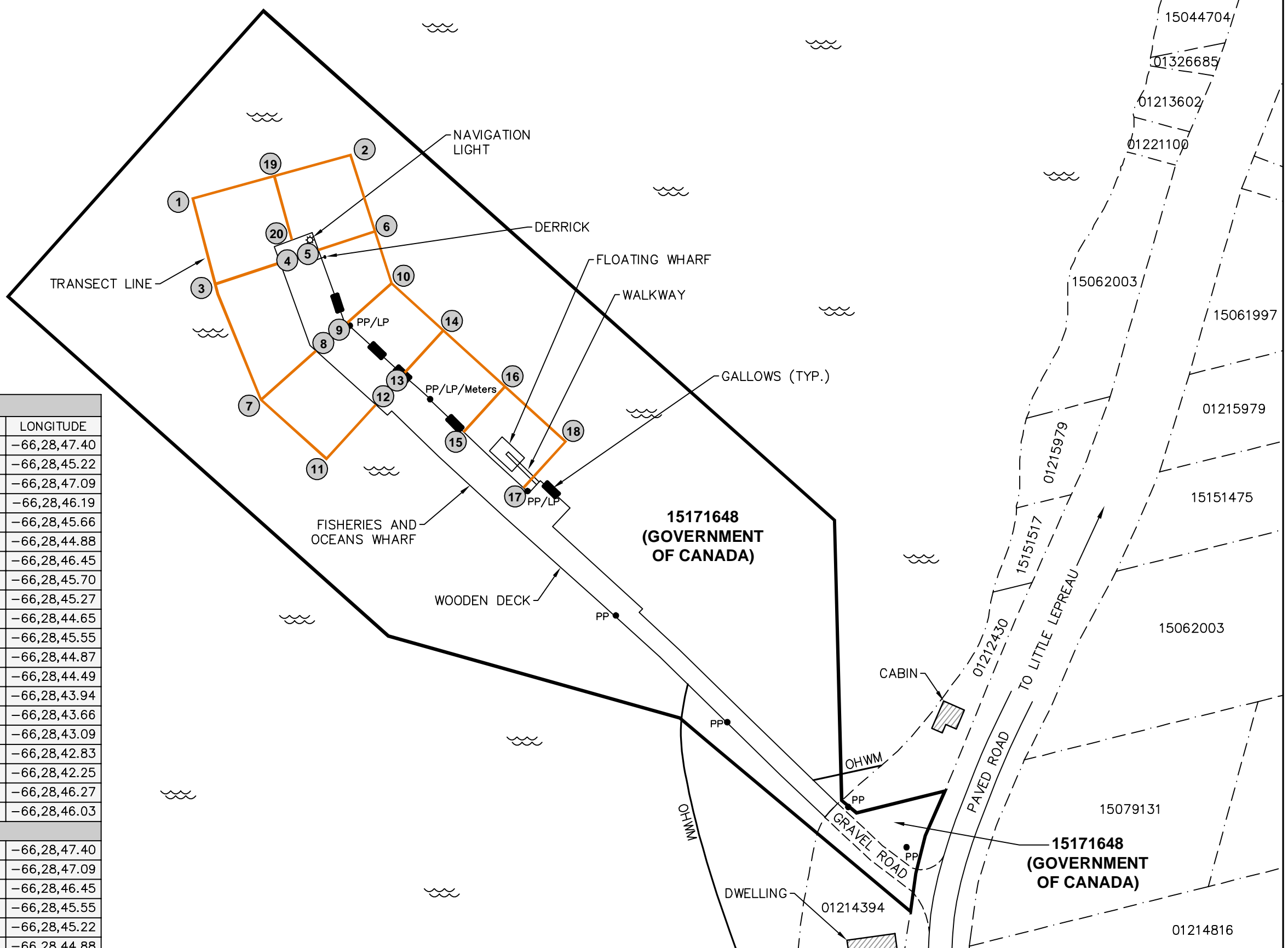
Transect 12			
Transect Distance (m)	Substrate (%)	Macrofaunal Life Observed (Estimated Abundances*)	Macrofloral Life Observed (% Coverage)
0-5	Sand (100%)	No life observed	Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (10%), Bladderwrack (<i>Fucus</i> sp.) (5%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (5%)
5-10			Macrofloral debris (50%), Brown algae (<i>Desmarestia</i> sp.) (10%), Bladderwrack (<i>Fucus</i> sp.) (5%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (5%)
10-15			Macrofloral debris (30%), Brown algae (<i>Desmarestia</i> sp.) (20%)
15-20			Macrofloral debris (30%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (5%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (10%)
20-25			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (40%), Bladderwrack (<i>Fucus</i> sp.) (5%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (20%)
25-30			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (40%), Bladderwrack (<i>Fucus</i> sp.) (5%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (20%)
30-35			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (40%), Bladderwrack (<i>Fucus</i> sp.) (10%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (20%)
35-40			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (40%), Bladderwrack (<i>Fucus</i> sp.) (15%), Rock weed (<i>Ascophyllum nodosum</i>) (5%), Sea lettuce (<i>Ulva lactuca</i>) (20%)
40-45			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (20%), Rock weed (<i>Ascophyllum nodosum</i>) (15%), Sea lettuce (<i>Ulva lactuca</i>) (20%)
45-50			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (20%), Rock weed (<i>Ascophyllum nodosum</i>) (15%), Sea lettuce (<i>Ulva lactuca</i>) (20%)
50-55			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (20%), Rock weed (<i>Ascophyllum nodosum</i>) (15%), Sea lettuce (<i>Ulva lactuca</i>) (20%)
55-60			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (20%), Rock weed (<i>Ascophyllum nodosum</i>) (15%), Sea lettuce (<i>Ulva lactuca</i>) (20%), Red algae (<i>Porphyra umbilicalis</i>) (5%)
60-65			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (20%), Rock weed (<i>Ascophyllum nodosum</i>) (15%), Sea lettuce (<i>Ulva lactuca</i>) (20%), Red algae (<i>Porphyra umbilicalis</i>) (5%)
65-70			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (20%), Rock weed (<i>Ascophyllum nodosum</i>) (15%), Sea lettuce (<i>Ulva lactuca</i>) (20%), Red algae (<i>Porphyra umbilicalis</i>) (5%)
70-75			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (20%), Rock weed (<i>Ascophyllum nodosum</i>) (15%), Sea lettuce (<i>Ulva lactuca</i>) (20%), Red algae (<i>Porphyra umbilicalis</i>) (5%)
75-80			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (20%), Rock weed (<i>Ascophyllum nodosum</i>) (10%), Sea lettuce (<i>Ulva lactuca</i>) (20%), Red algae (<i>Porphyra umbilicalis</i>) (10%)
80-85			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (15%), Rock weed (<i>Ascophyllum nodosum</i>) (15%), Sea lettuce (<i>Ulva lactuca</i>) (20%), Red algae (<i>Porphyra umbilicalis</i>) (10%)
85-90			Macrofloral debris (10%), Brown algae (<i>Desmarestia</i> sp.) (20%), Bladderwrack (<i>Fucus</i> sp.) (25%), Rock weed (<i>Ascophyllum nodosum</i>) (15%), Sea lettuce (<i>Ulva lactuca</i>) (20%), Red algae (<i>Porphyra umbilicalis</i>) (10%)
90-95			Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (20%), Bladderwrack (<i>Fucus</i> sp.) (25%), Rock weed (<i>Ascophyllum nodosum</i>) (15%), Sea lettuce (<i>Ulva lactuca</i>) (20%), Kelp (<i>Laminaria saccharina</i>) (5%), Red algae (<i>Porphyra umbilicalis</i>) (10%)
95-100			Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (20%), Bladderwrack (<i>Fucus</i> sp.) (25%), Rock weed (<i>Ascophyllum nodosum</i>) (15%), Sea lettuce (<i>Ulva lactuca</i>) (20%), Kelp (<i>Laminaria saccharina</i>) (5%), Red algae (<i>Porphyra umbilicalis</i>) (10%)
100-105	Macrofloral debris (5%), Brown algae (<i>Desmarestia</i> sp.) (30%), Bladderwrack (<i>Fucus</i> sp.) (25%), Rock weed (<i>Ascophyllum nodosum</i>) (15%), Sea lettuce (<i>Ulva lactuca</i>) (10%), Kelp (<i>Laminaria saccharina</i>) (5%), Red algae (<i>Porphyra umbilicalis</i>) (10%)		
105-110	Sand (80%), Gravel (20%)	No life observed	Macrofloral debris (10%), Bladderwrack (<i>Fucus</i> sp.) (10%)
110-115			Macrofloral debris (10%)
115-120			Macrofloral debris (5%), Bladderwrack (<i>Fucus</i> sp.) (5%)
120-125			Macrofloral debris (5%), Bladderwrack (<i>Fucus</i> sp.) (5%), Sea lettuce (<i>Ulva lactuca</i>) (5%), Irish moss (<i>Chondrus crispus</i>) (5%)

Notes:
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 Uncommon ("U") – Quantifiable (number of individuals) observations made infrequently along the 5m segment.

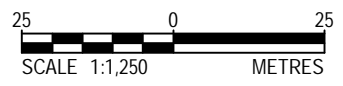
Figures



MACES BAY



TRANSECT COORDINATES					
NUMBER	POINT	NORTHING	EASTING	LATITUDE	LONGITUDE
T-1	1	7346360.24	2501586.95	45,07,03.50	-66,28,47.40
	2	7346373.36	2501634.56	45,07,03.93	-66,28,45.22
T-2	3	7346334.36	2501593.76	45,07,02.66	-66,28,47.09
	4	7346340.83	2501613.32	45,07,02.87	-66,28,46.19
T-3	5	7346344.65	2501624.87	45,07,03.00	-66,28,45.66
	6	7346350.30	2501641.96	45,07,03.18	-66,28,44.88
T-4	7	7346299.48	2501607.59	45,07,01.53	-66,28,46.45
	8	7346314.25	2501624.19	45,07,02.01	-66,28,45.70
T-5	9	7346322.50	2501633.46	45,07,02.28	-66,28,45.27
	10	7346334.57	2501647.01	45,07,02.67	-66,28,44.65
T-6	11	7346281.61	2501627.34	45,07,00.95	-66,28,45.55
	12	7346297.96	2501642.20	45,07,01.48	-66,28,44.87
T-7	13	7346307.02	2501650.44	45,07,01.78	-66,28,44.49
	14	7346320.39	2501662.60	45,07,02.21	-66,28,43.94
T-8	15	7346289.71	2501668.72	45,07,01.21	-66,28,43.66
	16	7346303.46	2501681.22	45,07,01.66	-66,28,43.09
T-9	17	7346272.87	2501686.81	45,07,00.67	-66,28,42.83
	18	7346286.84	2501699.51	45,07,01.12	-66,28,42.25
T-10	19	7346367.03	2501611.58	45,07,03.72	-66,28,46.27
	20	7346347.68	2501616.91	45,07,03.09	-66,28,46.03
PARALLEL TRANSECT COORDINATES					
T-11	1	7346360.24	2501586.95	45,07,03.50	-66,28,47.40
	3	7346334.36	2501593.76	45,07,02.66	-66,28,47.09
	7	7346299.48	2501607.59	45,07,01.53	-66,28,46.45
	11	7346281.61	2501627.34	45,07,00.95	-66,28,45.55
T-12	2	7346373.36	2501634.56	45,07,03.93	-66,28,45.22
	6	7346350.30	2501641.96	45,07,03.18	-66,28,44.88
	10	7346334.57	2501647.01	45,07,02.67	-66,28,44.65
	14	7346320.39	2501662.60	45,07,02.21	-66,28,43.94
	18	7346286.84	2501699.51	45,07,01.12	-66,28,42.25



COORDINATES NAD83 (CSRS) NB STEREOGRAPHIC



DATE	AUGUST 2018	PROJECT	UNDERWATER BENTHIC HABITAT SURVEY MACES BAY DFO-SCH, CHARLOTTE CO., NB DFRP No. 04031; SCH No. 2588; MS02588	PROJECT NO.	18-7906
		TITLE	UNDERWATER VIDEO TRANSECT LOCATIONS	FIGURE NO.	1

File name: c:\projects\working directory\projects\2018\50heblms28730187906-05-fig 1.dwg