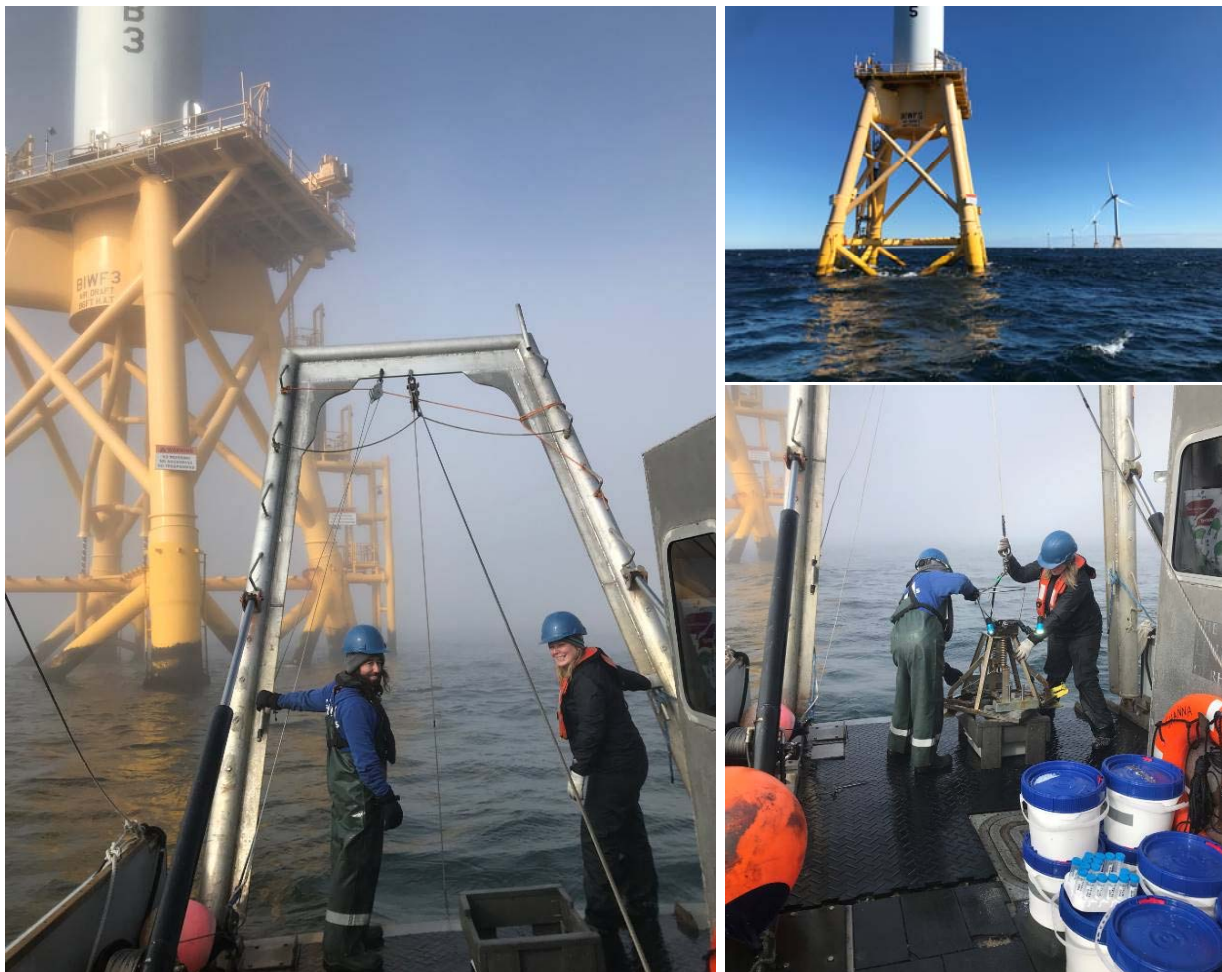


Benthic and Epifaunal Monitoring During Wind Turbine Installation and Operation at the Block Island Wind Farm, Rhode Island – Project Report Volume II – Appendices



Benthic and Epifaunal Monitoring During Wind Turbine Installation and Operation at the Block Island Wind Farm, Rhode Island – Project Report

Volume II – Appendices

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Bureau of Ocean Energy Management
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Appendix A – Field Sampling Plan



Real-Time Opportunity for Development of Environmental Observations (RODEO)

Revised Work Execution Plan/Field Sampling Plan for Field Observations During Wind Turbine Installation and Operation

Block Island, Rhode Island

Contract No. M15PC00002,
Task Order No. M16PD00025

June 25, 2016

Prepared for:



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Acronyms and Abbreviations

BITS	Block Island Transmission System
BIWF	Block Island Wind Farm
BLM	Blue Land Media
COR	Contracting Officer Representative
dB	decibel(s)
dB re 1 μ Pa RMS	decibels referenced to 1 micro Pascal root mean square
DWW	Deepwater Wind
DMON	Digital acoustic monitoring
DOI	Department of Interior
FAA	Federal Aviation Administration
HASP	Health and Safety Plan
Hz	Hertz
MAI	Marine Acoustic, Inc.
MPR	Monthly Progress Report
OFC	Onsite Field Coordinator
RODEO	Real-time Opportunity for Development Environmental Observations
SHRU	Several Hydrophone Receive Units
SSS	Side Scan Sonar
TO	Task Order
URI	University of Rhode Island
WTG	Wind Turbine Generator
WHOI	Woods Hole Oceanographic Institution



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1.0 Introduction and Background

Task Order (TO) M16PD00025 was issued to HDR on 16 May 2016. Under this Time-and-Material (T&M) TO, HDR will conduct field monitoring during wind turbine generator (WTG) installation and operations at the Block Island Wind Farm (BIWF), Rhode Island. The work to be performed under this TO falls within the objectives identified in the basic IDIQ Contract number M15PC00002 and specifically Tasks C.5.2.1, C.5.2.2, C.5.2.4 and C.5.3.

This revised Work Execution Plan (WEP)/Field Sampling Plan (FSP) supplements the information provided in the Field Data Collection Plan prepared under TO M16PD00006 and it incorporates response to clarifications sought by BOEM on the draft version of the plan dated June 8, 2016. All revisions are shown in RED font for easy reference. It provides additional details on the HDR Team's approach for conducting field surveys to gather data for establishing a record of impact producing activities during the WTG installation and operations at the BIWF.

The BIWF is America's first offshore wind farm, and it is being constructed by Deepwater Wind (DWW) Block Island, LLC approximately 3 miles off the coast of Block Island, which is located approximately 16 miles south of the Rhode Island mainland (Figure 1). BIWF consists of five, 6-MW Alstom Haliade 150 wind turbine generators (WTGs), a submarine cable interconnecting the WTGs (hereafter referred to as Inter-Array Cable), and a 34.5-kilovolt (kV) transmission cable from the northernmost WTG to an interconnection point on Block Island (hereafter referred to as Export Cable). Once completed, the five turbines will produce 30-megawatts for Block Island residents, and the mainland will receive the additional power.

The construction of the facility began in July 2015, is occurring in a phased manner, and is anticipated to be completed towards the end of 2016. During the recently completed Phase I, 5 steel jacket foundations were installed over 18 weeks (from July 26 to October 26, 2015). Phase II is scheduled to begin in June 2016 and will include installing power transmission cables and the WTGs on the foundations that were installed during Phase I. Following the completion of Phase II construction, operational testing is scheduled to occur towards the end of 2016.

Phase II will include the following major construction activities:

1. **Sea2shore Cable Installation** – which is scheduled to start in June 2016, by National Grid, and will include construction/installation of the following components
2. **Inter-array Cable:** Submarine cable connecting the WTGs.
3. **Export Cable:** Cable connecting northern most WTG to Block Island.
4. **Block Island Substation:** This will be located in New Shoreham on Block Island, and it will include approximately 0.8 mile of underground cable from the beach to the new substation.
5. **Block Island Transmission System (BITS):** This includes a bi-directional approximately 20-mile submarine cable from Block Island to Scarborough State

Beach in Narragansett and 3.5 miles of underground cable from Scarborough State Beach to the Dillon's Corner substation. The BITS will deliver power both to and from the Rhode Island mainland to Block Island.

6. **Turbine Installation** – This includes installation of turbine towers, blades, nacelles on the foundations that were constructed during Phase I, and it is scheduled to occur over 4 weeks in the summer of 2016. Each WTG consists of three sections. GE is currently manufacturing the lower sections at the Port of Providence facility. Final assembly of the turbine units will be completed at Quonset Point.
7. **Turbine Operational Testing** – WTG operational testing will be conducted during the fourth quarter of 2016.

Per guidance from BOEM, monitoring and field observations proposed in the Field Plan and detailed in this WEP:

1. Do not duplicate or substitute for compliance monitoring that is required to be performed by the construction contractors,
2. Are compatible with scheduled construction
3. Are designed for providing additional information necessary for BOEM analysts to fully analyze the scope and extent of environmental impacts that may result from the construction activities and provide data to improve the accuracy of models and analysis criteria used to establish current monitoring controls and mitigations.

Also, per guidance from BOEM, the approach presented in this WEP includes mechanisms for the following:

- Ensuring that a process is in place for coordinating with other ongoing activities
- Providing a process for coordination of the team's efforts with the industry
- Providing sufficient safety procedures to protect personnel during monitoring activities.

1.1 Deliverables Schedule

The period of performance for this TO is 18 months from the date of award. The recording of the events during the installation of the wind turbine generators and acoustic recordings is expected to take place between August and December of 2016. Monitoring of initial operation will begin between August and December of 2016 following installation and monitoring for underwater sound, seabed vibration, and particle velocity will continue from initial operations for a period of 12 months. The benthic monitoring and sediment recovery activities will begin as soon as practicable after installation and be repeated during a period up to 12 months. Work products will be delivered per schedule shown in Table 1.



Table 1: Deliverable Schedule

Deliverables	Distribution	Due Date
A. Monthly Status Reports for TO	COR, CO, DES Chief – one (1) copy (digital) each via email.	Every month beginning with month 1 after contract award.
B. Technical Report (Draft Copy)	CO – cover letter via email COR, DES Chief – one (1) digital copy each via CD or ftp	Twelve months (12) after data collection is completed.
C. Technical Report (Final Copy)	CO - copy of cover letter only, via email COR, DES Chief – one (1) electronic copy each on CD	Within thirty (30) days of receipt of BOEM review comments for Technical Report (Draft Copy).
D. Technical Summary (Draft Copy)	COR, CO, DES Chief– one (1) digital copy each	Concurrent with submission of Technical Report (Draft Copy).
E. Final Technical Summary (Final Copy)	COR, DES Chief – one (1) digital copy CO – one (1) hard copy	Concurrent with submission of Technical Report (Final Copy).
F. Webinar and Power Point Presentation	COR, DES Chief– one (1) digital copy each on CD	Within two weeks prior to the end of the contract.
G. Publications, Presentations, and Outreach	COR – one (1) digital copy	Prior to submission for acceptance by publisher or conference coordinator

1.2 DOI Scientific Integrity Policy Acknowledgment

HDR acknowledges that scientific integrity is vital to Department of the Interior (DOI) activities under which scientific research, data, summaries, syntheses, interpretations, presentations, and/or publications are developed and used. We recognize that failure to uphold the highest degree of scientific integrity will result not only in potentially flawed scientific results, interpretations, and applications but will damage HDR and DOI’s reputation and ability to uphold the public’s trust.

All work performed under this TO will comply with the DOI Scientific Integrity Policy posted to <http://www.doi.gov>.

2.0 Scope of Work

2.1 Monitoring Objectives

The objective of this TO is to provide a record of impact producing activities and, where possible, quantify such activities during the construction of the facility, and to evaluate monitoring techniques. Specific technical objectives are as follows:

- Record the type and duration of visual activities that occur during the installation and operation of five wind turbine generators for BIWF including the size, type and number of vessels, the duration of activities, and other impact producing factors.
- Measure underwater sound generated by the operation of up to five wind turbine generators for BIWF.
- Measure the in air acoustic sound from operation of BIWF.
- Evaluate sediment disturbance and recovery from spud and anchor chain locations post-construction activities.
- Conduct benthic monitoring around the turbine foundations.
- Evaluate acoustic data for all construction activities.
- Develop improvements for monitoring of marine mammals in vicinity of BIWF.

2.2 Industry Coordination

As required by BOEM, this WEP includes mechanisms for ensuring industry coordination on an as needed basis. During the implementation of the TO, close coordination will be required with National Grid, DWW and TetraTech. The HDR Project Manager (PjM) will be primarily responsible for ensuring this coordination. As necessary, the PjM may assign a designee to support the coordination efforts.

Prior to commencing any fieldwork, efforts will be coordinated with the BOEM Contracting Officer Representative COR, DWW and/or National Grid. The HDR PjM (or his designee) will check in every morning with either DWW or the National Grid Manager to get an update on the activities planned for the day and their nature and duration. The PjM will share this information with all HDR Team members and monitoring personnel to ensure that data collection is conducted in real-time when the construction activities are actually in progress.

2.3 Government-Furnished Information

The following government-furnished information will facilitate finalization of the Draft Plan and subsequent implementation:

- Full details of construction methodology, especially:
 - installation methodology (equipment, procedures and predicted duration)
 - other activities (e.g., horizontal drilling)
- Timescales and program for each site
- Any planned mitigation or abatement
- Any specific requirements from BOEM acoustic modelers for data they wish to have for model verification
- Details of compliance monitoring required and proposed to be conducted by the construction contractors
- National Grid boring data along cable transect.
- Hydroacoustic data collected by Jasco as part of DWW's mitigation plan.

2.4 Tasks

2.4.1 Wind Turbine Generator Installation Observations

Visual observations of construction activities associated with two turbine generators from the shoreline will be logged by the HDR Team during the turbine assembly. This phase is expected to last for approximately 5 weeks. The real-time data collected through visual monitoring will provide additional information necessary for BOEM's evaluation of environmental effects of future facilities and generate data to improve the accuracy of models and analysis criteria employed to establish monitoring controls and mitigations.

Subtask 2.4.1.1 Onshore Visual Observations

The HDR team will provide visual monitoring during the installation, by placing a dedicated onshore observer to record the following from the Southeast Lighthouse:

- Visibility of construction activities from shoreline
- The types of lighting used at the construction site and what can be seen from the shoreline
- Meteorological conditions that affect visibility from shore including humidity.

Data will be recorded daily at early morning, mid-day, sunset, and during significant changes in meteorological conditions (rain, fog, etc.) during each day that construction takes place. The day's first observation will be based on ferry schedule but should occur around 8:30 AM. Observations will include a set of photos taken from a fixed point, at the same angle, and using a constant zoom setting on the camera. Video recordings will be made as necessary to document unusual sightings or infrequent occurrences.

After observations are documented from the SE Lighthouse, the observer will transition to a to be determined location, and record activities occurring in Stand-by Area A. This area is located approximately 2 nautical miles to the west of Block Island and it will serve as a staging area for vessels or used during work stoppage due to weather or sea states. The exact location will be finalized during site reconnaissance immediately before installation activities begin, during mobilization of the team.

This dedicated onshore observer will be also be responsible for monitoring airborne sound pressure levels as described below in Section 2.4.1.3. In conjunction with sound pressure monitoring, the observer may also collect visual data from Mohegan Bluffs, Balls Point, or Pt. Judith on the mainland.

Task-Specific Assumptions

- 1. HDR costs are based on one staff staying 5 weeks (35 days at full per diem x 1 staff) + (2 days of travel per diem x 1 staff) + (37 nights lodging x 1 staff).*
- 2. Costs include purchase of Point Judith Ferry "books." Each book contains 20 tickets at a discounted rate due to bulk purchase. The high speed ferry was selected (versus traditional) due to earlier morning departures in June.*
- 3. Sea states along with weather (wind and rain) can change unexpectedly and may cut survey days and potential data collection short as a result. If data collection is hampered by sea state, HDR will immediately notify the COR and propose alternative approaches.*

Subtask 2.4.1.2 Offshore Visual Observations

A second dedicated observer will be located offshore on a boat adjacent to the WTG jackets during the turbine assembly and will record:

- Number, size, and type of construction vessels
- Size and location of deployed anchors
- Number and nature of lighting used at the site
- Type of construction activities being conducted and duration of each activity.

Where possible, the observer will also record relevant information including incidental observations on the occurrence of marine species and other activities (fishing vessels, recreational vessels, etc.). The offshore observation location will be selected such that the monitoring vessel will not interfere with the construction activities or with transit of the construction vessels. Observations will also be made at least once per survey day of the

Stand by Area A. Construction activity observations will be recorded using an iPad with pre-formatted field logs.

HDR will utilize the charter vessel Hula Dog. A 27-foot-long center console outfitted with radar, GPS, and communications. The Hula Dog and its Captain, Matt King, provided a successful platform during Phase I monitoring. HDR team members will take the ferry over each day and board the Hula Dog on Block Island for monitoring.

Task-Specific Assumptions

- 1. HDR costs are based on one staff staying 5 weeks (35 days at full per diem × 1 staff) + (2 days of travel per diem × 1 staff) + (37 nights lodging × 1 staff).*
- 2. The charter boat costs assume 35 days of monitoring. Should the schedule change, additional costs may be incurred if a different charter boat is required on short notice or the number of monitoring days exceeds 35.*
- 3. Costs include purchase of Point Judith Ferry “books.” Each book contains 20 tickets at a discounted rate due to bulk purchase. The high speed ferry was selected (versus traditional) due to earlier morning departures in June.*
- 4. Sea states along with weather (wind and rain) can change unexpectedly and may cut survey days and potential data collection short as a result. HDR will not be responsible for additional costs resulting from loss of effort caused by weather, and/or vessel mechanical failures.*

Subtask 2.4.1.3 Airborne Sound Monitoring

Onshore Airborne Sound Monitoring

Prior to commencement of construction activities, The HDR monitoring team will mobilize to the site and undertake baseline noise monitoring on Block Island and the mainland, focusing on the Southeast Light (as used in August 2015) and Point Judith (mainland). An alternative monitoring location at Point Judith to the one used in 2015 will be identified during site reconnaissance due to the high background noise levels. Larson Davis LD831 sound level meters will be calibrated with field calibration devices and clocks will be synchronized. Baseline data will be captured on the day before construction begins and outside of periods of construction noise.

The ability to capture airborne noise signal from the construction will be highly dependent on meteorological conditions, especially wind direction, and so under adverse sound propagation conditions, there is a chance that little to no signal from the works will be detected on land. Due to distances involved, it is likely that no sound is detected at Point Judith even in the event of ideal weather conditions. Where such a situation occurs, this will be logged and the measurements will not be repeated.

Monitoring is proposed for one turbine tower (approximately 5 days) unless they are curtailed due to persistent adverse weather conditions, or additional measurements taken in the event that additional measurements are clearly beneficial. It is expected that the towers and blades will arrive onsite on August 1st 2016 and the construction will

commence two days later. Therefore the following airborne monitoring timeline is proposed:

- July 31. Mobilization and finalization of monitoring sites.
- August 1st to 2nd. Baseline monitoring, Southeast Light and Pt. Judith.
- August 3rd to 7th. Construction monitoring.
- August 8th. Demobilize.

Note the following:

No modelling has been incorporated into this task. Existing airborne noise models are typically designed for urban areas and generally over land. And in this particular situation, modelling would not influence our choice of monitoring locations due to the limited number of available sites to monitor from. However, if BOEM desires modelling of airborne noise over water from operation of the turbines, this can be researched further and an implementation plan could be developed.

That the noise levels and propagation will be higher under downwind conditions and lower under upwind conditions is not in question, but it is the purpose of the measurements to quantify the real-life effect of these changing conditions. Irrespective of the results of monitoring, the number of available onshore monitoring locations on Block Island or the mainland with line of sight to the turbines, appropriate orientation to site, low background noise and accessibility are very limited and this is what will guide the siting of monitoring station(s). Offshore vessel-based monitoring will enable noise levels in multiple directions relative to the wind direction to be captured.

Task-Specific Assumptions

1. *Monitoring is proposed for one turbine tower (approximately 5 days)*
2. *Three standby days have been factored into the budget to accommodate construction and weather delays.*
3. *HDR has budgeted 1 staff for 13 days to conduct onshore noise monitoring.*

Offshore Airborne Sound Monitoring

Airborne sound monitoring equipment will be set up on the survey vessel. The vessel proposed is URI's R/V McMaster or R/V Shanna Rose. A Larson Davis LD831 sound level meter will be connected to a microphone on a 5/10m extension lead and a high performance windshield. The microphone will be fixed to the top of the wheelhouse on the vessel used for the underwater noise measurements, prior to departure from the harbor. Samples will be taken while construction is ongoing.

Offshore measurements will commence at the start of construction of the first tower installation, and end on completion of its final blade. Multiple airborne noise transects with varying wind conditions will be undertaken to ensure robust data is obtained.

The timeline for personnel presence on site will be as per the onshore program above with the same assumption of standby days.

Task-Specific Assumptions

1. *Three standby days have been factored into the budget to accommodate construction and weather delays.*

Subtask 2.4.1.4 B-roll and final vignette (construction & initial operation)

To help present the Block Island wind farm to the public, media and other constituents, Blue Land Media (BLM) will continue the work of capturing b-roll footage and interviews during the final construction and testing phases of the project.

Filming will take place during 2, 4-day, trips. The first trip will coincide with the final stages of construction of the wind turbines to complete the visual story begun with the capture of the footage showing the installation of the transmission lines. The combined footage from the transmission line installation and final construction of the wind turbines will show the scope and general environment of the construction phases of the project.

The second trip will coincide with HDR's testing and monitoring work. When combined with the footage of the sediment monitoring completed during the transmission line installation, this footage will complete the monitoring story of the project. The footage will show not just how environmental impacts were studied to assess the impact of the construction phase, but how the ongoing environmental impacts of operation are being measured and monitored, including the future plans for marine mammal monitoring and ongoing study.

In addition to the b-roll footage captured during these trips, interviews will be completed with key participants involved in the construction, monitoring and ongoing operation of the wind farm. At the conclusion of the filming trips, BLM will pull selected footage and interview comments and create libraries of the footage to be delivered to BOEM on hard drives (one master and one backup). This footage may be used for media outreach, educational projects, social media and other future uses.

Once all filming is completed, BLM will complete a short video vignette, approximately 5 minutes in length, that will provide a thorough overview of the project, the outcomes and the careful monitoring and environmental impact assessments completed before, during and after construction. Since this is America's first offshore wind farm, telling this story in a concise, accessible manner is particularly important to help media, the general public and other key constituencies understand both the process and assessment that has been a part of this historic project. The final video may be particularly useful in presenting and explaining future projects at public media and online.

The vignette will be completed with full color correction, professional narration, sound mix and mastering. It will be HD broadcast quality and will be provided in 1080HD and 720HD H.264 video files for easy distribution.

2.4.2 Wind Turbine Generator Operations Observations

Wind turbine operations testing is schedule to occur in the fall of 2016. If there are delays in the construction and testing of the WTGs, the monitoring associated with the operations will be conducted as soon possible after the installation and testing is completed.

Subtask 2.4.2.1 Onshore Visual Observations

The HDR Team will conduct and log visual observations of operational activities from the shoreline during the turbine operational phase.

Initial operations visual observations will occur at three locations: Southeast Light House, Point Judith, and Brenton Point State Park.

A single onshore observer will record the following from each of the three locations over a period of three weeks:

- Visibility of operational activities from shoreline in the vicinity of the turbines.
- The types of lighting used at the operational site and what can be seen from the shoreline during night time monitoring.
- Meteorological conditions that affect visibility from shore including humidity.

The observer will spend a week (5 days) at each of the locations in order to capture 3 days of monitoring under a variety of meteorological conditions. Data will be recorded daily at early morning, mid-day, late afternoon, and approximately 1 hour after sunset for a total of three days at each location following the beginning of initial operations. The observer will attempt to record observations during a variety of meteorological conditions. The observations will include a set of photos taken from a fixed point, at the same angle, and using a constant zoom setting on the camera. Video recordings will be made as necessary to document unusual sightings or infrequent occurrences.

Nighttime observations will occur 1 hour after sunset to record and characterize types of lighting visible from shore. A Canon 7D-camera setup with a tripod to accommodate the required slow shutter speed necessary to capture images will be utilized to photograph operational activities. The last scheduled ferry departs Block Island at 7:30 PM; therefore observations from South East Lighthouse will require 1 week lodging on Block Island.

Task-Specific Assumptions

1. *HDR costs are based on one staff working at each of three locations for 5 days. (15 days at full per diem × 1 staff) + (2 days of travel per diem × 1 staff) + (16 nights lodging × one staff).*

Subtask 2.4.2.2 Offshore Visual Observations

An HDR Team offshore observer will conduct one night time assessment to determine the maximum distance that lights can be observed. Still and video recordings shall be made at 7 distances from the turbines: 1 mile, 3 miles, 5 miles, 10 miles, 20 miles, 25 miles, and no longer visible

It is anticipated that the FAA warning lights will be visible to 25 miles and construction lights up to 5 miles. Measurements will be recorded on a clear night. Measurements shall be repeated, both moving away and towards the wind turbines. Meteorological conditions will be recorded. Where possible, the observer will also record relevant information including incidental observations on the occurrence of marine species and other activities (fishing vessels, recreational vessels, etc.).

HDR will utilize charter boat Hula Dog to conduct the nighttime monitoring.

Task-Specific Assumptions

1. *HDR costs are based on 1 staff staying 4 days (2 days at full per diem × 1 staff) + (2 days of travel per diem × 1 staff) + (3 nights lodging × one staff).*

Subtask 2.4.2.3 Airborne Sound Monitoring

2.4.2.3.1 Onshore Airborne Sound Monitoring

Sound level meters will be set up by the HDR Team to monitor the noise during wind turbine operation at the onshore locations noted below:

- Mohegan Bluffs (Southeast Light), at the same position used during the foundation installation in August 2015.
- Point Judith, although an alternative location to August 2015, less affected by wave/shore noise will be sought.
- Brenton Point State Park. This is a newly requested location and may well suffer from high background noise from a perimeter road and pedestrians on the park, and is over 20 miles away from the turbines.

For the last two locations, attended monitors will be set up during the BIWF operational phase under ideal wind conditions (south west component) for one day. If no noise from the turbines can be detected, measurements at these locations will not be repeated. If noise is detected, sound will be recorded for a period of two days and a long-term monitoring program will be recommended.

The SLMs will have a specialized low frequency detection capability which will capture potential infrasound from the wind turbines, an issue which has been identified as a concern to the public from other onshore wind turbines.

A long term SLM will be set up and secured at the Southeast Light location. This will continuously monitor background noise conditions and capture meteorological conditions. It is proposed that the SLM will be remotely accessed and downloaded, and options from three suppliers are currently being investigated.

Task-Specific Assumptions

1. *Onshore monitoring will be conducted by the HDR Team members conducting onshore visual monitoring, over the same time frame.*

2.4.2.3.2 Offshore Airborne Sound Monitoring

Long-term offshore airborne noise monitoring is not currently feasible with existing technology, which is generally geared to onshore conditions. Therefore, the necessary airborne noise measurements will be captured offshore on the R/V McMaster or R/V Shanna Rose using a sound level meter with a microphone connected to an extension lead, and fixed with high performance windscreen to the top of the frame on the vessel. Airborne noise measurements will be taken under a variety of wind conditions: upwind, downwind and cross-wind of the operational turbines.

The weather forecast will be checked prior to mobilization to ensure that conditions are suitable such that calm conditions are avoided. It should be noted that it will not be possible to sample offshore airborne noise under high wind conditions for safety reasons. However, extraneous noise from waves in high seas is expected to dominate any noise directly from the turbine, making the turbine noise at sea level indistinguishable. In this scenario, noise measurements on shore, especially at the Southeast Light on the top of a cliff, may be of greatest benefit.

Noise characteristics, particularly in respect of volume and frequency, will be captured at relatively close range to the turbine (< 1000 m) with a focus on sampling varying wind speeds to identify changes that this causes. Measurements will be taken on transects to sample variations with range until noise from the turbine is inaudible. This includes noise from internal machinery as well as blade swish and any other noise produced by the operational turbine.

Airborne noise will be analyzed, as a minimum, in terms of L_{A90} , L_{Aeq} and $L_{Cpeak.peak}$.

Task-Specific Assumptions

1. *One standby day has been factored into the budget to accommodate construction and weather delays.*

Subtask 2.4.2.4 Underwater Sound Monitoring – Operational Turbines

The HDR Team Member Subacoustech Environmental will deploy one fixed location hydrophone: at either 100 m from the location of one of the outer turbines or one centrally in between two of the turbines. URI will utilize one of the monitoring stations to sample the other location.

The hydrophone is proposed to be an icListen HF, suspended by a floatation buoy from an anchor on the seabed. The clocks will be synchronized with other underwater and airborne sound monitoring equipment. This will monitor continuously over 3 months, after which it will be retrieved and downloaded. . The precise locations will be selected in consultation with HDR Team Member URI to ensure that the crossover between equipment set up in the vicinity of the turbines is as beneficial and complementary as possible, for example capturing data at equivalent distances both to the east and the west of the turbines.

Once the fixed monitoring station is deployed, HDR Team will travel to the foundation to be installed, as close as allowable by Deep Water Wind (DWW). It is understood that there are no restrictions provided no contact is made with the vessel and turbine or foundation itself. Transect measurements will be taken in a direction away from the turbine, moving outwards for as long as the turbine can no longer be detected above background noise. The bearings will be chosen in accordance with those taken during construction noise measurements in 2015, and will therefore include a transect towards Block Island, towards Point Judith and out to deep water to the east. During all measurements, all vessel equipment will be shut down, including engines, inverters and any other sound generating equipment. Measurements will be monitored by the surveyor using headphones to detect any unexpected, anomalous or erroneous signals.

Measurements will consist of two simultaneous subsea sound pressure samples using a vertical array at mid-water and at a depth of 1 meter above the seabed, using Reson TC4014 or Bruel & Kjaer 8016 hydrophones connected to proprietary variable-gain amplification and recording systems. A triaxial seabed vibration monitor (modified Vibrock transducer) will also be deployed at each location for as far as transmission through the seabed is detected. Daily conductivity, depth and temperature readings will be taken.

The data will be recorded in a raw data format that allows post processing in any metric currently used and detailed notes will be made to fully describe the situation in which the measurement was made for future detailed analysis. All data will be downloaded and backed up on a daily basis. The underwater sound pressure data will be processed to produce, as a minimum, dB re 1 μ Pa rms and peak levels.

HDR Team Members URI/WHOI/MAI will participate in this task by supporting the efforts by Subacoustech to monitor the underwater acoustic environment near the Block Island Wind Farm. The equipment deployed will support this task in addition to the whale detection task below. The efforts in this task include:

- Deploy Geophysical Sled with 3D geophone on the seabed and a tetrahedral array of hydrophones about 1 m above the seabed. This system will be deployed

at a close range to the WTG #1 (range to be determined in consultation with the developer). The science objectives of these measurements will include: measurement of seabed vibration from turbine operation and measurements of acoustic pressure and particle velocity in the water column. This system will also be utilized as part of the whale detection and localization task described below. The tetrahedral array provides direction of arrival for signals such as whale vocalizations.

- Design and deploy vertical and L-arrays for measurements of the distant turbine operation noise (range to the arrays to be determined as part of the design process). The arrays will be similar to those used in the summer of 2015 and are designed to have low self-noise as demonstrated by the BIWF construction data analyzed to date. The arrays will also be used in the whale detection and localization task below.
- Provide and deploy RBR CTD system used in the 2015 effort providing salinity, temperature, and depth data at stations to be determined. In addition, for long term monitoring of the sound speed, a number of thermistors will be mated with the vertical hydrophone arrays described below (e.g. the Seabird SBE56 Temperature Logger) where we are deploying two vertical hydrophone arrays equipped with the SHRU data acquisition systems (similar to those deployed in 2015) with upgraded atomic clocks that will enable accurate timing and therefore localization when combined with the DMON system.

Note the following:

The locations of the underwater noise monitors during wind farm operation are different than those used to monitor underwater noise during the construction program. Whereas a fixed monitoring distance of 750 m was used during the installation of turbine foundations, to be consistent with the bulk of data available from existing installations in Europe, for operational noise a position much closer to a turbine will be used, as well as one representative of multiple simultaneously operating turbines. The monitors deployed will sample multiple ranges and noise metrics, with minimal crossover.

A geophysical sled will be deployed sled equipped with the tetrahedral array of hydrophones (for the determination of particle velocity for fish and invertebrates effects studies) and 3D geophone at a range less than or equal to 100 m from the turbine (WTG #3) to capture the noise levels near to the operational turbines. This siting of the sled will allow for the near field characterization including pressure, seabed vibration, and particle velocity.

Vertical hydrophone array moorings and a horizontal hydrophone array will be deployed. One vertical array will be deployed at a range of 500 m and the other a range of 1000 m from WTG#3 aligned with the geophysical sled (the line perpendicular to the WTG array). This allows for the observation of the transition from near field to far field of the acoustic signals from the operating wind turbines. The horizontal array will be deployed co-located with 1000 m vertical array.

The HDR Team will deploy a long-term underwater sound pressure monitoring device in between two of the turbines to sample the 'in-field' noise emissions.

2.4.3 Benthic Monitoring

While long range and large scale changes in benthic conditions are not expected from the presence of the five turbines, localized disturbance near the foundation is expected and is poorly understood for this location. Alterations may occur due to the presence of the structures which provides substrate for marine organisms and resultant increase in the deposition of organic detrital material.

Under this TO, benthic monitoring surveys shall be conducted at two turbine locations with different substrate types. Although the foundations were put in place during fall of 2015, modifications of the seafloor should still be discernable and measured relative to the surrounding sediment habitat. Observations from the available European study are of a “changing macrobenthic community” extending up to 50m from the scour protection boulders indicating the possibility of a long term shift in community composition, which may become spatially extended’ (Degraer et al., 2012¹). This information will form the basis for extrapolation to larger wind facilities.

The purpose of the benthic monitoring is to assess temporal and spatial changes in benthic community abundance and diversity that may result from the potential sediment enrichment that is likely to occur in the vicinity of the BIWF WTGs during the operational phase. Roles and responsibilities of the benthic monitoring team members are described in Table 2

Table 2: Key Benthic Monitoring Team Members Roles and Responsibilities

Name	Affiliation	Role	Responsibilities
Anwar Khan	HDR	Task Manager	<ul style="list-style-type: none"> • Coordination and communication of project schedule • Technical reporting • Coordination of resources and deliverables
Paul English	Fugro EMU	Technical Project Manager	<ul style="list-style-type: none"> • Study design • Technical reporting • Attendance at client meetings
John King	URI	Field Team Leader	<ul style="list-style-type: none"> • Provision of vessel and sampling equipment • Field sampling, • Laboratory analyses • Preparation of the primary benthic ecology data

¹ Degraer, S., Brabant, R. and Rumes, B. (Eds) (2012). Offshore wind farms in the Belgian part of the North Sea: Heading for an understanding of environmental impacts. Royal Belgian Institute of Natural Sciences, Management Unit of the North Sea Mathematical Models, Marine ecosystem management unit. 155 pp. + annexes).

The proposed benthic monitoring and data analyses protocol is described below. This protocol incorporates BOEM's habitat monitoring survey guidelines (as presented in 30 CFR § 585) and integrates lessons learned from offshore wind farm benthic monitoring programs conducted in UK (MMO, 2014²).

Subtask 2.4.3.1 Literature Review

Relevant and available scientific literature and pertinent project reports will be acquired and reviewed to crystallize current understanding of benthic ecological conditions within the BIWF Project Area and provide a wider context for interpretation of the survey findings. The findings of the literature review will also be used to clarify heterogeneity of seabed habitat and community types at the locations of the turbines to inform the turbine selection for the monitoring program. At a minimum, the following key documents will be reviewed:

- BIWF-BITS Environmental Report
- BIWF-BITS Benthic Survey Report
- Geophysical (MBES and side scan sonar) data
- Others

Literature review findings and their significance and utility will be summarized and discussed in the benthic monitoring report.

Subtask 2.4.3.2 Study Design

Sediment samples will be collected and analyzed for benthic biota abundance and diversity at two (of the five) turbine locations. Sampling locations will be selected to represent different habitat types. Particle size distribution and organic content will also be analyzed in each sediment sample. The sampling ranges proposed are intended to provide adequate coverage of the anticipated spatial extents of effects based on prior observations such as those reported by Degraer et al., 2012.

At each of the two turbine locations, seabed video and quantitative grab sediment samples will be collected at 20-, 50- and 100-meter distances from the base of the turbine foundation (Figure 1), subject to the presence and spread of scour protection material at the base of the foundation and the presence of inter-array cables and in collaboration with DWW.

In addition, two reference areas, located outside of the predicted influences of the BIWF activities and comparable in substrate and depth conditions, will also be selected and surveyed under this task. Data from the reference areas will allow assessment of benthic change attributable to the operation of the wind farm against the natural variation.

At each of the four locations, sample stations will be orientated in line with the dominant tidal current flow and perpendicular to the current. The hypothesis tested in this instance

² Marine Management Organization. 2014. *Review of environmental data associated with post-consent monitoring of license conditions of offshore wind farms*. A report produced for the Marine Management Organization pp194. MMO Project No. 1301. ISBN 978-1-909452-24-4.

will relate to the presence of a gradient of enrichment effects along the axis of the dominant tidal flow with minimal or no effects occurring on the seabed perpendicular to the direction of current flow. The direction of the flow of the principal current at each turbine will be established from AWAC monitoring data that is being collected under a separate task.

Six sample stations will be selected at each turbine location; each station will be sampled in triplicate to increase statistical rigor. Thus, 18 samples will be collected at each turbine location for a total of 36 samples between the two turbines.

Three sample stations will be selected at each reference site; each station will be sampled in triplicate to increase statistical rigor. Thus, 9 samples will be collected at each reference site for a total of 18 samples between the two reference sites.

Finally, at each of the two turbine and the two reference stations, a designated QC sample will be collected and processed. The four QC samples will be subjected to taxonomic analyses by an independent expert.

Thus a total of 36 (2 turbine stations) + 18 (2 reference stations) + 4 QC (2 turbine and 2 reference stations) = 58 samples will be collected and analyzed during each survey.

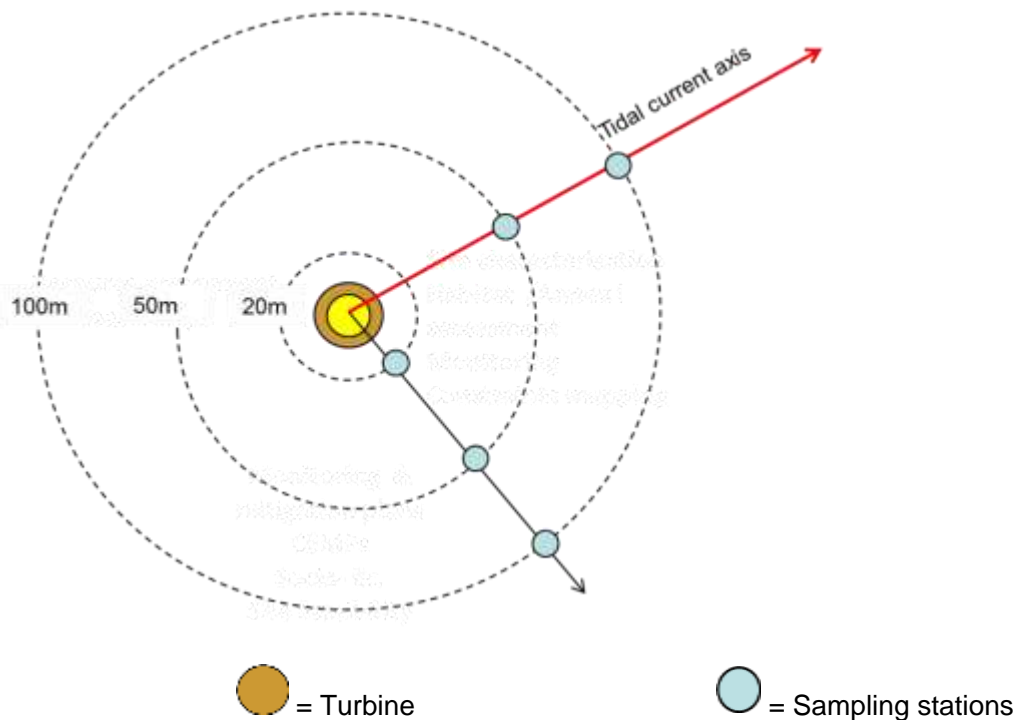


Figure 1: Indicative near field benthic ecology sampling station arrangement

Monitoring locations and sampling stations will be selected based on literature review findings and will be confirmed in the field through review of seabed video prior to sample collection.

Subtask 2.4.3.3 Monitoring Methodology

At each sampling site, drop down video will be undertaken using a digital video/stills camera mounted in a suitable frame. It is anticipated that underwater visibility will be suitable for a standard video frame to be used based on previous similar seabed video surveys at Block Island Wind Farm. Seabed habitat types and epibenthic communities will be recorded throughout the duration of the seabed video deployment together with any initial observations. The duration of the seabed video surveillance at each station will be a minimum of 5 minutes although this will be extended where necessary to ensure that all features observed can be confidently described in terms of their spatial extent, composition and characterizing biology.

Representative photographic stills of the seabed will also be taken (minimum 5 geo-referenced photographs per deployment). Distance lasers will be mounted on the video frame to allow for scaling of sediment size classes and species.

Positions for the video survey will be recorded at the beginning and the end of each drop, with the position of the video throughout the video drop overlain on the video footage to ensure accurate geo-referencing. The initial deployment of the drop down video at each sample station will enable assessment of the seabed habitat in terms of local heterogeneity and key epibenthos species.

Following recovery of the seabed video, the Smith-Mcintyre grab sampler, which covers approximately 620 cm² area, will be deployed at each sample station. A Go-Pro video camera will be attached to the sampler in order to document the nature of the seabed at the exact location where the grab sediment sample is collected. Upon recovery of the sample, the sediment within the grab bucket will be viewed in order to assess whether the sample is acceptable (i.e. has not been subject to partial washout during retrieval, and is of sufficient volume relating to depth of bite). A measure of the sediment redox potential will be taken and recorded. The sample will be released into a hopper. An assessment of sample volume (expressed in liters) will then be made and a visual description recorded. A photograph of the sediment will be taken prior to any sample processing. Any conspicuous sediment features and obvious fauna will be recorded.

A sub-sample for particle size distribution analysis and organic content will be transferred into a pre-labelled heavy duty quart-sized Ziplock plastic bag and sealed to ensure no loss of fines. Sediment samples will be stored at 40C up to a maximum of 28 days prior to analysis.

The remaining sediment sample will be sieved on a 1mm aperture mesh sieve to remove the finer sediment fractions. The contents of the sieve will be transferred into a pre-labelled bucket with internal label and fixed on-site using 4% buffered saline formalin solution. Stain will be added at this stage, as appropriate.

Monitoring Frequency

One round of benthic monitoring surveys will be conducted under this TO. Note that it is expected that any sediment enrichment and benthic modification will develop over a comparatively long time and only after mature fouling communities have developed on the turbines and foundations. Therefore, it is strongly recommended that benthic

monitoring continue in the future at pre-defined intervals (1, 3, 5, and 10 years post operations).

During the repeat monitoring survey(s), it will important to re-locate the sample stations with a high degree of accuracy so that repeat samples are collected at the same point along the gradient of change for comparison between monitoring occasions. Differential GPS (dGPS) with navigational layback with accuracy of 1 – 3 m should be used for position fixing and finding during the future monitoring events.

Also, the repeat survey(s) should be performed at the same time of year as the initial sampling proposed under this TO to negate the effects of seasonal variation in benthic community composition.

Subtask 2.4.3.4 Survey Mobilization

All necessary equipment and personnel will be mobilized at the URI Bay Campus and loaded on the R/V Shanna Rose at Point Judith Pond on the South Coast of Rhode Island. It is anticipated that mobilization to the survey locations will require about approximately 4 hours. Transit time to the survey area is estimated at about one hour.

Subtask 2.4.3.5 Field Sampling

A field crew of four people including a captain, a technician and two graduate students from URI will be utilized for the underwater video and grab sampling field survey. The first (initial) survey is planned to be conducted during October/November 2016 time frame and is expected to last over approximately 3 days. The port of operations for the duration of the monitoring study will be Point Judith Pond. All sampling survey will be conducted using the vessel R/V Shanna Rose. This vessel has been recently used during acoustic surveys at Block Island and is therefore suitable for site and sea conditions.

Subtask 2.4.3.6 Taxonomic Analyses

Macrofaunal grab samples will be re-sieved over a 1mm mesh to remove all remaining fine sediment and fixative. Fauna will be sorted from the sediment by elutriation and subsequent examination upon a white tray, with the resultant extracted sediment then sorted by hand under a binocular microscope. Residual sediment fractions will be retained following sorting for future Quality Control (QC) auditing.

Macro-invertebrates collected from the grab samples will be identified to species level, where possible, and enumerated. Colonial, encrusting epifaunal species will also be identified to species level where possible and were given a P (present) value.

Faunal biomass analysis will be based on a wet-biota method with estimates of ash-free dry weight. Faunal samples will be separated into infaunal and epifaunal species, the former only being included in the analysis. The retained infauna will then be separated into the following phyla, and weighed to 0.0001g:

- Polychaeta
- Crustacea

- Echinodermata
- Mollusca
- Others

The primary macrofaunal analysis of 54 samples will be conducted by taxonomic specialists at the Ecological Consulting Organization. Macrofaunal analyses of the 4 QA/QC samples will be conducted by Sheldon Pratt, a local expert on the staff at URI. Results from the two separate analyses will be compared to each others to provide analytical quality control.

Subtask 2.4.3.7 Particle Size Distribution

Sediment samples collected in the field will be analyzed for particle size distribution. Particle sizing will be undertaken via a sieve series corresponding to half phi units and a Rptap system. Laser diffraction techniques using a Malvern system shall be used for the further analysis of the fines (<63m) fraction of the sediment where these constitute 5% or greater by weight of the sample.

Subtask 2.4.3.8 Sediment Chemistry

Sub-samples of seabed sediment will be analyzed for organic matter content. A muffle furnace will be used to for the organic matter content determination following the Loss-On-Ignition method of Dean (1974³).

Subtask 2.4.3.9 Video Documentation

The development of stereocamera systems deployed in Lagrangian float drifters (Roman et.al.,2011⁴) provide very high quality images that can be captured and mosaiced for complete coverage imaging of bottom type and epibenthic community. The camera float can be deployed during the conventional video and grab sampling exercise and recovered after a ~2 hour deployment. It gathers improved video data but does not add to field time.

Video footage will be analyzed to describe the epibenthic communities, and seabed habitat types. Should potential geogenic reef be recorded, an estimate of the percentage of cobbles, boulders and bedrock throughout the drop down video transect will be undertaken, together with elevation, extent and species composition.

Subtask 2.4.3.10 Data Analyses

Data drawn from the faunal and sediment analyses will be analyzed to describe community and seabed sediment structure and distribution and to elucidate relationships between faunal assemblages and physical and chemical variables. The approach will

³Dean, W. E. Jr. 1974. Determination of carbonate and organic matter in calcareous sediments and sedimentary rocks by loss on ignition: Comparison with other methods. *Journal of Sedimentary Petrology*, 44, 242-248 p.

⁴ Roman, C., Inglis, G., and McGilvray, B. 2011. Lagrangian floats as sea floor imaging platforms. *Continental Shelf Research*, 31(15):1592-1598.

follow that used recently for habitat mapping in the field area by LaFrance et al (2014)⁵. In short, side scan sonar imaging will be used in conjunction with the benthic biology and video data to produce fine-scale habitat maps of the of the study area in CMECS format. Biological descriptors of the community (abundance of individuals, biomass, Richness, Dominance and Shannon's diversity) will be calculated.

The PRIMER suite of statistical routines shall be employed to investigate community structure and relationships with abiotic factors employing non parametric Multi-dimensional Scaling (nMDS), BIOENV and SIMPER as well as ANOVA and ANOSIM to detect significant differences between the different treatment and sampling campaigns (Clarke & Warwick, 2001⁶).

The hypotheses that will be tested include:

- Seabed sediments in close proximity to offshore wind farm turbine foundations will become organically enriched resulting in modified benthic invertebrate communities over time compared to reference conditions.
- A gradient of organic enrichment and benthic community modification will occur with the greatest modifications, relative to reference conditions, occurring with decreasing distance from the turbine foundations.
- Effect gradients will be aligned with the direction of the principal tidal axes dominating the wind farm site.

The variables that will be measured include:

- Sediment organic carbon content
- Sediment particle size distribution
- Depth
- Numbers of macrobenthic species (S)
- Numbers of macrobenthic individuals (A)
- Macrobenthic biomass (B)
- Habitat and community classification

Derived univariate and multivariate variables will be drawn from the PRIMER v6 package of statistical routines (Clarke & Warwick, 2001). Statistical hypothesis testing, (i.e. ANOVA) will also be employed to detect significant difference between the different treatment and reference sample locations.

To the best of our knowledge, the only prior use of this type of sampling design has been at the Thorntonbank offshore wind farm in the Belgian sector of the North Sea (Degraer et al., 2012). The limited monitoring of this type highlights the very restricted information available on local-scale effects on benthos and the value of the current opportunity to fill this important data gap under the RODEO initiative.

⁵ LaFrance, M.; King, J.; Oakley, B.; Pratt, S. (2014). A Comparison of Top-Down and Bottom-Up Approaches to Benthic Habitat Mapping to Inform Offshore Wind Energy Development. *Continental Shelf Research*, 83, 24-44.

⁶Clarke, K.R. and Warwick, R.M. 2001. *Change in Marine Communities: An Approach to Statistical Analysis and Interpretation*. 2nd Edition, PRIMER-E, Plymouth, 172 p.

Radial sampling is proposed as the preferred design to test the hypothesized gradient effects. The design is particularly recommended to fill current knowledge gaps regarding local-scale effects of offshore wind farm operation on benthic ecology.

Subtask 2.4.3.11 Reporting

For each survey, two work products will be prepared. The first will be a (draft and final) technical report and the second will be a manuscript for publication in a national peer-reviewed journal.

In both work products, the focus will be on documenting possible changes in the CMECS biotope classification around the turbine structures associated with any organic enrichment of the local sediments and "reef effects" due to colonization of the hard substrates provided by the foundation structures. In some instances, the changes to benthic community structure may be beneficial by providing an enhanced epifaunal food source, whereas in others it may be detrimental, e.g. colonization by invasive tunicate species or change in sediment chemistry. Enrichment and reef effects may take longer than one year to develop. Recommendations for extended study will be discussed and will consider DWW's monitoring commitments to optimize future sampling efforts. The report will also include discussion on the performance and possible future utility of the stereo-camera/floater system in offshore wind farm monitoring.

Task-Specific Assumptions

1. One round of sediment sample collection and processing will be conducted under this task.
2. Monitoring locations and sampling stations will be selected based on literature review findings and will be confirmed in the field through review of seabed video prior to sample collection.
3. A total of 36 (2 turbine stations) + 18 (2 reference stations) + 4 QC (2 turbine and 2 reference stations) = 58 samples will be collected and analyzed under this task.
4. Sediment sampling is expected to occur over a 3-day period; this includes approximately 4 hours for mobilization and two hours of round trip transit time each day.

2.4.4 Evaluation of Acoustic Data (OPTIONAL)

The HDR Team (including URI, WHOI, MAI and Subacoustech) will analyze the data collected during the pile driving activities by DWW at the BIWF in 2015. The hydrophone and geophone calibrations will be incorporated into the calculation of acoustic field and particle velocity at all sensors. Based on the construction log, the received acoustic signatures will be correlated with the appropriate pile and the hammer strike. The main focus of the effort will be on the data from the geophysical sled consisting of the 3-axis geophone and the tetrahedral hydrophone array.

The team will also try to estimate particle velocities on the seafloor (from the 3-axis geophone data) and in water (approximately 1 m from the seafloor using the data from the tetrahedral array). Modeling and data analysis efforts of various team members will be coordinated to interpret the spatial variation of the levels measured by different systems (URI, MAI and WHOI). Available environmental information will be collected and consolidated to facilitate the modeling efforts. These data include sound speed profiles from CTD data, bathymetry and geoacoustic information. The major tasks are:

1. **Pile schedule, check pile rake, construct log of pile number and leg number vs. time:** Analyze the acoustic and particle velocity data and correlate it with the pile driving schedule and appropriate hammer impact on individual piles. Tabulate the pile rake associated with the acoustic signatures addressing the potential cause of sound pressure level variation with rake.
2. **Incorporate the exact calibration of acoustic and particle velocity sensors:** Extract the correct absolute levels. Based on the hammer type, the difference in the levels of noise radiated from hammer impacts will be investigated. Background noise will be characterized and compared with the data collected during the SAMP studies. Kurtosis of the data will be calculated to investigate the changes in this metric as a function of range and pile rake.
3. **Environmental data coordination:** collect and consolidate the available environmental information to facilitate the 3-D modeling of the acoustic field. These data include sound speed profiles from CTD data, bathymetry and geoacoustic information. Environmental data from sources such as Ocean Special Area Management Plan (O-SAMP), other surveys and coring from the location, site characterization by construction contractors, etc. will also be gathered.
4. **Coordinate the 3-D modeling efforts:** Coordination will occur between URI, Sandia Laboratory, WHOI, and MAI. The pile rake information from task 1 and the environmental data from task 3 will be inputs to the 3-D models. The underwater soundscape will be created by assimilating the data and model results. The effect of water depth, bathymetry, temperature, sea state, sediment type on the sound propagation will be investigated using the model. Estimates of the noise levels at 750 m and comparison of this with BIWF measurements taken by Tim Mason at Subacoustech and with European measurements from comparable water depths, pile diameters and hammer energies will be accomplished. Sandia has computational capability along with both commercial and in-house modeling tools

applicable to this problem. A subcontract between URI and Sandia for assisting our team in developing the 3D model including mentoring a graduate student will be used. The model will be validated by comparison to measured data and WHOI 3D models.

5. **Particle velocity on the seabed and in water:** Particle velocity calculation using the data from 3-axis geophone and acoustic data from the tetrahedral array will be accomplished. It is recommended that calculation be done in coordination with Dr. Steve Crocker at the Naval Undersea Warfare Center (NUWC) due to the scarcity of expertise in this area of science. To accomplish this coordination, BOEM would need to establish a mechanism such as the use of an interagency agreement with NUWC tasking their agency to provide technical input and review for this calculation.
6. **Actual sound pattern:** Coordinate an effort to determine the actual sound pattern at the various locations comparing the background noise 30 minutes before the impulsive pile driving signals, followed by an hour of background noise level measurements. The analysis will include the energy measured at the piles by DWW to understand the effect of pile energy to received levels. This will be repeated for all available pile driving events.

Note the following:

Analysis of the pile driving data collected in the summer and fall of 2015 will be broken down between the organizations based on their in-house expertise. In particular, the towed array data was a focused effort of Marine Acoustics, Inc. and that data analysis will be led by MAI with support from the other organizations. The preliminary analysis of vertical line array data (SHRUs) from the same period will be led by WHOI. WHOI had the SHRURead software for signal extraction, cataloging and archive.

The follow on analysis on the extracted signals will be done the other organizations which have specific focus. For example, MAI and WHOI are particularly interested in the observations of pile driving and marine mammal vocalizations. The value of signal extraction, cataloging and archiving provides a cost effective launch pad for detailed analyses including graduate theses and dissertations. URI will coordinate the team efforts in addition to participating in the data analyses.

Also, the Team will provide frequency-weighted analysis of the data in accordance with NOAA's guidelines. In particular, the team will compute 0-to-peak unweighted SPL and weighted SEL estimates for the pile driving signals measured at the various instruments.

Task-Specific Assumptions

1. *Three months of analysis are included in the cost estimate.*
2. *This is an optional task to be performed only if additional funding is authorized by BOEM.*

2.4.5 Whale Detection for Marine Mammal Monitoring (OPTIONAL)

Passive acoustic monitoring has become a standard methodology for assessing the occurrence and distribution of marine mammals; however, surprisingly little research has been conducted on the detection range of different species' vocalizations, and how that detection range varies with environmental conditions (e.g., ocean conditions, water depth, sediment type), signal type, passive acoustic monitoring system, and platform (e.g., moored buoy, autonomous underwater vehicle). To effectively use passive acoustics to monitor marine mammals, an understanding of the area over which the monitoring system can detect each species of interest is absolutely critical.

Using HDR Team Members URI, WHOI and MAI, a cost-effective plan that is scientifically sound and produces all the required data to detect, classify and localize (DCL) marine mammals including right whales, humpback whales and fin whales within the potential zone of influence of the operating wind turbines was developed. One option by the team involved the fabrication and deployment of a DMON buoy similar to that already in place on operating off of Nomans Land, Massachusetts (Figure 2). The DMON buoy would provide real time detection and classification of these whales. The current system could not localize because of the design limitations in the system. Therefore, with importance of localization with accurate distance estimation to the animals, the team will use the existing DMON buoy for initial detection and classification.

In addition to this DMON system, we will deploy two vertical hydrophone arrays equipped with the SHRU data acquisition systems (similar to those deployed in 2015) with upgraded atomic clocks that will enable accurate timing and therefore localization when combined with the DMON system. In addition, we will deploy an L-shaped hydrophone array with both a vertical and horizontal sections. The vertical component would be in the water column and the horizontal component would be on the seafloor. The combination of the existing DMON, two SHRU vertical hydrophone arrays and the L-shaped hydrophone array along with the tetrahedral array on the sled very near one of the wind turbine structure provides the redundancy in measurements needed to reliably detect, classify and localize these whales.

All of the assets deployed as part of this project have dual capability to monitor the wind turbine noise as well as the whale DCL effort. The systems should be deployed for 6 weeks at a time, ideally in three separate deployments over the next 12 months. *However, due to budget constraints only one deployment over six weeks is possible and has been included in the cost estimate.*

These are autonomous data recording systems that will provide acoustic signals upon recovery after each deployment. An option, if requested by BOEM, is that a new DMON system can be fabricated and deployed. This system could be integrated in the design described above enhancing results.

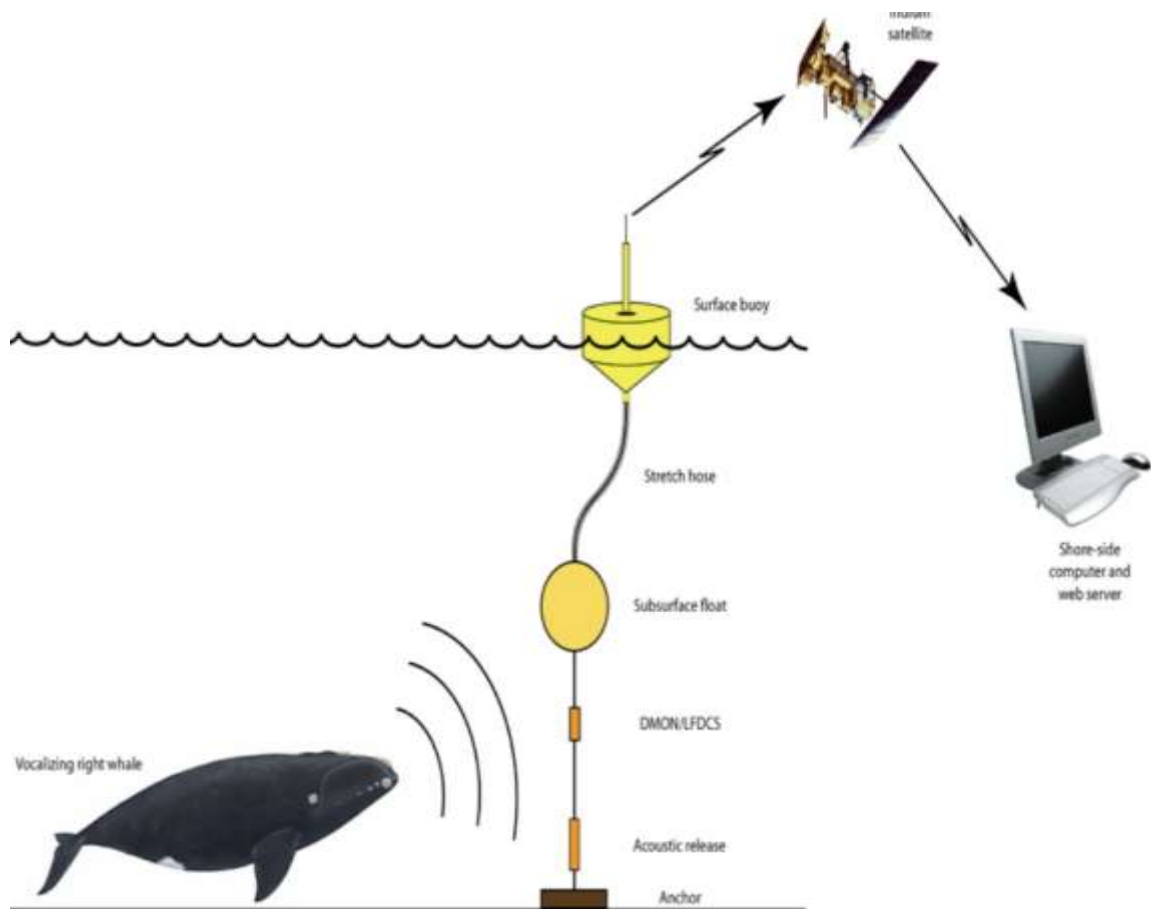


Figure 2: Spectrogram of the acoustic data recorded on the 15-km vertical array mooring on November 4, 2015 showing fin whale calls centered at 20 Hz.

Note: Fin whale calls (indicated by the vertical red lines about every 10 seconds) were also detected on the same day by the WHOI DMON system near Nomans Land Island, Massachusetts shown at <http://dcs.who.edu/nomans0315/nomans0315.shtml>.

Task Methodology

The HDR Team will investigate the potential for real-time detection and tracking of marine mammals using the same SHRU moorings described above. The equipment proposed for this task includes two SHRU moorings and the tetrahedral array onboard the geophysical sled along with a WHOI L-array (an array with both a horizontal leg and a vertical leg). This equipment is already on hand and can be deployed at relatively low cost.

In addition, the existing DMON system off Nomans Land, Massachusetts will be utilized in this task. With this DMON system, the two SHRU moorings, the tetrahedral array and the WHOI L-array, we can study the detection probabilities for the various marine species including fin whales, humpback whales, and right whales.

The performance of the system in localizing vocalizing whales will be assessed with playback experiments using a towed acoustic source such as a J-15-3 which can transmit acoustic signals as low as 50 Hz. We will also perform playback experiments to assess system performance. The SHRUs will be upgraded with high precision atomic clocks for this work and a synchronization source (with source level of about 160 dB re 1 μ Pa at 1 m) will be deployed in the region to align the systems' clocks. The uncertainty associated with whale localizations will be evaluated. The deployments of these systems should be done in 6-week periods, ideally with at three deployments, one in the fall of 2016 and two in winter and spring of 2017 but due to budgetary constraints only a single deployment in fall of 2016 is included in the cost estimate. Other deployments in the winter, spring and summer 2017 could be added with sufficient resources.

Any permits required for the deployment of the moored synchronization source and towed playback source will be acquired by the HDR team in consultation with the BOEM. The sources being employed have source levels below 170 dB re 1 μ Pa at 1 m. Therefore, we foresee no potential problems with getting any required permits and likely will get Finding of No Significant Impact (FONSI) from the National Marine Fisheries Service Office of Protected Species.

Note the following:

1. The HDR Team will use array processing to enhance detection of the marine mammal vocalizations against ambient noise from shipping, wind, etc. and the noise from the Block Island Wind Farm. The horizontal array will have 8 hydrophones and will be an array gain of 9 dB. The vertical arrays of 4 phones each provide 6 dB each of array gain. The design of system of vertical arrays and a horizontal array was chosen to maximize the marine mammal detection probabilities at a reasonable cost. Alternatives were considered including a new real-time DMON buoy but this variant was not chosen for this demonstration due to its cost and time constraints in getting the system ready for the Block Island Wind Farm operation expected for the fall of 2016.
2. Detections of marine mammals on the vertical line arrays and horizontal line array will used to estimate time-varying positions of these animals. The data published online from the existing DMON system off Nomans Land will be used to validate the detections. We are not proposing to deploy another DMON system.
3. The horizontal line array has directivity and can simultaneously detect the vocalizing marine mammals and the monitor the noise radiated from the operating wind turbines. Our objective for this work is to optimize the resources for this dual application. The existing DMON buoy data available online will be used to validate the marine mammal detections on the horizontal and vertical arrays. The capability for simultaneous wind turbine noise monitoring and marine mammal passive tracking will provide the community with a demonstrated tool that enhances the study of any potential effects of offshore renewable energy installations.

Task-Specific Assumptions

- 1. Three months of analysis and one 6-week deployment is included in the cost estimate.*
- 2. This is an optional task to be performed only if additional funding is authorized by BOEM.*

2.4.6 Publications, Presentations, and Outreach

All results from this effort shall be documented in a final report per the deliverable schedule in section 2.5 to include a draft report and final report of results from this task order field work and analysis. Survey data shall be documented in a detailed report that will also describe the survey methodology, monitoring equipment, monitoring conditions, and recommendations for future monitoring. A separate, stand-alone report for the whale detection task will be produced. Photographs and video will be provided on a DVD with an index clearly identifying each photograph or set of photographs and/or videos. A video will be produced of the activities that capture both construction and monitoring activities associated with the completion of the wind farm at Block Island.

Journal publications and presentations at public meetings will be produced. Preparation of five journal publications and the presentation of results at four professional meetings will be performed. A PowerPoint presentation and webinar giving an overview of the study results will be given two weeks prior to the completion of the project.

All manuscripts intended to be published in journals and all abstracts or summaries prepared for oral presentations, based on this study, will be submitted to BOEM for review and comment prior to submittal to the journal or conference authority and any comments incorporated to the extent practical. All such publications and oral presentations and draft and final reports will contain an acknowledgment of support from the BOEM under this award that reads:

Study concept, oversight, and funding were provided by the U.S. Department of the Interior, Bureau of Ocean Energy Management, Environmental Studies Program, Washington, DC under Contract Number M16PD00025

2.4.7 Project Management

This TO will be implemented by a team of experienced and qualified experts. Roles and responsibilities of individual team members are listed in Table 3.

Monthly Status Reports (MPR)

For the duration of this TO, the HDR Project Manager will prepare and submit to BOEM via e-mail a MPR that will describe the status of each task and percent complete, a summary of budgetary expenses, work to be completed in the subsequent month, and the status of any problems encountered.

Draft reports will be initially submitted and they will be finalized by addressing comments provided by BOEM.

Meetings

One in-person project meeting will be conducted with BOEM technical staff after the data have been collected to allow the HDR Team members to share results and discuss preparation of the draft and final reports for each task.

Status Update Phone Calls

As necessary, the HDR Project Manager will schedule periodic conference calls with the BOEM COR to provide updates, address issues, and ensure team coordination.

Table 3: Team Members Roles and Responsibilities

Name	Affiliation	Role
Anwar Khan	HDR	Program Manager
Randy Gallien	HDR	Project Manager/Technical Advisor
James Elliott	HDR	Task Manager (Visual Observations)/Onsite Field Coordinator
Dr. Kristen Ampela	HDR	Task Manager (Acoustic Monitoring)
Craig Johnson	HDR	Technical Advisor
Dr. Arthur Popper	UM	Technical Advisor
Paul English	Fugro EMU	Technical Project Manager (Benthic Monitoring)
Tim Mason	Subacoustech	Technical Project Manager (Acoustic Monitoring)
Dr. Jim Miller	URI	Technical Project Manager (Acoustic Monitoring)
Dr. John King	URI	Benthic Sample Collection and Processing Technical Lead
Dr. Kathleen Vigness-Raposa	MAI	Underwater Sound Monitoring Technical Lead
Dr. Adam Frankel	MAI	Underwater Sound Monitoring Technical Lead
Jennifer Giard	MAI	Underwater Sound Monitoring Technical Lead
Art Newhall	WHOI	Underwater Sound Monitoring Technical Lead
Y.T. Lin	WHOI	Underwater Sound Monitoring Technical Lead
Dr. Mark Baumgartner	WHOI	Underwater Sound Monitoring Technical Lead
Walter Rissmeyer	BLM	Video Production Technical Lead

UM = University of Maryland

URI = University of Rhode Island

MAI = Marine Acoustic, Inc.

WHOI = Woods Hole Oceanographic Institution

BLM = Blue Land Media

3.0 Task Order Implementation

3.1 Construction Schedule

The tentative schedule for BIWF Phase II construction is as follows:

1. **WTG Installation** – scheduled to occur over four weeks in the summer of 2016.
2. **WTG Operational Testing** – WTG operational testing will be conducted during the fourth quarter of 2016.

3.2 Coordination with the DWW and Construction Contractors

Prior to start of the monitoring activities, the HDR Team will coordinate through BOEM with DWW and National Grid to identify limitations that the monitoring team will be working under. These limitations could include areas that are off-limit for surveying due to Health and Safety considerations.

After the start of monitoring, periodic discussions will be held with the on-site construction contractors to ensure that both teams are fully aware of each other's activities and that vessel traffic is appropriately coordinated.

4.0 Health and Safety

A task specific HASP will be developed prior to monitoring activities beginning. The HDR Onsite Field Coordinator (OFC) will also serve as the onsite Health and Safety representative for the RODEO Team and will be responsible for ensuring that all field data collection is performed in accordance with the pre-approved site-specific HASP. Daily “tailgate” meetings will be held amongst all the HDR Team.

Where appropriate and applicable the HDR OFC will attend DWW safety meetings. The OFC will include information from the DWW safety meetings that has applicability to the RODEO team in the daily “tailgate” meetings. A record of all health and safety meetings and acknowledgements will be maintained by the OFC.

Each participant on the HDR Team will have the ability to raise safety concerns to the OFC. The OFC will have the authority to stop all monitoring activities until an unsafe condition is resolved.

The HDR Team Program Management Staff is committed to the health and safety of each employee that participates in the field data collection effort. It is essential that all Task Managers and Field Supervisors insist on the maximum safety performance and awareness of all employees under their direction, by enthusiastically and consistently administering all health and safety rules and regulations.

Appendix B – Field Survey Records of Vessel-Based Data Collection

B.1 Vessel-Based Year 1

Vessel-Based Year 1							
Sample ID	X	Y	Date	Time	Depth (m)	Sediment quantity in Grab Bucket	Habitat Description
T1-7_Rep1	-71.5067	41.1257	20/12/2016	09:13	27.37	1/4	Cobbles gravel, sand; Cobbles caught in jaws of grab
T1-7_Rep2	-71.5067	41.1257	20/12/2016	09:19	27.46	1/4	Cobbles, gravel, sand
T1-7_Rep3	-71.5067	41.1257	20/12/2016	09:23	27.40	1/4	Cobbles, gravel, sand
T1-8_Rep1	-71.5068	41.1256	20/12/2016	09:26	27.49	1/3	Cobbles, gravel, sand
T1-8_Rep2	-71.5067	41.1257	20/12/2016	09:29	27.04	1/4	Cobbles, gravel, sand
T1-8_Rep3	-71.5067	41.1257	20/12/2016	09:45	27.46	1/3	Cobbles, gravel, sand
T1-3_Rep1	-71.5073	41.1255	20/12/2016	09:58	27.37	1/4	Cobbles, gravel, sand
T1-3_Rep2	-71.5073	41.1255	20/12/2016	10:03	27.80	1/4	Cobbles, gravel, sand
T1-3_Rep3	-71.5070	41.1255	20/12/2016	10:06	27.34	1/4	Cobbles, gravel, sand
T1-2_Rep1	-71.5075	41.1253	20/12/2016	10:13	27.83	1/4	Cobbles, gravel, sand
T1-2_Rep2	-71.5075	41.1254	20/12/2016	10:17	27.58	1/4	Cobbles, gravel, sand
T1-2_Rep3	-71.5076	41.1254	20/12/2016	10:20	27.61	1/4	Cobbles, gravel, sand
T1-4_Rep1	-71.5082	41.1258	20/12/2016	10:30	28.50	3/4	Gravel, sand; GoPro NOT on
T1-4_Rep2	-71.5083	41.1258	20/12/2016	10:35	28.19	1/4	Gravel, sand
T1-4_Rep3	-71.5083	41.1259	20/12/2016	10:38	28.38	1/4	Gravel, sand
T1-9_Rep1	-71.5084	41.1263	20/12/2016	10:41	28.32	1/2	Gravel, sand
T1-9_Rep2	-71.5083	41.1264	20/12/2016	10:48	28.56	1/4	Cobbles, gravel, sand
T1-9_Rep3	-71.5083	41.1261	20/12/2016	10:52	28.50	1/2	Cobbles, gravel, sand
T1-5_Rep1	-71.5077	41.1264	20/12/2016	10:56	28.29	1/2	Gravel, sand
T1-5_Rep2	-71.5077	41.1264	20/12/2016	11:06	28.25	1/4	Cobbles, gravel, sand
T1-5_Rep3	-71.5079	41.1263	20/12/2016	11:10	28.04	3/4	N/A
T1-1_Rep1	-71.5071	41.1261	20/12/2016	11:14	27.68	Full	Sand; full grab

Vessel-Based Year 1							
Sample ID	X	Y	Date	Time	Depth (m)	Sediment quantity in Grab Bucket	Habitat Description
T1-1_Rep2	-71.5074	41.1259	20/12/2016	11:18	28.13	1/8	Gravel, sand
T1-1_Rep3	-71.5071	41.1260	20/12/2016	11:21	27.92	1/4	Cobbles, gravel, sand
T1-6_Rep1	-71.5071	41.1260	20/12/2016	11:27	27.77	1/2	Sand with little cobbles and gravel
T1-6_Rep2	-71.5069	41.1260	20/12/2016	11:29	27.92	1/4	Sand with little cobbles and gravel
T1-6_Rep3	-71.5070	41.1261	20/12/2016	11:32	27.92	1/8	Cobbles, gravel, sand
T3-7_Rep1	-71.5218	41.1152	20/12/2016	11:45	26.43	1/4	Gravel, sand; grain size tube was not flashed at GoPro before deployment
T3-7_Rep2	-71.5220	41.1153	20/12/2016	11:49	26.40	3/4	Gravel, sand
T3-7_Rep3	-71.5220	41.1153	20/12/2016	11:56	26.49	Full	Gravel, sand
T3-8_Rep1	-71.5223	41.1149	20/12/2016	12:11	26.27	1/2	Gravel, sand
T3-8_Rep2	-71.5222	41.1148	20/12/2016	12:14	26.18	3/4	Gravel, sand
T3-8_Rep3	-71.5222	41.1149	20/12/2016	12:17	26.37	1/2	Gravel, sand
T3-3_Rep1	-71.5216	41.1145	20/12/2016	12:20	25.97	3/4	Gravel, sand
T3-3_Rep2	-71.5215	41.1145	20/12/2016	12:24	26.09	1/3	Gravel, sand; mussel shell hash
T3-3_Rep3	-71.5215	41.1145	20/12/2016	12:26	26.15	1/4	Cobbles, gravel, sand; mussel shells (~1"-2")
T3-1_Rep1	-71.5214	41.1145	20/12/2016	12:31	26.21	Full	Gravel, sand; mussel shell hash
T3-1_Rep2	-71.5216	41.1144	20/12/2016	12:36	25.79	Full	Gravel, sand; mussel shell hash
T3-1_Rep3	-71.5215	41.1145	20/12/2016	12:39	25.91	Full	Gravel, sand; mussel shell hash
T3-9_Rep1	-71.5213	41.1141	20/12/2016	12:50	25.36	Full	Gravel, sand
T3-9_Rep2	-71.5209	41.1141	20/12/2016	12:54	25.48	Full	Gravel, sand
T3-9_Rep3	-71.5208	41.1140	20/12/2016	12:57	26.09	Full	Gravel, sand
T3-6_Rep1	-71.5211	41.1142	20/12/2016	13:10	25.76	Full	Gravel, sand
T3-6_Rep2	-71.5212	41.1142	20/12/2016	13:13	25.51	1/2	Gravel, sand
T3-6_Rep3	-71.5211	41.1142	20/12/2016	13:15	25.97	Full	Gravel, sand
T3-4_Rep1	-71.5206	41.1147	20/12/2016	13:19	25.79	1/2	Gravel, sand
T3-4_Rep2	-71.5204	41.1147	20/12/2016	13:22	25.73	Full	Gravel, sand
T3-4_Rep3	-71.5204	41.1147	20/12/2016	13:28	25.88	1/2	Gravel, sand
T3-2_Rep1	-71.5211	41.1150	20/12/2016	13:32	26.21	Full	Sand with little gravel
T3-2_Rep2	-71.5210	41.1151	20/12/2016	13:36	26.30	Full	Sand with little gravel
T3-2_Rep3	-71.5209	41.1150	20/12/2016	13:38	26.15	Full	Sand with little gravel
T3-5_Rep1	-71.5206	41.1154	20/12/2016	13:51	26.52	1/3	N/A

Vessel-Based Year 1							
Sample ID	X	Y	Date	Time	Depth (m)	Sediment quantity in Grab Bucket	Habitat Description
T3-5_Rep2	-71.5207	41.1153	20/12/2016	13:55	26.52	1/4	Cobbles, gravel, sand
T3-5_Rep3	-71.5204	41.1155	20/12/2016	13:59	26.52	Full	Sand
T5-9_Rep1	-71.5389	41.1062	20/01/2017	08:38	22.34	Full	Coarse sand
T5-9_Rep2	-71.5387	41.1063	20/01/2017	08:52	22.46	N/A	N/A
T5-9_Rep3	-71.5385	41.1063	20/01/2017	09:01	22.68	Full	Coarse sand
T5-1_Rep1	-71.5382	41.1063	20/01/2017	09:05	22.77	1/2	Coarse sand
T5-1_Rep2	-71.5380	41.1063	20/01/2017	09:08	22.83	1/3	Coarse sand
T5-1_Rep3	-71.5382	41.1063	20/01/2017	09:11	22.62	Full	Coarse sand
T5-6_Rep1	-71.5378	41.1058	20/01/2017	09:15	22.68	Full	Coarse sand
T5-6_Rep2	-71.5377	41.1058	20/01/2017	09:22	22.31	Full	N/A
T5-6_Rep3	-71.5378	41.1058	20/01/2017	09:24	22.19	Full	Coarse sand
T5-7_Rep1	-71.5375	41.1057	20/01/2017	09:29	22.04	1/4	N/A
T5-7_Rep2	-71.5377	41.1057	20/01/2017	09:36	22.16	Full	Coarse sand
T5-7_Rep3	-71.5377	41.1055	20/01/2017	09:40	22.22	1/2	Coarse sand
T5-8_Rep1	-71.5373	41.1055	20/01/2017	09:43	22.59	Full	Coarse sand
T5-8_Rep2	-71.5373	41.1055	20/01/2017	09:50	22.77	1/10	N/A
T5-8_Rep3	-71.5373	41.1055	20/01/2017	09:57	22.49	1/8	Coarse sand
T5-3_Rep1	-71.5370	41.1063	20/01/2017	10:01	23.35	1/10	N/A
T5-3_Rep2	-71.5372	41.1062	20/01/2017	10:04	23.59	1/2	Coarse sand
T5-3_Rep3	-71.5370	41.1063	20/01/2017	10:08	23.44	1/2	Gravel, coarse sand
T5-4_Rep1	-71.5368	41.1063	20/01/2017	10:15	23.93	Full	Finer sand
T5-4_Rep2	-71.5368	41.1067	20/01/2017	10:19	23.90	Full	Finer sand
T5-4_Rep3	-71.5368	41.1067	20/01/2017	10:20	24.14	Full	Medium sand
T5-5_Rep1	-71.5372	41.1067	20/01/2017	10:30	23.90	3/4	Medium sand
T5-5_Rep2	-71.5372	41.1067	20/01/2017	10:36	23.84	3/4	Medium sand
T5-5_Rep3	-71.5370	41.1067	20/01/2017	10:40	24.14	1/3	n/a
T5-2_Rep1	-71.5373	41.1067	20/01/2017	10:45	23.59	Full	Medium sand
T5-2_Rep2	-71.5373	41.1067	20/01/2017	10:48	23.74	Full	Medium, fine sand
T5-2_Rep3	-71.5373	41.1067	20/01/2017	10:52	24.08	Full	Medium sand
Cl-2_Rep1	-71.5407	41.1022	20/01/2017	11:10	21.09	1/8	Cobbles, gravel sand; gravel in jaws of grab
Cl-2_Rep2	-71.5407	41.1022	20/01/2017	11:17	21.73	1/8	Cobbles, gravel sand; gravel in jaws of grab
Cl-2_Rep3	-71.5407	41.1022	20/01/2017	11:27	21.70	1/10	Very little sand
C1-3_Rep1	-71.5402	41.1012	20/01/2017	11:34	21.67	Over full	Coarse sand; shell hash
C1-3_Rep2	-71.5402	41.1012	20/01/2017	11:37	21.46	Full	Coarse sand
C1-3_Rep3	-71.5402	41.1012	20/01/2017	11:43	21.82	Full	Coarse sand; shell hash
C1-4_Rep1	-71.5410	41.1012	20/01/2017	11:56	20.24	1/2	n/a

Vessel-Based Year 1							
Sample ID	X	Y	Date	Time	Depth (m)	Sediment quantity in Grab Bucket	Habitat Description
C1-4_Rep2	-71.5412	41.1012	20/01/2017	12:05	20.57	n/a	Sand, cobble, gravel; not much material
C1-4_Rep3	-71.5410	41.1012	20/01/2017	12:17	20.42	1/4	N/A; rocks in jaws of grab
C1-1_Rep1	-71.5417	41.1010	20/01/2017	12:23	21.55	n/a	Sand, but mostly shell hash
C1-1_Rep2	-71.5418	41.1010	20/01/2017	12:41	22.31	1/4	Fine sand; shell hash
C1-1_Rep3	-71.5418	41.1012	20/01/2017	12:45	22.25	1/4	Gravel, fine sand; shell hash; rocks in jaws of grab
C2-2_Rep1	-71.5113	41.1098	20/01/2017	12:58	27.25	3/4	Cobble, gravel, sand; grain size tube was not flashed at GoPro before deployment
C2-2_Rep2	-71.5117	41.1100	20/01/2017	13:07	26.55	Full	Fine sand with gravel
C2-2_Rep3	-71.5115	41.1100	20/01/2017	13:11	26.82	1/2	Coarse sand; rocks in jaws of grab
C2-1_Rep1	-71.5117	41.1102	20/01/2017	13:15	26.52	Full	Gravel, coarse sand; "muddy water"
C2-1_Rep2	-71.5117	41.1103	20/01/2017	13:18	26.49	1/2	Gravel, coarse sand; rocks in jaws of grab
C2-1_Rep3	-71.5118	41.1102	20/01/2017	13:22	26.49	1/4	Gravel, sand
C2-4_Rep1	-71.5123	41.1107	20/01/2017	13:25	26.03	1/2	Gravel, coarse sand; rocks in jaws of grab
C2-4_Rep2	-71.5125	41.1107	20/01/2017	13:35	25.97	n/a	Sand with gravel; rocks in jaws of grab
C2-4_Rep3	-71.5123	41.1108	20/01/2017	13:38	25.63	1/8	Coarse sand with gravel
C2-3_Rep1	-71.5122	41.1108	20/01/2017	13:42	25.60	1/2	Gravel, sand; rocks in jaws of grab
C2-3_Rep2	-71.5120	41.1108	20/01/2017	13:45	26.24	Full	Gravel, sand; amphipods
C2-3_Rep3	-71.5122	41.1110	20/01/2017	13:48	25.88	1/4	Gravel, coarse sand; amphipods
C3-1_Rep1	-71.5313	41.1172	21/03/2017	08:38	27.10	1/2	Gravel, sand; amphipods
C3-1_Rep2	-71.5318	41.1173	21/03/2017	08:48	27.01	1/2	Gravel, finer sand
C3-1_Rep3	-71.5317	41.1173	21/03/2017	08:52	26.70	1/3	Gravel, coarse sand; rock in jaws of grab
C3-2_Rep1	-71.5303	41.1168	21/03/2017	09:02	26.91	1/4	Gravel, medium sand
C3-2_Rep2	-71.5303	41.1168	21/03/2017	09:08	26.76	1/8	Gravel, sand; not much material
C3-2_Rep3	-71.5303	41.1168	21/03/2017	09:16	26.82	N/A	Gravel, finer sand; not much material
C3-3_Rep1	-71.5318	41.1172	21/03/2017	09:23	27.16	1/2	Gravel, medium sand
C3-3_Rep2	-71.5318	41.1172	21/03/2017	09:27	27.01	1/2	Gravel, medium sand

Vessel-Based Year 1							
Sample ID	X	Y	Date	Time	Depth (m)	Sediment quantity in Grab Bucket	Habitat Description
C3-3_Rep3	-71.5318	41.1172	21/03/2017	09:30	27.40	1/2	Gravel, medium sand
C3-4_Rep1	-71.5322	41.1172	21/03/2017	09:33	27.25	1/2	Cobble, sand
C3-4_Rep2	-71.5323	41.1172	21/03/2017	09:39	27.43	1/4	Gravel, fine sand; rocks in jaws of grab
C3-4_Rep3	-71.5323	41.1172	21/03/2017	09:42	27.34	1/4	Gravel, medium sand
C3-QC	-71.5310	41.1167	21/03/2017	09:50	26.82	Full	Gravel, medium sand; GoPro NOT on
T5-OC	-71.5368	41.1068	21/03/2017	10:00	23.53	Full	Medium sand
T3-QC	-71.5213	41.1150	21/03/2017	10:09	26.37	Full	Gravel, coarse sand
T1-QC	-71.5077	41.1252	21/03/2017	10:17	27.61	1/3	N/A; rocks in jaws of grab

B.2 Vessel-Based Year 2

Vessel-Based Year 2						
Sample ID	X	Y	Date	Depth (m)	Sediment quantity in Grab Bucket	Habitat Description
T1-1-R1	41.12622	-71.5074	30/11/2017	27.43	1/4 full	Coarse sand, gravel, cobbles
T1-1-R2	41.1261	-71.5075	30/11/2017	27.65	1/8 full	Coarse sand, cobbles, gravel; no photo taken
T1-1-R3	41.12608	-71.5076	30/11/2017	27.71	1/2 full	Cobbles, gravel, coarse sand
T1-2-R1	41.12545	-71.5072	30/11/2017	26.97	1/8 full	Cobbles, gravel, coarse sand
T1-2-R2	41.12542	-71.5072	30/11/2017	26.82	1/2 full	Cobbles, gravel, coarse sand
T1-2-R3	41.12542	-71.5074	30/11/2017	27.07	1/4 full	Cobbles, gravel, coarse sand
T1-3-R1	41.12602	-71.5073	30/11/2017	27.61	1/2 full	Cobbles, gravel, coarse sand - more than has been; worms present
T1-3-R2	41.12602	-578.25	30/11/2017	27.34	1/10 full	Cobble, gravel, coarse sand
T1-3-R3	41.12597	-71.5072	30/11/2017	27.16	1/4 full	Finer sediment - dark grey in color, some shell hash, cobbles, gravel, sand
T1-4-R1	41.1257	-71.5068	30/11/2017	26.85	1/4 full	Cobbles, gravel, coarse sand
T1-4-R2	41.12565	-71.5067	30/11/2017	26.82	1/2 full	Cobbles, gravel, coarse sand with some barnacles on cobble, 1 mussel attached to clump of gravel, 1 blade of seagrass
T1-4-R3	41.12563	-71.5067	30/11/2017	26.67	1/8 full	Cobbles, gravel, coarse sand
T1-5-R1	41.12622	-71.5073	30/11/2017	27.22	1/8 full	Cobbles, gravel, coarse sand
T1-5-R2	41.12623	-71.5073	30/11/2017	27.31	1/2 full	Mostly coarse sand, little cobbles and gravel, some shell hash
T1-5-R3	41.12612	-71.5073	30/11/2017	27.37	1/2 full	Coarse sand, lot of cobbles and gravel
T1-6-R1	41.12605	-71.5081	30/11/2017	27.61	1/2 full	Cobbles, gravel, coarse sand
T1-6-R2	41.12592	-71.508	30/11/2017	27.61	1/8 full	Cobbles, gravel, coarse sand
T1-6-R3	41.12593	-71.5084	30/11/2017	27.65	1/2 full	Cobbles, gravel, coarse sand
T1-7-R1	41.12552	-71.5083	30/11/2017	27.52	1/2 full	Cobbles, gravel, coarse sand
T1-7-R2	41.12568	-71.5084	30/11/2017	27.40	1/2 full	Cobbles, gravel, coarse sand; 1 mature mussel, 2 astarte clams, 1 crab (released, picture taken)
T1-7-R3	41.12548	-71.5085	30/11/2017	27.68	1/2 full	Cobbles, coarse sand, little gravel
T1-8-R1	41.12628	-71.5073	30/11/2017	27.43	1/4 full	Cobbles, gravel, coarse sand
T1-8-R2	41.12655	-71.5072	30/11/2017	27.37	1/2 full	Cobbles, gravel, coarse sand
T1-8-R3	41.12635	-71.5071	30/11/2017	27.25	1/2 full	Cobbles, gravel, coarse sand
T1-9-R1	41.12482	-71.5075	30/11/2017	26.58	1/4 full	Cobbles, gravel, coarse sand
T1-9-R2	41.12495	-71.5073	30/11/2017	26.52	1/2 full	Cobbles, gravel, coarse sand, some shells
T1-9-R3	41.125	-71.5073	30/11/2017	26.79	1/4 full	Cobbles, gravel, coarse sand
T3-1-R1	41.11498	-71.5206	30/11/2017	25.42	full	Very coarse sand with little gravel, 1 sand dollar shell - very close to turbine
T3-1-R2	41.11507	-71.5210	30/11/2017	25.48	full	Coarse sand, very coarse sand, few worms
T3-1-R3	41.11518	-71.5209	30/11/2017	25.51	full	Very coarse sand, coarse sand

Vessel-Based Year 2						
Sample ID	X	Y	Date	Depth (m)	Sediment quantity in Grab Bucket	Habitat Description
T3-2-R1	41.1144	-71.5214	30/11/2017	25.02	full	Very coarse sand, coarse sand, maybe small gravel, some gravel, 1 large snail
T3-2-R2	41.11135	-71.5214	30/11/2017	25.02	full	Very coarse sand, coarse sand, maybe small gravel, some gravel
T3-2-R3	41.11423	-71.5215	30/11/2017	25.05	1/2 full	Very coarse sand, coarse sand, maybe small gravel, some gravel
T3-3-R1	41.11492	-71.5206	30/11/2017	25.57	full	Very coarse sand, coarse sand, gravel
T3-3-R2	41.11497	-71.5208	30/11/2017	25.66	1/2 full	Coarse sand, very coarse sand, gravel, some of the sediment is darker shade gray
T3-3-R3	41.11497	-71.5208	30/11/2017	25.76	full	Very coarse sand, coarse sand, gravel
T3-4-R1	41.11427	-71.5212	30/11/2017	24.99	full	Coarse sand, some very coarse sand, some gravel
T3-4-R2	41.1142	-71.5211	30/11/2017	24.78	1/2 full	Coarse sand, some very coarse sand, some gravel
T3-4-R3	41.11423	-71.521	30/11/2017	24.96	1/2 full	Mostly very coarse sand, coarse sand (little gravel)
T3-5-R1	41.11418	-71.5211	30/11/2017	25.05	1/2 full	Very coarse sand, coarse sand, gravel, maybe finel gravel
T3-5-R2	41.11412	-71.5213	30/11/2017	25.12	1/2 full	Very coarse sand, coarse sand, some gravel (little)
T3-5-R3	41.1141	-71.521	30/11/2017	25.30	full	Very coarse sand, coarse sand, some gravel (little)
T3-6-R1	41.11447	-71.5218	30/11/2017	25.24	full	Very coarse sand, small gravel, some gravel
T3-6-R2	41.11447	-71.5221	30/11/2017	25.42	full	Very coarse sand, small gravel, some gravel
T3-6-R3	41.11447	-71.5217	30/11/2017	25.24	full	Very coarse sand, small gravel, some gravel
T3-7-R1	41.11523	-71.5208	30/11/2017	25.57	full	Coarse sand with some gravel, very coarse sand
T3-7-R2	41.11532	-71.5207	30/11/2017	25.66	full	Very coarse sand, very little gravel
T3-7-R3	41.11527	-71.5206	30/11/2017	25.45	1/2 full	Coarse sand, very coarse sand
T3-8-R1	41.11483	-71.5222	30/11/2017	25.24	full	Very coarse sand, very coarse sand, coarse sand, some gravel, few worms
T3-8-R2	41.1147	-71.5226	30/11/2017	25.66	1/2 full	Coarse sand, very coarse sand, gravel (little)
T3-8-R3	41.11472	-71.522	30/11/2017	25.21	full	Very coarse sand, coarse sand, some gravel (small)
T3-9-R1	41.11405	-71.5217	30/11/2017	24.78	full	Medium sand, coarse sand
T3-9-R2	41.11413	-71.5215	30/11/2017	25.12	1/2 full	Medium sand, fine sand, shell hash (fine)
T3-9-R3	41.11408	-71.5214	30/11/2017	24.96	1/2 full	Medium sand, fine sand, shell hash (fine)

Vessel-Based Year 2						
Sample ID	X	Y	Date	Depth (m)	Sediment quantity in Grab Bucket	Habitat Description
T5-6-R1	41.10675	-71.5373	30/11/2017	23.41	full	Coarse sand, very coarse sand, gravel, 1 Astarte clam
T5-6-R2	41.10662	-71.5373	30/11/2017	23.53	1/2 full	Very coarse sand, coarse sand, gravel
T5-6-R3	41.10665	-71.5373	30/11/2017	23.50	full	Coarse sand, very coarse sand, gravel
T5-7-R1	41.10648	-71.5383	30/11/2017	22.89	1/2 full	Coarse sand, very coarse sand, gravel
T5-7-R2	41.10657	-71.5385	30/11/2017	23.29	1/2 full	1 Astarte, coarse sand, very coarse sand, gravel
T5-7-R3	41.1066	-71.5386	30/11/2017	22.56	full	Coarse sand, very coarse sand
T5-9-R1	41.10702	-71.5375	30/11/2017	23.44	1/4-1/8 full	Very coarse sand, gravel, 1 Astarte clam
T5-9-R2	41.10697	-71.5375	30/11/2017	23.53	full	Very coarse sand, coarse sand, gravel, few small cobbles, few worms, some shell fragments
T5-9-R3	41.10697	-71.5375	30/11/2017	23.44	full	Coarse sand, very coarse sand, gravel, few small cobbles, 1 Astarte clam
C1-1-R1	41.10642	-71.5303	01/12/2017	23.26	1/3 full	Very coarse sand, some gravel, medium brown
C1-1-R2	41.10562	-71.5303	01/12/2017	23.41	full	Very coarse sand, full grab, some gravel
C1-1-R3	41.10555	-71.5302	01/12/2017	23.32	1/2 full	Very coarse sand, gravel, 2 rocks
C1-2-R1	41.10505	-71.5303	01/12/2017	23.04	1/4 full	Sponge and worm present
C1-2-R2	41.10482	-71.5301	01/12/2017	23.01	1/2 full	Mostly gravel with very coarse sand, some 1/2 clam shells
C1-2-R3	41.10482	-71.5302	01/12/2017	22.74	1/4 full	Mostly large cobble/rock, very coarse sand, some rocks with barnacle
C1-3-R1	41.10433	-71.5302	01/12/2017	22.98	1/2 full	Very coarse sand, some gravel
C1-3-R2	41.10435	-71.5303	01/12/2017	22.86	full	Very coarse sand and gravel
C1-3-R3	41.10432	-71.5303	01/12/2017	22.86	full	N/A
C2-1-R1	41.11033	-71.5404	01/12/2017	26.33	full	Clam (live), worm, very coarse sand, some gravel
C2-1-R2	41.11368	-71.5405	01/12/2017	26.79	1/2 full	Very coarse sand, some pebbles/gravel
C2-1-R3	41.11342	-71.5405	01/12/2017	26.40	full	Very coarse sand, pebbles (some), worm
C2-2-R1	41.11323	-71.5413	01/12/2017	25.73	full	Very coarse sand, some gravel
C2-2-R2	41.11327	-71.5413	01/12/2017	26.03	full	Very coarse sand, one large rock, live clam, gravel
C2-2-R3	41.11325	-71.5411	01/12/2017	25.51	full	Very coarse sand, little gravel
C2-3-R1	41.114	n/a	01/12/2017	26.85	full	Very coarse sand, pebbles (some)
C2-3-R2	41.1141	-71.5404	01/12/2017	26.79	full	Very coarse sand
C2-3-R3	41.11402	-71.5404	01/12/2017	27.07	full	Very coarse sand, worms
C3-1-R1	41.1239	-71.5162	01/12/2017	28.25	1/3 full	Pebbles/shells, surrounded by very coarse sand

Vessel-Based Year 2						
Sample ID	X	Y	Date	Depth (m)	Sediment quantity in Grab Bucket	Habitat Description
C3-1-R2	41.12413	-71.5162	01/12/2017	28.01	full	1/2 scallop shell, very coarse sand, some pebbles/cobbles
C3-1-R3	41.12397	-71.5162	01/12/2017	28.41	1/2 full	N/A
C3-2-R1	41.12498	-71.5155	01/12/2017	28.71	1/2 full	Very coarse sand, some 1/2 scallop shells
C3-2-R2	41.12488	-71.5154	01/12/2017	28.83	full	Very coarse sand, shells
C3-2-R3	41.12495	-71.5155	01/12/2017	28.59	1/2 full	Very coarse sand, some pebbles/gravel
C3-3-R1	41.1239	-71.5167	01/12/2017	28.01	1/2 full	Mostly gravel (50/50), very coarse, very coarse sand
C3-3-R2	41.12375	-71.5166	01/12/2017	28.01	1/2 full	Clam shells, very coarse gravel, cobbles/pebbles
C3-3-R3	41.12383	-71.5167	01/12/2017	28.25	1/2 full	Gravel, pebbles (most), surrounded by very coarse sand
T5-1-R1	41.1061	-71.5381	01/12/2017	22.16	3/4 full	Coarse sand, some shell fragments, medium brown sand
T5-1-R2	41.10605	-71.5379	01/12/2017	22.16	full	Coarse sand, medium brown
T5-1-R3	41.1063	-71.5381	01/12/2017	22.49	3/4 full	Coarse sand, medium brown
T5-2-R1	41.106	-71.537	01/12/2017	22.77	full	Larger rocks, very coarse sand, shells
T5-2-R2	41.10642	-71.5372	01/12/2017	22.71	full	Very coarse sand, medium brown
T5-2-R3	41.10643	-71.5371	01/12/2017	22.74	2/3 full	N/A
T5-3-R1	41.10555	-71.5376	01/12/2017	21.34	full	Coarse sand, medium brown
T5-3-R2	41.1058	-71.5378	01/12/2017	21.43	N/A	Coarse sand, medium brown
T5-3-R3	41.10625	-71.5378	01/12/2017	21.85	full	Medium brown
T5-4-R1	41.10612	-71.5369	01/12/2017	22.92	1/2 full	Mussel 1/2 shells, very coarse sand, 1/2 clam shell, all dead, medium brown
T5-4-R2	41.10627	-71.5368	01/12/2017	23.29	3/4 full	Very coarse sand, some shell fragment
T5-4-R3	41.1063	-71.5369	01/12/2017	23.16	N/A	Very coarse sand, snail and mussels (dead), 1 intact mussel shell
T5-5-R1	41.10588	-71.5376	01/12/2017	21.73	full	Very coarse sand, some gravel, medium brown
T5-5-R2	41.10578	-71.5375	01/12/2017	21.98	1/2 full	Very coarse sand, some gravel, medium brown
T5-5-R3	41.10573	-71.5374	01/12/2017	22.59	1/3 full	Larger rocks, very coarse sand, shells
T5-8-R1	41.10555	-71.5379	01/12/2017	21.52	1/2 full	N/A
T5-8-R2	41.10625	-71.538	01/12/2017	21.55	full	Some cobbles, medium brown
T5-8-R3	41.10582	-71.5382	01/12/2017	21.61	1/3 full	Medium coarse sand

B.3 Vessel-Based Year 3

Vessel-Based Year 3							
Sample ID	X	Y	Date	Time	Depth (m)	Sediment quantity in Grab Bucket	Habitat Description
T3-7 Rep1	-71.5205	41.1147	2/4/19	9:27	86.4	full	Medium-coarse sand; sand waves; little shell hash
T3-7 Rep2	-71.5202	41.1151	2/4/19	9:35	87.1	full	Coarse sand; few cobbles; sand waves; few shells
T3-7 Rep3	-71.5201	41.1151	2/4/19	9:50	86.5	3/4	Medium-coarse sand; some pebbles; sand waves; very little shell hash
T3-5 Rep1	-71.5207	41.1150	2/4/19	9:58	86.5	full	Coarse sand; sand waves; very little shell hash
T3-5 Rep2	-71.5205	41.1149	2/4/19	10:04	85.8	full	Medium-coarse sand; some pebbles; sand waves; very little shell hash
T3-5 Rep3	-71.5208	41.1149	2/4/19	10:10	86.7	full	Medium-coarse sand; sand waves, 1 (whole) mussel shell
T3-3 Rep1	-71.5205	41.1147	2/4/19	10:19	84.2	3/4	Coarse sand with a few pebbles; sand waves; very little shell hash
T3-3 Rep2	-71.5206	41.1148	2/4/19	10:25	85.1	1/2	Coarse sand, pebbles, a few cobbles; sand waves, 2 halves of mussel shells; no other shell hash
T3-3 Rep3	-71.5207	41.1146	2/4/19	10:37	84.8	full	Medium-coarse sand with little pebble; sand waves; no shell hash
T3-8 Rep1	-71.5205	41.1152	2/4/19	10:45	86.3	3/4	Medium-coarse sand; sand waves; No shell hash
T3-8 Rep2	-71.5206	41.1152	2/4/19	10:53	85.3	full	Medium-coarse sand; sand waves, 1 slipper shell; no other shell hash
T3-8 Rep3	-71.5208	41.1153	2/4/19	11:05	86.8	3/4	Coarse sand with pebbles, a few cobbles; sand waves; 1 moon snail shell; no other shell hash
T3-1 Rep1	-71.5208	41.1150	2/4/19	11:16	85.6	full	Coarse sand with some pebbles; sand waves, no shell hash
T3-1 Rep2	-71.5210	41.1150	2/4/19	11:22	85.6	3/4	Medium-coarse sand with some pebbles; sand waves, 1 mussel shell half; no other shell hash

Vessel-Based Year 3							
Sample ID	X	Y	Date	Time	Depth (m)	Sediment quantity in Grab Bucket	Habitat Description
T3-1 Rep3	-71.5208	41.1150	2/4/19	11:27	84.2	3/4	Medium-coarse sand, a few pebbles; sand waves; a few half and whole mussel shells
T3-4 Rep1	-71.5216	41.1149	2/4/19	11:33	85.3	full	Medium-coarse sand with little pebble; sand waves; 1 slipper shell; no other shell hash
T3-4 Rep2	-71.5216	41.1149	2/4/19	11:39	85.7	full	Coarse sand, cobbles, many pebbles; 1 mussel shell half; no other shell hash
T3-4 Rep3	-71.5215	41.1148	2/4/19	11:53	84	1/8	Coarse sand, some pebbles; sand waves; shell hash
T3-9 Rep1	-71.5220	41.1147	2/4/19	12:22	84.2	full	Coarse sand, a few cobbles, pebbles; sand waves; a few clumps of mussel shells; small amount of other shell hash
T3-9 Rep2	-71.5221	41.1148	2/4/19	12:30	84.4	3/4	Coarse sand, some pebbles; sand waves; no shell hash
T3-9 Rep3	-71.5222	41.1148	2/4/19	12:35	84.7	full	Coarse sand, pebbles; little shell hash
T3-6 Rep1	-71.5216	41.1143	2/4/19	12:42	83.2	3/4	Medium-coarse sand some pebbles; sand waves; some clumps of mussel shells
T3-6 Rep2	-71.5220	41.1145	2/4/19	12:47	83.9	3/4	Medium-coarse sand, pebbles; sand waves; small amount of shell hash
T3-6 Rep3	-71.5217	41.1143	2/4/19	12:55	83.5	3/4	Fine sand; sand waves; many clumps of mussel shells; minimal shell hash
T3-2 Rep1	-71.5216	41.1145	2/4/19	13:10	83.1	3/4	Medium-coarse sand with few pebbles; sand waves, some clumps of mussel shells; no other shell hash
T3-2 Rep2	-71.5215	41.1145	2/4/19	13:16	83.4	1/2	Coarse sand, pebbles, few cobbles; sand waves; some shell hash
T3-2 Rep3	-71.5215	41.1144	2/4/19	13:24	83	full	Coarse sand, some pebbles; sand waves; no shell hash

Vessel-Based Year 3							
Sample ID	X	Y	Date	Time	Depth (m)	Sediment quantity in Grab Bucket	Habitat Description
T5-9 Rep1	-71.5385	41.1066	2/4/19	13:43	74.6	3/4	Medium-coarse sand, few cobbles; sand waves; small number slipper and mussel shells; no shell hash
T5-9 Rep2	-71.5387	41.1066	2/4/19	13:52	74	3/4	Coarse sand, some pebbles, cobbles; sand waves; no shell hash
T5-9 Rep3	-71.5386	41.1066	2/4/19	13:56	73.5	full	Coarse sand, few cobbles and pebbles; sand waves; no shell hash
T5-4 Rep1	-71.5381	41.1064	2/4/19	14:03	75	full	Coarse sand, some gravel and pebbles; sand waves; minimal mussel shell hash
T5-4 Rep2	-71.5383	41.1064	2/4/19	14:08	73.2	full	Coarse sand, some pebbles; sand waves; no shell hash
T5-4 Rep3	-71.5383	41.1064	2/4/19	14:13	71.4	full	Coarse sand, minimal gravel and pebbles; sand waves; minimal shell hash
T5-5 Rep1	-71.5382	41.1059	2/4/19	14:24	71	3/4	Coarse sand, some pebbles, 3 large cobbles; sand waves; 2-3 mussel shell halves
T5-5 Rep2	-71.5381	41.1059	2/20/19	12:16	71.6	3/4	Medium sand, some small pebbles, minimal cobbles; sand waves; minimal shell hash
T5-5 Rep3	-71.5381	41.1059	2/4/19	14:33	70.9	1/3	Medium sand, 5 large cobbles; sand waves; no shell hash
T5-8 Rep1	-71.5369	41.1056	2/4/19	14:41	73	3/4	Coarse sand, a few cobbles; sand waves, no shell hash
T5-8 Rep2	-71.5372	41.1056	2/4/19	14:51	72.7	full	Coarse sand, some pebbles; sand waves; two small Astarte shells; no other shell hash
T5-8 Rep3	-71.5371	41.1056	2/4/19	14:56	72.9	3/4	Coarse sand, some pebbles; sand waves; minimal shell hash
T5-3 Rep1	-71.5380	41.1066	2/11/19	9:55	75.3	3/4	Coarse sand, some pebbles; sand waves; 1-2 halves of mussel shells; some shellhash

Vessel-Based Year 3							
Sample ID	X	Y	Date	Time	Depth (m)	Sediment quantity in Grab Bucket	Habitat Description
T5-3 Rep2	-71.5380	41.1066	2/11/19	10:25	76.1	full	Coarse sand, some pebbles, a few cobbles; sand waves, ~3 Astarte and a few mussel shells; some shell hash
T5-3 Rep3	-71.5378	41.1066	2/11/19	10:31	77.8	full	Coarse sand, some cobbles and pebbles; sand waves; shell hash
T5-7 Rep1	-71.5375	41.1068	2/11/19	10:37	78.4	3/4	Coarse sand, some pebbles, ~5 Astarte; sand waves; some shell hash
T5-7 Rep2	-71.5377	41.1071	2/11/19	10:40	71.8	3/4	Coarse sand, some cobbles and pebbles; sand waves, ~2 Astarte; some shell hash
T5-7 Rep3	-71.5376	41.1070	2/11/19	10:44	78.4	full	Coarse sand, some pebbles and cobbles; sand waves; ~2 Astarte; some shell hash
T5-1 Rep1	-71.5372	41.1065	2/11/19	10:51	78.3	3/4	Coarse sand, some pebbles; sand waves; 1 Astarte; some shell hash
T5-1 Rep2	-71.5376	41.1067	2/11/19	10:55	78.1	full	Coarse sand, cobbles, few pebbles; sand waves; some shell hash
T5-1 Rep3	-71.5372	41.1065	2/11/19	10:59	78.6	full	Medium sand, some small pebbles; sand waves; minimal shell hash
T5-6 Rep1	-71.5378	41.1059	2/11/19	11:05	74.6	full	Coarse sand, some pebbles; sand waves; few mussel shell halves; minimal shell hash
T5-6 Rep2	-71.5378	41.1059	2/11/19	11:10	74.2	full	Coarse sand, some pebbles; sand waves, ~2 Astarte; some shell hash
T5-6 Rep3	-71.5378	41.1059	2/11/19	11:15	74.2	full	Coarse sand, some cobbles and pebbles; sand waves; ~2 mussel shell halves, some shell hash
T5-2 Rep1	-71.5380	41.1060	2/11/19	11:26	75.1	3/4	Coarse sand, some pebbles; sand waves, ~5 mussel shell halves; some shell hash
T5-2 Rep2	-71.5378	41.1058	2/11/19	11:36	74.2	full	Coarse sand; sand waves; 2 mussel shell halves, no other shell hash

Vessel-Based Year 3							
Sample ID	X	Y	Date	Time	Depth (m)	Sediment quantity in Grab Bucket	Habitat Description
T5-2 Rep3	-71.5378	41.1060	2/11/19	11:42	75.8	full	Coarse sand, some pebbles; sand waves ~3 mussel shell halves; some shell hash
T1-6 Rep1	-71.5082	41.1256	2/11/19	11:59	93.4	1/2	Medium sand and pebbles, gravel, some cobbles; no visible bedforms; no shell hash
T1-6 Rep2	-71.5081	41.1255	2/11/19	12:13	92.9	1/2	Medium sand, gravel, small cobbles with growths (barnacles?); no visible bedform; no shell hash
T1-6 Rep3	-71.5080	41.1257	2/11/19	12:18	93.7	1/2	Medium sand, gravel, abundant cobbles and pebbles; some cobbles have growths (barnacles?); no visible bedforms; minimal shell hash
T1-9 Rep1	-71.5078	41.1250	2/11/19	12:24	92.7	1/2	Medium sand, gravel, cobbles; some cobbles have growths (barnacles?); no visible bedforms; minimal shell hash
T1-9 Rep2	-71.5078	41.1251	2/11/19	12:34	92.6	1/2	Medium sand, little gravel; no visible bedforms; some shell hash, mussel shells in clumps with growths
T1-9 Rep3	-71.5079	41.1251	2/11/19	12:37	92.2	1/2 - 1/3	Medium sand, gravel, cobbles, white sponge (<i>Polymastia robusta</i>); some shell hash with growth (barnacles?)
T1-8 Rep1	-71.5069	41.1251	2/11/19	13:20	90.4	1/4	Medium sand, some gravel, pebbles; Sand waves; minimal shell hash
T1-8 Rep2	-71.5068	41.1253	2/11/19	13:29	90.3	1/2	Medium sand, gravel, cobbles, some pebbles; sand waves; minimal shell hash
T1-8 Rep3	-71.5070	41.1251	2/11/19	13:42	91.1	1/8	Medium sand, gravel, small cobbles; some cobbles with growths (barnacles?); no visible bedforms; no shell hash
T1-4 Rep1	-71.5069	41.1262	2/11/19	13:49	92	1/2	Medium sand only; sand waves; no shell hash

Vessel-Based Year 3							
Sample ID	X	Y	Date	Time	Depth (m)	Sediment quantity in Grab Bucket	Habitat Description
T1-4 Rep2	-71.5071	41.1262	2/11/19	13:58	92.4	3/4	Medium sand; sand waves; 1 small clump of mussel shells; minimal shell hash
T1-4 Rep3	-71.5071	41.1262	2/11/19	14:09	92	1/4	Medium sand, cobbles; sand waves; no shell hash
T1-7 Rep1	-71.5073	41.1263	2/11/19	14:46	92.7	1/2	Medium sand, some gravel; no visible bedforms; minimal shell hash
T1-7 Rep2	-71.5085	41.1265	2/11/19	15:09	93.5	1/2	Medium sand, gravel, small cobbles; no visible bedforms; small amount of shell hash
T1-7 Rep3	-71.5079	41.1264	2/11/19	15:14	93.1	3/4	Medium sand, some gravel - small cobbles; no visible bedforms; minimal shell hash
C1-1 Rep1	-71.5130	41.1278	2/11/19	16:13	97.8	3/4	Coarse sand, some pebbles; sand waves; no shell hash except very few small shell fragments
C1-1 Rep2	-71.5131	41.1277	2/20/19	9:18	101	3/4	
C1-1 Rep3	-71.5130	41.1277	2/20/19	9:34	101	1/2	
C1-2 Rep1	-71.5128	41.1283	2/20/19	9:38	101	1/2	
C1-2 Rep2	-71.5130	41.1284	2/20/19	9:43	100	1/2	
C1-2 Rep3	-71.5129	41.1283	2/20/19	9:51	101	1/2	
C1-3 Rep1	-71.5125	41.1287	2/20/19	9:59	101	2/3	
C1-3 Rep2	-71.5126	41.1287	2/20/19	10:04	100	1/2 - 1/3	
C1-3 Rep3	-71.5125	41.1287	2/20/19	10:07	100	3/4	
C2-1 Rep1	-71.5339	41.1144	2/20/19	10:26	91.4	1/3 - 1/4	
C2-1 Rep2	-71.5339	41.1143	2/20/19	10:30	91	3/4	
C2-1 Rep3	-71.5339	41.1143	2/20/19	10:34	90.9	full	
C2-2 Rep1	-71.5346	41.1136	2/20/19	10:39	89.8	full	
C2-2 Rep2	-71.5346	41.1139	2/20/19	10:43	90.1	full	
C2-2 Rep3	-71.5346	41.1138	2/20/19	10:50	90	full	
C2-3 Rep1	-71.5351	41.1144	2/20/19	10:55	90.4	1/3	
C2-3 Rep2	-71.5352	41.1144	2/20/19	10:59	90	full	
C2-3 Rep3	-71.5351	41.1143	2/20/19	11:02	90.6	full	
C3-1 Rep1	-71.5295	41.1034	2/20/19	11:11	76	1/3	
C3-1 Rep2	-71.5295	41.1034	2/20/19	11:18	76	2/3	
C3-1 Rep3	-71.5295	41.1035	2/20/19	11:22	76	3/4	
C3-2 Rep1	-71.5291	41.1037	2/20/19	11:28	76.8	full	
C3-2 Rep2	-71.5288	41.1037	2/20/19	11:34	76.8	full	

Vessel-Based Year 3							
Sample ID	X	Y	Date	Time	Depth (m)	Sediment quantity in Grab Bucket	Habitat Description
C3-2 Rep3	-71.5290	41.1036	2/20/19	11:42	76.1	3/4	
C3-3 Rep1	-71.5286	41.1025	2/20/19	11:55	77.7	full	Medium sand, abundant pebbles, few cobbles; sand waves, minimal shell hash
C3-3 Rep2	-71.5287	41.1025	2/20/19	11:59	77.6	3/4	Medium sand, few cobbles and pebbles; sand waves; shell hash
C3-3 Rep3	-71.5287	41.1025	2/20/19	12:05	77.4	full	Medium sand, some pebbles, few cobbles; sand waves; minimal shell hash
T1-1 Rep1	-71.5074	41.1254	2/20/19	12:36	88.5	1/3	Medium sand, gravel, small cobbles; some cobbles have growths (baracles?); white sponge (<i>Polymastia robusta</i>); no visible bedforms; minimal shell hash
T1-1 Rep2	-71.5075	41.1254	2/20/19	12:40	89	1/3	Medium sand, gravel - small cobbles; cobbles have growths (barnacles?); 2 sea stars; white sponge (<i>Polymastia robusta</i>); very few mussel shell fragments
T1-1 Rep3	-71.5075	41.1256	2/20/19	12:44	88.7	1/3 - 1/4	Medium sand, gravel - small cobbles; cobbles have growths (barnacles?); sand waves; 3 sea stars; no shell hash
T1-3 Rep1	-71.5071	41.1260	2/20/19	12:51	89.5	Not noted	Medium sand, cobbles; some cobbles have growths; scattered small rocks; sand waves; some mussel shell halves; no other shell hash
T1-3 Rep2	-71.5071	41.1260	2/20/19	12:55	89.6	1/3	Medium sand, gravel, cobbles; some cobbles have growths (barnacles?), 2 sea stars; sand waves, minimal shell hash
T1-3 Rep3	-71.5070	41.1260	2/20/19	12:58	89.3	1/2	Medium sand, gravel, some small cobbles with growths (barnacles?); sand waves; no shell hash

Vessel-Based Year 3							
Sample ID	X	Y	Date	Time	Depth (m)	Sediment quantity in Grab Bucket	Habitat Description
T1-2 Rep1	-71.5070	41.1259	2/20/19	13:22	88.6	1/4 - 1/8	Medium sand, many cobbles and small rocks (some have barnacle growths); 2 sea stars; sand waves; mussel shell halves; no shell hash
T1-2 Rep2	-71.5070	41.1259	2/20/19	13:25	89.1	1/2	Medium sand, small cobbles; some cobbles have growths (barnacles?); sand waves; 1 naticidae shell; minimal shell hash
T1-2 Rep3	-71.5070	41.1259	2/20/19	13:32	88.8	1/3 - 1/2	Medium sand, gravel, small cobbles; some cobbles have growths (barnacles?); sand waves; 1 sea stars; minimal shell hash
T1-5 Rep1	-71.5071	41.1253	2/20/19	13:12	88.1	1/4	Medium sand, gravel, cobbles; cobbles have growths (barnacles?); 2 sea stars; no visible bedforms; no shell hash
T1-5 Rep2	-71.5077	41.1260	2/20/19	13:43	90.3	2/3 - 3/4	Medium sand, some gravel and small cobbles; no visible bedform; whole mussel shells and mussel shell hash covering the entire field of view
T1-5 Rep3	-71.5080	41.1258	2/20/19	13:46	90.6	2/3 - 3/4	Medium sand; no visible bedforms; 1 sea stars; whole mussel shells and hash covering entire field of view

Appendix C – Camera Field Notes for Float and Diver-Towed Missions

C.1 Float Missions Year 1

Float Missions Year 1								
Site Name		Latitude	Longitude	Date	Time	Data Directory	# Images	Notes
C1-1	Drop	41 06 9.4256 N	071 32 25.5741 W	6/28/17	10:30:50	stereo_surv_1419	BW 334	
	Recover	41 06 9.4306 N	071 32 47.2654 W	6/28/17	11:00:24		Color 334	
C1-2	Drop	41 06 4.3487 N	071 32 21.2024 W	6/28/17	11:24:54	stereo_surv_1519	BW 573	
	Recover	41 06 1.8616 N	071 33 0.7179 W	6/28/17	12:09:27		Color 571	
C3-1	Drop	41 07 0.4035 N	071 31 46.4251 W	6/28/17	12:33:44	stereo_surv_1627	BW 625	
	Recover	41 06 58.2207 N	071 31 59.061 W	6/28/17	13:06:26		Color 625	
C3-2	Drop	41 07 2.2434 N	071 31 43.0546 W	6/28/17	13:24:59	stereo_surv_1716	BW 896	
	Recover	41 06 56.7147 N	071 31 49.3558 W	6/28/17	14:07:22		Color 847	
C2-1	Drop	41 06 39.4243 N	071 30 42.5795 W	6/28/17	14:31:01	stereo_surv_1824	BW 1023	
	Recover	41 06 33.0584 N	071 30 38.9662 W	6/28/17	15:18:57		Color 1023	
T3-1	Drop	41 06 55.4611 N	071 31 16.9588 W	8/9/17	8:53:46	stereo_surv_1251	BW 673	
	Recover	41 06 52.3003 N	071 31 30.807 W	8/9/17	9:25:59		Color 675	
T3-2	Drop	41 06 51.018 N	071 31 13.4758 W	8/9/17	9:41:59	stereo_surv_1337	BW 639	
	Recover	41 06 47.4895 N	071 31 26.7836 W	8/9/17	10:13:50		Color 639	
T1-1	Drop	41 07 34.4225 N	071 30 25.8154 W	8/9/17	10:31:17	stereo_surv_1426	BW 585	
	Recover	41 07 30.9421 N	071 30 38.9035 W	8/9/17	11:03:24		Color 601	
T1-2	Drop	41 07 31.1076 N	071 30 26.2505 W	8/9/17	11:39:21	stereo_surv_1529	BW 453	8-bit
	Recover	41 07 27.7819 N	071 30 35.8594 W	8/9/17	12:11:19		Color 0	
T5-4	Drop	41 06 24.4283 N	071 32 15.5297 W	8/9/17	12:31:01	stereo_surv_1627	BW 96	8-bit
	Recover	41 06 23.0000 N	071 32 16.1562 W	8/9/17	12:47:01		Color 0	

Float Missions Year 1								
Site Name		Latitude	Longitude	Date	Time	Data Directory	# Images	Notes
T5-1	Drop	41 06 22.0583 N	071 32 16.6649 W	8/9/17	12:52:15	stereo_surv_1646	BW 424	8-bit
	Recover	41 06 12.3688 N	071 32 17.7263 W	8/9/17	13:24:10		Color 0	
T5-2	Drop	41 06 22.1883 N	071 32 14.7691 W	8/9/17	13:43:23	stereo_surv_1735	BW 140	Dying strobe
	Recover	41 06 10.3441 N	071 32 15.2148 W	8/9/17	14:15:14		Color 311	Dying strobe
T5-3	Drop	41 06 22.1547 N	071 32 17.4531 W	8/9/17	14:29:54	stereo_surv_1824	BW 79	Dying strobe
	Recover	41 06 15.0901 N	071 32 18.5089 W	8/9/17	14:49:47		Color 149	Dying strobe
T3-3	Drop	41 06 52.3902 N	071 31 17.2978 W	8/9/17	15:03:19	stereo_surv_1859	BW 67	Dying strobe
	Recover	41 06 44.5542 N	071 31 17.0274 W	8/9/17	15:23:12		Color 142	Dying strobe
T1-3	Drop	41 07 31.9203 N	071 30 28.5224 W	8/9/17	15:35:48	stereo_surv_1932	BW 64	Dying strobe
	Recover	41 07 27.4791 N	071 30 28.9664 W	8/9/17	15:55:27		Color 116	Dying strobe

C.2 Float and Diver-Towed Missions Year 2

Float and Diver-Towed Missions Year 2								
Site Name		Latitude	Longitude	Date	Time	Data Directory	# Images	Notes
T3-1 Float	Drop	41.115304 N	071.520978 W	5/17/2018	11:07:00	stereo_surv_1458	BW 609	Images partially lighted by strobe
	Recover	41.114735 N	071.522693 W	5/17/2018	11:29:00		Color 510	
T3-2 Float	Drop	41.114305 N	071.520333 W	5/17/2018	01:20:00	stereo_surv_1714	BW 519	
	Recover	41.112508 N	071.520647 W	5/17/2018	01:43:00		Color 365	
T3 Diver	Drop	41.114846 N	071.52117 W	5/17/2018	12:09:00	stereo_surv_1551	BW 733	
	Recover	41.114846 N	071.52117 W	5/17/2018	12:37:00		Color 688	
C1-1 Float	Drop	41 06 18.2813 N	071 31 47.4121 W	6/12/2018	07:26:26	stereo_surv_1126	BW 474	
	Recover	41 06 20.0263 N	071 31 55.3527 W	6/12/2018	07:53:14		Color 452	
C1-2 Float	Drop	41 06 19.0185 N	071 31 45.9851 W	6/12/2018	08:14:59	stereo_surv_1215	BW 1,384	Strobe not working for part of mission
	Recover	41 06 17.8844 N	071 31 51.3523 W	6/12/2018	08:41:19		Color 454	
C2-1 Float	Drop	41 06 49.4877 N	071 32 24.1619 W	6/12/2018	09:28:57	stereo_surv_1328	BW 1,296	Strobe not used
	Recover	41 06 46.089 N	071 32 24.6876 W	6/12/2018	09:54:38		Color 934	
C2-2 Float	Drop	41 06 51 N	071 32 26.6641 W	6/12/2018	09:58:16			Strobe not used
	Recover	41 06 48.333 N	071 32 25.1485 W	6/12/2018	10:25:15			
C3-1 Float	Drop	41 07 29.5037 N	071 30 58.0635 W	6/12/2018	10:45:55	stereo_surv_1445	BW 915	
	Recover	41 07 25.3768 N	071 30 52.8953 W	6/12/2018	11:12:29		Color 915	
C3-2 Float	Drop	41 07 29.1298 N	071 30 59.2409 W	6/12/2018	11:16:16			
	Recover	41 07 23.0487 N	071 30 54.2445 W	6/12/2018	11:42:47			
T5-1 Float	Drop	41 06 21.5111 N	071 32 15.8619 W	6/15/2018	08:00:46	stereo_surv_1157	BW 908	
	Recover	41 06 17.7585 N	071 32 43.0275 W	6/15/2018	08:26:37		Color 901	
T5-2 Float	Drop	41.106395 N	071.537976 W	6/15/2018	08:35:00			
	Recover	41 06 20.3184 N	071 32 41.7113 W	6/15/2018	09:00:57			
T1-1 Float	Drop	41 07 32.1352 N	071 30 25.1301 W	6/15/2018	09:18:43	stereo_surv_1318	BW 774	
	Recover	41 07 29.8859 N	071 30 43.7418 W	6/15/2018	09:44:51		Color 766	

Float and Diver-Towed Missions Year 2

Site Name		Latitude	Longitude	Date	Time	Data Directory	# Images	Notes
T1-2 Float	Drop	41 07 34 N	071 30 25.7292 W	6/15/2018	09:50:49			
	Recover	41 07 31.9699 N	071 30 39.2763 W	6/15/2018	10:10:36			
T1 Diver	Drop	41.125636 W	071.50749 W	6/15/2018	10:43:00	stereo_surv_1430	BW 504	
	Recover	41.125636 W	071.50749 W	6/15/2018	11:07:00		Color 1,503	
T5 Diver	Drop	41.106209 N	071.537636 W	6/15/2018	11:52:00	stereo_surv_1546	BW 508	
	Recover	41.106209 N	071.537636 W	6/15/2018	12:15:00		Color 508	

C.3 Float and Diver-Towed Missions Year 3

Float and Diver-Towed Missions Year 3								
Site Name		Latitude	Longitude	Date	Time	Data Directory	# Images	Notes
T3-1 Float	Drop	41.115610 N	071.521580 W	08/01/2019	9:36	20190801_092700	399	Drifted from turbine - prob outside study area. Time not synced.
	Recover	41.114510 N	071.526370 W	08/01/2019	10:07			
T3-2 Float	Drop	41.114733 N	071.520600 W	08/01/2019	11:34	20190801_112557	300	15 mins instead of 20.
	Recover	41.112800 N	071.522416 W	08/01/2019	11:54			
T3 Diver	Drop	41.114572 N	071.521156 W	08/01/2019	12:09	20190801_120234	499	Good. Too heavy.
	Recover	41.115382 N	071.521187 W	08/01/2019	13:00			
T1-1 Float	Drop	41.125550 N	071.509116 W	08/01/2019	13:48	20190801_134026	400	Good.
	Recover	41.122150 N	071.509983 W	08/01/2019	14:15			
T1-2 Float	Drop	41.126600 N	071.507433 W	08/01/2019	14:27	201908-01_142300	400	Good. Very buoyant.
	Recover	41.123083 N	071.509166 W	08/01/2019	14:54			
T5-1 Float	Drop	41.107400 N	071.537233 W	08/02/2019	9:12	20190802_094350	400	Good. Buoyant.
	Recover	41.107066 N	071.543466 W	08/02/2019	9:39			
T5-2 Float	Drop	41.106166 N	071.536100 W	08/02/2019	9:50	Unavailable	NA	Good. Slightly buoyant.
	Recover	41.106216 N	071.541250 W	08/02/2019	10:15			
T1 Diver	Drop	41.125636 N	071.507490 W	08/02/2019	10:41	20190802_103504	484	Good.
	Recover	41.126446 N	071.507521 W	08/02/2019	11:20			
C3-1 Float	Drop	41.102916 N	071.528500 W	08/02/2019	11:34	20190802_113009	400	Good.
	Recover	41.101200 N	071.531300 W	08/02/2019	12:01			
C3-2 Float	Drop	41.103533 N	071.528066 W	08/02/2019	12:10	20190802_120349	400	-
	Recover	41.101300 N	071.528066 W	08/02/2019	12:35			
T5 Diver	Drop	41.106209 N	071.537636 W	08/02/2019	12:42	20190802_124125	502	Good.
	Recover	41.107019 N	071.537667 W	08/02/2019	13:20			

Float and Diver-Towed Missions Year 3

Site Name		Latitude	Longitude	Date	Time	Data Directory	# Images	Notes
C1-1 Float	Drop	41.128483 N	071.512720 W	08/27/2019	NR	20190827_083044	392	Good. Modified strobe.
	Recover	41.127208 N	071.512713 W	08/27/2019	NR			
C1-2 Float	Drop	41.128869 N	071.512745 W	08/27/2019	NR	20190827_091139	400	Good.
	Recover	41.127285 N	071.512635 W	08/27/2019	NR			
C2-1 Float	Drop	41.114695 N	071.534510 W	08/27/2019	NR	20190827_095529	399	Good.
	Recover	41.112606 N	071.533770 W	08/27/2019	NR			
C3-1 Float	Drop	41.115522 N	071. 535092 W	08/27/2019	NR	20190827_102956	400	Good.
	Recover	41.113549 N	071.534186 W	08/27/2019	NR			

Appendix D – Results of the Sediment Particle Size Distribution Analysis for Vessel-Based and Diver-Based Data Collection

D.1 Year 1 Vessel-Based Results

Vessel-Based Samples Year 1									
Station	% Clay	% Silt	% Coarse Silt	% Very Fine Sand	% Fine Sand	% Medium Sand	% Coarse Sand	% Very Coarse Sand	TOTAL
T1-1_Rep1	0	0	0	0	5.46	48.62	41.82	4.09	99.99
T1-1_Rep2	0	0	0	0	5.06	58.38	36.10	0.47	100.01
T1-1_Rep3	0	0	0	0	4.44	55.26	39.32	0.97	99.99
T1-2_Rep1	0	0	0	0	6.65	49.27	40.87	3.21	100.00
T1-2_Rep2	0	0	0	0	6.23	49.87	41.31	2.59	100.00
T1-2_Rep3	0	0	0	0.06	15.84	52.23	30.68	1.19	100.00
T1-3_Rep1	0	0	0	0	4.19	47.55	45.03	3.23	100.00
T1-3_Rep2	0	0	0	0	1.83	45.30	49.37	3.49	99.99
T1-3_Rep3	0	0	0	0	13.03	57.88	28.79	0.30	100.00
T1-4_Rep1	0	0	0	0	12.09	55.67	31.15	1.10	100.01
T1-4_Rep2	0	0	0	0	4.39	46.38	44.52	4.70	99.99
T1-4_Rep3	0	0	0	0	3.87	45.56	46.22	4.35	100.00
T1-5_Rep1	0	0	0	0	1.21	40.46	52.38	5.95	100.00
T1-5_Rep2	0	0	0	0	2.19	41.26	49.60	6.95	100.00
T1-5_Rep3	0	0	0	0	1.83	43.11	49.82	5.24	100.00
T1-6_Rep1	0	0	0	0	8.11	62.16	29.66	0.08	100.01
T1-6_Rep2	0	0	0	0	8.54	58.91	32.10	0.46	100.01
T1-6_Rep3	0	0	0	0	4.73	55.74	38.48	1.06	100.01
T1-7_Rep1	0	0	0	0	6.23	52.58	39.56	1.63	100.00
T1-7_Rep2	0	0	0	0	4.77	60.70	34.53	0.00	100.00
T1-7_Rep3	0	0	0	0	5.06	50.22	42.21	2.50	99.99
T1-8_Rep1	0	0	0	0	2.45	39.37	49.80	8.38	100.00
T1-8_Rep2	0	0	0	0	5.37	50.43	41.64	2.56	100.00
T1-8_Rep3	0	0	0	0	3.26	50.26	44.26	2.22	100.00
T1-9_Rep1	0	0	0	0	0.48	31.17	56.02	12.32	99.99
T1-9_Rep2	0	0	0	0	2.05	38.91	50.47	8.57	100.00
T1-9_Rep3	0	0	0	0	4.82	46.51	43.57	5.10	100.00
T3-1_Rep1	0	0	0	0	0.78	31.69	53.89	13.65	100.01
T3-1_Rep2	0	0	0	0	0.90	31.76	53.54	13.80	100.00
T3-1_Rep3	0	0	0	0	0.04	22.00	56.10	21.85	99.99
T3-2_Rep1	0	0	0	0	0.09	25.20	57.86	16.85	100.00
T3-2_Rep2	0	0	0	0	0.88	32.70	53.32	13.10	100.00

Vessel-Based Samples Year 1									
Station	% Clay	% Silt	% Coarse Silt	% Very Fine Sand	% Fine Sand	% Medium Sand	% Coarse Sand	% Very Coarse Sand	TOTAL
T3-2_Rep3	0	0	0	0	0.11	28.24	59.35	12.30	100.00
T3-3_Rep1	0	0	0	0	0.23	27.20	56.57	15.99	99.99
T3-3_Rep2	0	0	0	0	0.66	31.17	53.75	14.41	99.99
T3-3_Rep3	0	0	0	0	0.23	31.61	58.24	9.92	100.00
T3-4_Rep1	0	0	0	0	0.11	25.09	57.10	17.70	100.00
T3-4_Rep2	0	0	0	0	0.64	36.03	55.44	7.90	100.01
T3-4_Rep3	0	0	0	0	0.77	31.32	54.00	13.91	100.00
T3-5_Rep1	0	0	0.03	0.31	1.73	28.77	50.34	18.82	100.00
T3-5_Rep2	0	0	0.01	1.77	6.97	28.64	45.28	17.34	100.01
T3-5_Rep3	0	0	0	0	0.43	20.97	52.31	26.30	100.01
T3-6_Rep1	0	0	0	0	0.34	33.53	56.79	9.34	100.00
T3-6_Rep2	0	0	0	0	0.88	40.38	53.49	5.25	100.00
T3-6_Rep3	0	0	0	0	0.25	32.75	57.57	9.43	100.00
T3-7_Rep1	0	0	0	0	0	14.57	57.23	28.19	99.99
T3-7_Rep2	0	0	0	0	0.86	30.88	53.39	14.87	100.00
T3-7_Rep3	0	0	0	0	0.25	24.53	55.47	19.75	100.00
T3-8_Rep1	0	0	0	0	0.06	25.25	57.28	17.40	99.99
T3-8_Rep2	0	0	0	0	0.01	21.44	61.34	17.21	100.00
T3-8_Rep3	0	0	0	0	0.27	32.37	57.55	9.81	100.00
T3-9_Rep1	0	0	0	0	0.62	36.56	55.45	7.37	100.00
T3-9_Rep2	0	0	0	0	1.29	37.01	52.22	9.49	100.01
T3-9_Rep3	0	0	0	0	0.44	35.73	56.84	7.00	100.01
T5-1_Rep1	0	0	0	0.17	0.33	19.64	51.77	28.10	100.01
T5-1_Rep2	0	0	0	0.40	0.12	8.65	53.30	37.53	100.00
T5-1_Rep3	0	0	0.16	0.45	3.11	27.67	47.91	20.71	100.01
T5-2_Rep1	0	0	0	0	0.92	25.49	50.87	22.71	99.99
T5-2_Rep2	0	0	0	0	2.93	40.16	46.86	10.06	100.01
T5-2_Rep3	0	0	0	0	1.91	36.04	49.96	12.08	99.99
T5-3_Rep1	0	0	0.07	0.32	1.12	20.82	49.57	28.10	100.00
T5-3_Rep2	0	0	0.10	0.18	1.74	23.31	48.19	26.48	100.00
T5-3_Rep3	0	0	0	0	5.51	36.68	42.64	15.17	100.00
T5-4_Rep1	0	0	0	0	2.86	46.85	45.28	5.01	100.00
T5-4_Rep2	0	0	0	0	6.51	59.18	33.72	0.60	100.01
T5-4_Rep3	0	0	0	0	2.42	38.19	48.50	10.88	99.99
T5-5_Rep1	0	0	0	0	2.60	38.00	48.22	11.18	100.00
T5-5_Rep2	0	0	0	0	3.09	37.73	46.58	12.60	100.00
T5-5_Rep3	0	0	0	0	2.87	51.13	43.89	2.11	100.00
T5-6_Rep1	0	0	0	0	0	12.85	56.42	30.72	99.99

Vessel-Based Samples Year 1									
Station	% Clay	% Silt	% Coarse Silt	% Very Fine Sand	% Fine Sand	% Medium Sand	% Coarse Sand	% Very Coarse Sand	TOTAL
T5-6_Rep2	0	0	0	0	0.02	14.17	52.41	33.40	100.00
T5-6_Rep3	0	0	0	0	0	13.14	54.91	31.95	100.00
T5-7_Rep1	0	0	0	0	0	7.12	55.22	37.66	100.00
T5-7_Rep2	0	0	0	0	4.35	34.84	45.74	15.06	99.99
T5-7_Rep3	0	0	0	0	0.20	19.11	52.65	28.04	100.00
T5-8_Rep1	0	0	0.17	0.25	1.68	23.75	49.20	24.94	99.99
T5-8_Rep2	0	0	0	0	0.02	17.37	57.28	25.33	100.00
T5-8_Rep3	0	0	0	0.80	0.20	11.29	53.54	34.18	100.01
T5-9_Rep1	0	0	0	0	0	13.90	57.78	28.32	100.00
T5-9_Rep2	0	0	0	0	0	2.90	54.81	42.28	99.99
T5-9_Rep3	0	0	0	0	0	7.99	55.47	36.54	100.00
C1-1_Rep1	0	0	0.18	1.31	0.04	20.08	58.01	20.38	100.00
C1-1_Rep2	0	0	0	0	0.32	36.81	56.97	5.90	100.00
C1-1_Rep3	0	0	0	0	0.05	30.63	62.80	6.53	100.01
C1-2_Rep1	0	0	0	0	0.42	35.79	57.26	6.52	99.99
C1-2_Rep2	0	0	0	0	0.35	30.68	56.80	12.17	100.00
C1-2_Rep3	0	0	0	0	0.03	27.04	60.85	12.08	100.00
C1-3_Rep1	0	0	0	0	0	13.48	57.66	28.85	99.99
C1-3_Rep2	0	0	0	0	0	15.60	63.27	21.13	100.00
C1-3_Rep3	0	0	0	0	0.02	20.82	62.85	16.31	100.00
C1-4_Rep1	0	0	0	0	0.01	23.65	62.76	13.59	100.01
C1-4_Rep2	0	0	0	0	0.03	25.23	61.93	12.81	100.00
C1-4_Rep3	0	0	0	0	0.02	28.69	64.03	7.27	100.01
C2-1_Rep1	0.08	0.90	0	0	0.65	32.78	54.57	11.02	100.00
C2-1_Rep2	0	0	0	0	2.55	37.36	48.90	11.19	100.00
C2-1_Rep3	0	0	0	0	1.86	32.57	50.29	15.27	99.99
C2-2_Rep1	0	0	0	0	0.46	35.85	56.82	6.87	100.00
C2-2_Rep2	0	0	0.22	0.58	1.62	36.29	51.88	9.40	99.99
C2-2_Rep3	0	0.67	0	0	0.08	25.47	57.09	16.69	100.00
C2-3_Rep1	0	0	0.01	0.97	3.13	27.57	49.56	18.76	100.00
C2-3_Rep2	0	0	0.05	0.65	8.07	39.51	43.58	8.14	100.00
C2-3_Rep3	0.22	0.20	0.24	1.48	17.85	39.53	33.39	7.08	99.99
C2-4_Rep1	0	0	0	0.31	13.56	38.08	35.58	12.46	99.99
C2-4_Rep2	0	0	0	0	3.27	41.96	47.82	6.96	100.01
C2-4_Rep3	0	0	0	0	0.36	28.97	56.35	14.33	100.01
C3-1_Rep1	0	0	0	0	3.33	40.86	47.47	8.34	100.00
C3-1_Rep2	0	0	0	0	1.86	43.32	49.80	5.02	100.00
C3-1_Rep3	0	0	0	0	0.76	30.69	54.35	14.19	99.99

Vessel-Based Samples Year 1									
Station	% Clay	% Silt	% Coarse Silt	% Very Fine Sand	% Fine Sand	% Medium Sand	% Coarse Sand	% Very Coarse Sand	TOTAL
C3-2_Rep1	0	0	0	0	4.14	47.16	44.34	4.36	100.00
C3-2_Rep2	0	0	0	0	2.34	47.48	46.95	3.23	100.00
C3-2_Rep3	0	0	0	0	4.65	48.49	43.09	3.77	100.00
C3-3_Rep1	0	0	0	0	6.19	45.50	42.80	5.51	100.00
C3-3_Rep2	0	0.24	0.64	0.11	12.49	50.31	34.41	1.80	100.00
C3-3_Rep3	0	0	0	0	2.05	46.83	48.24	2.87	99.99
C3-4_Rep1	0	0	0	0	6.67	47.67	41.34	4.32	100.00
C3-4_Rep2	0	0	0	0	3.17	44.90	46.71	5.22	100.00
C3-4_Rep3	0	0	0	0	6.10	49.97	41.26	2.67	100.00
T1-QC	0	0	0	0	8.90	53.51	36.29	1.31	100.01
T3-QC	0	0	0	0	0.01	15.08	57.47	27.44	100.00
T5-OC	0	0	0	0	0.70	36.42	55.01	7.86	99.99
C3-QC	0	0	0	0	0.51	28.01	55.13	16.34	99.99

D.2 Year 2 Vessel-Based Results

Vessel-Based Samples Year 2									
Station	% Clay	% Silt	% Coarse Silt	% Very Fine Sand	% Fine Sand	% Medium Sand	% Coarse Sand	% Very Coarse Sand	Total
T1-1_R1	0	0	0	0	6.10	57.25	36.64	0.01	100
T1-1_R2	0	0	0	0	4.26	50.00	45.16	0.58	100
T1-1_R3	0	0	0	0	6.27	50.10	43.01	0.62	100
T1-2_R1	0	0	0	0	8.43	50.15	40.82	0.6	100
T1-2_R2	0	0	0	0	11.17	50.91	37.56	0.36	100
T1-2_R3	0	0	0	0	9.64	50.79	39.1	0.47	100
T1-3_R1	0	0	0	0	6.53	50.21	42.63	0.63	100
T1-3_R2	0	0	0	0	2.72	45.75	50.33	1.19	99.99
T1-3_R3	0	0	0	0	6.38	49.42	43.55	0.64	99.99
T1-4_R1	0	0	0	0	4.56	48.97	45.72	0.75	100
T1-4_R2	0	0	0	0	2.38	46.45	50.17	1.01	100.01
T1-4_R3	0	0	0	0	1.68	44.37	50.51	3.44	100
T1-5_R1	0	0	0	0	5.47	49.96	43.9	0.67	100
T1-5_R2	0	0	0	0	2.36	48.39	47.02	2.23	100
T1-5_R3	0	0	0	0	3.72	46.22	48.78	1.28	100
T1-6_R1	0	0	0	0	7.67	48.97	42.5	0.86	100
T1-6_R2	0	0	0	0	8.88	51.27	39.34	0.51	100
T1-6_R3	0	0	0	0	8.19	51.88	39.42	0.5	99.99
T1-7_R1	0	0	0	0	14.43	56.42	29.14	0	99.99
T1-7_R2	0	0	0	0	7.21	47.57	44.3	0.92	100
T1-7_R3	0	0	0	0	6.63	50.36	42.44	0.58	100.01
T1-8_R1	0	0	0	0	5.05	51.23	43.19	0.53	100
T1-8_R2	0	0	0	0	5.38	49.56	44.31	0.75	100
T1-8_R3	0	0	0	0	8.22	54.82	36.83	0.12	99.99
T1-9_R1	0	0	0	0	8.71	49.35	41.29	0.64	99.99
T1-9_R2	0	0	0	0	2.61	42.35	52.61	2.43	100
T1-9_R3	0	0	0	0	3.47	43.01	51.84	1.69	100.01
T3-1_R1	0	0	0	0	0.02	16.30	53.34	30.34	100
T3-1_R2	0	0	0	0	0.11	31.82	61.69	6.38	100
T3-1_R3	0	0	0	0	0	24.23	67.16	8.6	99.99
T3-2_R1	0	0	0	0	1.78	39.11	52.6	6.51	100
T3-2_R2	0	0	0	0	1.17	39.99	56.22	2.62	100
T3-2_R3	0	0	0	0	0.43	31.53	56.69	11.36	100.01
T3-3_R1	0	0	0	0	0.41	34.79	59.44	5.35	99.99
T3-3_R2	0	0	0	0	0.51	35.38	59.3	4.81	100
T3-3_R3	0	0	0	0	0.07	31.22	63.07	5.64	100

Vessel-Based Samples Year 2									
Station	% Clay	% Silt	% Coarse Silt	% Very Fine Sand	% Fine Sand	% Medium Sand	% Coarse Sand	% Very Coarse Sand	Total
T3-4_R1	0	0	0	0	1.85	43.23	53.19	1.73	100
T3-4_R2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0
T3-4_R3	0	0	0	0	2.01	44.00	52.42	1.57	100
T3-5_R1	0	0	0	0	1.73	40.61	54.54	3.12	100
T3-5_R2	0	0	0	0	1.94	42.11	53.38	2.57	100
T3-5_R3	0	0	0	0	2.96	45.93	49.90	1.21	100
T3-6_R1	0	0	0	0	0.59	38.41	58.03	2.96	99.99
T3-6_R2	0	0	0	0	0.54	36.91	58.35	4.20	100
T3-6_R3	0	0	0	0	1.3	40.61	55.07	3.02	100
T3-7_R1	0	0	0	0	0.09	30.77	62.78	6.37	100.01
T3-7_R2	0	0	0	0	0.11	32.58	61.51	5.80	100
T3-7_R3	0	0	0	0	3.06	40.78	46.28	9.89	100.01
T3-8_R1	0	0	0	0	0.66	31.52	60.48	7.35	100.01
T3-8_R2	0	0	0	0	0.13	33.47	61.26	5.15	100.01
T3-8_R3	0	0	0	0	1.53	35.84	51.74	10.90	100.01
T3-9_R1	0	0	0	0	5.45	52.61	41.61	0.33	100
T3-9_R2	0	0	0	0	6.43	55.17	38.39	0	99.99
T3-9_R3	0	0	0	0	4.73	52.86	42.20	0.22	100.01
T5-1_R1	0	0	0	0	0	25.74	66.52	7.74	100
T5-1_R2	0	0	0	0	0.93	21.57	51.92	25.58	100
T5-1_R3	0	0	0	0	0.33	29.43	62.91	7.33	100
T5-2_R1	0	0	0	0	0.12	31.14	62.62	6.11	99.99
T5-2_R2	0	0	0	0	0.47	30.82	60.77	7.94	100
T5-2_R3	0	0	0	0	1.67	34.83	57.43	6.07	100
T5-3_R1	0	0	0	0	0	23.47	67.60	8.93	100
T5-3_R2	0	0	0	0	2.42	36.14	55.55	5.89	100
T5-3_R3	0	0	0	0	0.61	29.99	60.78	8.63	100.01
T5-4_R1	0	0	0	0	1.89	38.18	55.75	4.18	100
T5-4_R2	0	0	0	0	0.80	33.94	60.22	5.03	99.99
T5-4_R3	0	0	0	0	0.03	24.56	64.86	10.54	99.99
T5-5_R1	0	0	0	0	1.41	34.88	58.48	5.23	100
T5-5_R2	0	0	0	0	0.51	29.54	62.45	7.50	100
T5-5_R3	0	0	0	0	0.08	28.08	63.33	8.51	100
T5-6_R1	0	0	0	0	0.02	27.92	64.83	7.23	100
T5-6_R2	0	0	0	0	0.04	27.25	64.32	8.39	100
T5-6_R3	0	0	0	0	0.34	24.36	55.69	19.61	100
T5-7_R1	0	0	0	0	0	20.39	69.62	9.99	100
T5-7_R2	0	0	0	0	1.49	25.44	51.45	21.61	99.99

Vessel-Based Samples Year 2									
Station	% Clay	% Silt	% Coarse Silt	% Very Fine Sand	% Fine Sand	% Medium Sand	% Coarse Sand	% Very Coarse Sand	Total
T5-7_R3	0	0	0	0	0.02	24.98	64.60	10.40	100
T5-8_R1	0	0	0	0	0.66	31.52	60.48	7.35	100.01
T5-8_R2	0	0	0	0	0.1	29.94	63.56	6.40	100
T5-8_R3	0	0	0	0	1.22	34.25	59.01	5.53	100.01
T5-9_R1	0	0	0	0	0.07	29.91	62.93	7.10	100.01
T5-9_R2	0	0	0	0	0.73	35.66	58.76	4.85	100
T5-9_R3	0	0	0	0	0.15	35.1	60.57	4.18	100
C1-1_R1	0	0	0	0	1.82	30.48	60.48	7.23	100.01
C1-1_R2	0	0	0	0	11.55	45.1	40.60	2.75	100
C1-1_R3	0	0	0	0	5.04	40.9	50.33	3.73	100
C1-2_R1	0	0	0	0	2.49	32.88	56.85	7.77	99.99
C1-2_R2	0	0	0	0	2.99	34.65	56.58	5.78	100
C1-2_R3	0	0	0	0	0	23.18	66.63	10.18	99.99
C1-3_R1	0	0	0	0	0.04	27.12	64.04	8.80	100
C1-3_R2	0	0	0	0	0.2	29.65	63.20	6.95	100
C1-3_R3	0	0	0	0	0.09	29.65	63.18	7.08	100
C2-1_R1	0	0	0	0	0.45	31.23	61.19	7.14	100.01
C2-1_R2	0	0	0	0	0.57	31.84	60.87	6.73	100.01
C2-1_R3	0	0	0	0	0	27.96	65.26	6.78	100
C2-2_R1	0	0	0	0	1.43	39.52	55.66	3.39	100
C2-2_R2	0	0	0	0	1.57	38.13	56.47	3.83	100
C2-2_R3	0	0	0	0	0.08	30.82	62.60	6.49	99.99
C2-3_R1	0	0	0	0	0.01	24.86	63.77	11.36	100
C2-3_R2	0	0	0	0	0.61	33.54	60.44	5.42	100.01
C2-3_R3	0	0.04	0.02	0.05	1.34	21.19	47.86	29.50	100
C3-1_R1	0	0	0	0	0.14	33.78	61.64	4.44	100
C3-1_R2	0	0	0	0	1.09	38.12	56.98	3.81	100
C3-1_R3	0	0	0	0	1.49	37.71	56.22	4.59	100.01
C3-2_R1	0.04	0.53	0.33	0.59	3.91	42.31	49.68	2.62	100.01
C3-2_R2	0	0	0	0	1.05	38.54	56.70	3.71	100
C3-2_R3	0	0	0	0	2.53	38.33	55.06	4.08	100
C3-3_R1	0	0	0	0	0.07	30.75	62.46	6.71	99.99
C3-3_R2	0	0	0	0	0.12	34.17	61.31	4.39	99.99
C3-3_R3	0	0	0	0	1.2	39.18	56.76	2.85	99.99

D.3 Year 2 Diver-Based Results

Diver-Based Samples Year 2									
Station	% Clay	% Silt	% Coarse Silt	% Very Fine Sand	% Fine Sand	% Medium Sand	% Coarse Sand	% Very Coarse Sand	Total
T1-FP1	8.81	12.7	2.33	3.27	4.96	29.45	36.29	2.22	100.01
T1-FP2	9.32	12.3	2.9	4.35	8.76	34.16	27.77	0.42	100.01
T1-FP3	15.23	16.5	2.62	3.7	5.79	28.34	27.2	0.64	100
T1-FP4	11.96	13.4	2.36	3.82	6.25	31.35	30.16	0.69	100.01
T1-FP5	31.64	34.4	6.11	6.96	4.77	7.25	7.86	0.96	99.99
T3-FP1	0	0	0	0	0	20.06	70.18	9.76	100
T3-FP2	0	0	0	0	0	21.6	69.21	9.19	100
T3-FP3	0	0	0	0	0	23.47	68.05	8.48	100
T3-FP4	0	0	0	0	0.88	40.66	56.38	2.08	100
T3-FP5	0	0	0	0	0.46	38.03	58.11	3.40	100
T5-FP1	0	0	0	0	0.01	22.98	65.81	11.20	100
T5-FP2	0	0	0	0	0.06	26.68	63.75	9.51	100
T5-FP3	0	0	0	0	0	23.16	66.71	10.12	99.99
T5-FP4	0	0	0	0	0	18.31	67.29	14.40	100
T5-FP5	0	0	0	0	0.07	26.67	63.06	10.20	100

D.4 Year 3 Vessel-Based Results

Vessel-Based Samples Year 3									
Station	% Clay	%Silt	% Coarse Silt	% Very Fine Sand	% Fine Sand	% Medium Sand	% Coarse Sand	% Very Coarse Sand	Total
C1-1 R1	0.00	0.00	0.00	0.00	0.09	34.01	61.90	4.00	100.00
C1-1 R2	0.00	0.00	0.00	0.00	2.04	45.58	51.40	0.98	100.00
C1-1 R3	0.00	0.00	0.00	0.00	0.57	37.81	58.48	3.14	100.00
C1-2 R1	0.00	0.00	0.00	0.00	2.28	40.79	54.15	2.77	99.99
C1-2 R2	0.00	0.00	0.00	0.40	10.07	49.00	40.27	0.62	100.36
C1-3 R3	0.00	0.00	0.00	0.00	1.85	42.95	53.89	1.31	100.00
C1-3 R1	0.00	0.00	0.00	0.00	4.43	48.92	45.98	0.68	100.01
C1-3 R2	0.00	0.00	0.00	0.00	3.66	40.98	52.51	2.84	99.99
C1-3 R3	0.00	0.00	0.00	0.00	3.28	46.70	49.04	0.99	100.01
C2-1 R1	0.00	0.00	0.00	0.00	1.42	41.24	54.98	2.37	100.01
C2-1 R2	0.00	0.00	0.00	0.00	1.40	41.68	54.82	2.11	100.01
C2-1 R3	0.00	0.00	0.00	0.00	1.41	39.58	55.62	3.39	100.00
C2-2 R1	0.00	0.00	0.00	0.00	1.86	42.04	53.60	2.50	100.00
C2-2 R2	0.00	0.00	0.00	0.00	1.32	40.96	55.54	2.17	99.99
C2-2 R3	0.00	0.00	0.00	0.00	0.10	26.07	66.02	7.89	100.08
C2-3 R1	0.00	0.00	0.00	0.00	0.07	31.53	62.89	5.50	99.99
C2-3 R2	0.00	0.00	0.00	0.00	0.81	37.12	58.21	3.86	100.00
C2-3 R3	0.00	0.00	0.00	0.00	1.04	38.75	56.92	3.28	99.99
C3-1 R1	0.00	0.00	0.00	0.00	0.00	23.72	67.44	8.84	100.00
C3-1 R2	0.00	0.00	0.00	0.00	0.00	18.15	69.52	12.33	100.00
C3-1 R3	0.00	0.00	0.00	0.00	0.00	19.16	68.01	12.83	100.00
C3-2 R1	0.00	0.00	0.00	0.00	0.40	28.29	63.51	8.15	100.35
C3-2 R2	0.00	0.00	0.00	0.00	0.00	24.84	65.39	9.77	100.00
C3-2 R3	0.00	0.00	0.00	0.00	0.53	33.75	60.21	5.51	100.00
C3-3 R1	0.00	0.00	0.00	0.00	0.00	21.90	66.98	11.12	100.00
C3-3 R2	0.00	0.00	0.00	0.00	0.01	26.92	65.26	7.81	100.00
C3-3 R3	0.00	0.00	0.00	0.00	0.00	23.55	67.52	8.93	100.00
T1-1 R1	0.00	0.00	0.00	0.00	15.14	54.96	29.88	0.20	100.18
T1-1 R2	0.00	0.00	0.00	0.00	4.69	46.93	47.36	1.02	100.00
T1-1 R3	0.00	0.00	0.00	0.00	13.28	53.72	32.93	0.07	100.00
T1-2 R1	0.00	0.00	0.00	0.00	5.63	48.79	44.98	0.59	99.99
T1-2 R2	0.00	0.00	0.00	0.00	6.18	53.09	40.56	0.17	100.00
T1-2 R3	0.00	0.00	0.00	0.00	0.32	40.59	57.63	1.46	100.00
T1-3 R1	0.00	0.00	0.00	0.00	6.77	53.16	39.76	0.31	100.00
T1-3 R2	0.00	0.00	0.00	0.00	6.90	53.47	39.47	0.17	100.01
T1-3 R3	0.00	0.00	0.00	0.00	5.51	50.48	43.51	0.49	99.99

Vessel-Based Samples Year 3									
Station	% Clay	%Silt	% Coarse Silt	% Very Fine Sand	% Fine Sand	% Medium Sand	% Coarse Sand	% Very Coarse Sand	Total
T1-4 R1	0.00	0.00	0.00	0.00	10.92	56.76	32.32	0.00	100.00
T1-4 R2	0.00	0.00	0.00	0.00	4.31	49.83	45.22	0.64	100.00
T1-4 R3	0.00	0.00	0.00	0.00	3.70	49.45	46.21	0.64	100.00
T1-5 R1	0.00	0.00	0.00	0.00	15.56	53.57	30.81	0.06	100.00
T1-5 R2	31.39	55.17	6.79	3.28	0.50	1.35	0.97	0.54	99.99
T1-5 R3	23.16	32.47	4.58	6.02	7.39	14.94	11.24	0.20	100.00
T1-6 R1	0.00	0.00	0.00	0.00	2.28	42.92	53.26	1.55	100.01
T1-6 R2	0.00	0.00	0.00	0.00	8.33	48.88	42.07	0.72	100.00
T1-6 R3	0.00	0.00	0.00	0.00	5.30	43.59	48.74	2.36	99.99
T1-7 R1	0.00	0.00	0.00	0.00	14.56	58.54	26.90	0.00	100.00
T1-7 R2	0.00	0.00	0.00	0.00	1.07	40.30	56.47	2.16	100.00
T1-7 R3	0.00	0.00	0.00	0.00	6.76	49.59	42.98	0.67	100.00
T1-8 R1	0.00	0.00	0.00	0.00	4.26	45.79	48.74	1.22	100.01
T1-8 R2	0.00	0.00	0.00	0.00	4.60	47.80	46.73	0.87	100.00
T1-8 R3	0.00	0.00	0.00	0.00	7.90	50.36	41.17	0.58	100.01
T1-9 R1	0.00	0.00	0.00	0.00	8.03	50.72	40.75	0.50	100.00
T1-9 R2	0.00	0.00	0.00	0.00	7.02	50.44	42.10	0.44	100.00
T1-9 R3	0.00	0.00	0.00	0.00	7.51	46.88	44.54	1.07	100.00
T3-1 R1	0.00	0.00	0.00	0.00	0.04	31.20	63.53	5.22	99.99
T3-1 R2	0.00	0.00	0.00	0.00	0.12	32.88	60.96	6.04	100.00
T3-1 R3	0.00	0.00	0.00	0.00	0.99	38.49	57.20	3.32	100.00
T3-2 R1	0.00	0.00	0.00	0.00	0.74	38.75	57.08	3.42	99.99
T3-2 R2	0.00	0.00	0.00	0.00	1.45	42.31	54.29	1.96	100.01
T3-2 R3	0.00	0.00	0.00	0.00	0.72	38.56	57.76	2.96	100.00
T3-3 R1	0.00	0.00	0.00	0.00	1.34	41.00	55.33	2.32	99.99
T3-3 R2	0.00	0.00	0.00	0.00	1.18	39.49	56.73	2.60	100.00
T3-3 R3	0.00	0.00	0.00	0.00	0.00	30.31	65.15	4.54	100.00
T3-4 R1	0.00	0.00	0.00	0.00	0.00	23.97	65.38	10.65	100.00
T3-4 R2	0.00	0.00	0.00	0.00	0.08	32.71	62.86	4.35	100.00
T3-4 R3	0.00	0.00	0.00	0.00	0.28	35.46	59.57	4.69	100.00
T3-5 R1	0.00	0.00	0.00	0.00	0.09	33.15	62.10	4.67	100.01
T3-5 R2	0.00	0.00	0.00	0.00	0.31	35.86	59.78	4.05	100.00
T3-5 R3	0.00	0.00	0.00	0.00	0.00	24.35	67.73	7.92	100.00
T3-6 R1	0.00	0.00	0.00	0.00	1.84	44.00	52.97	1.19	100.00
T3-6 R2	0.00	0.00	0.00	0.00	1.14	40.02	55.80	3.04	100.00
T3-6 R3	0.00	0.00	0.00	0.00	3.46	50.39	45.60	0.55	100.00
T3-7 R1	0.00	0.00	0.00	0.00	1.38	40.65	54.87	3.09	99.99

Vessel-Based Samples Year 3									
Station	% Clay	%Silt	% Coarse Silt	% Very Fine Sand	% Fine Sand	% Medium Sand	% Coarse Sand	% Very Coarse Sand	Total
T3-7 R2	0.00	0.00	0.00	0.00	0.72	36.42	58.15	4.71	100.00
T3-7 R3	0.00	0.00	0.00	0.00	0.12	34.28	60.93	4.67	100.00
T3-8 R1	0.00	0.00	0.00	0.00	0.24	34.85	59.92	4.99	100.00
T3-8 R2	0.00	0.00	0.00	0.00	0.11	32.91	62.00	4.99	100.01
T3-8 R3	0.00	0.00	0.00	0.00	0.03	29.07	64.48	6.43	100.01
T3-9 R1	0.00	0.00	0.00	0.00	0.14	35.61	60.24	4.02	100.01
T3-9 R2	0.00	0.00	0.00	0.00	0.14	33.99	60.58	5.29	100.00
T3-9 R3	0.00	0.00	0.00	0.00	0.04	30.59	63.69	5.68	100.00
T5-1 R1	0.00	0.00	0.00	0.00	1.67	42.96	53.41	1.96	100.00
T5-1 R2	0.00	0.00	0.00	0.00	0.90	36.32	58.07	4.71	100.00
T5-1 R3	0.00	0.00	0.00	0.00	0.66	36.56	58.44	4.33	99.99
T5-2 R1	0.00	0.00	0.00	0.00	0.00	14.18	70.64	15.18	100.00
T5-2 R2	0.00	0.00	0.00	0.00	0.00	21.47	66.38	12.15	100.00
T5-2 R3	0.00	0.00	0.00	0.00	1.87	36.64	57.00	4.49	100.00
T5-3 R1	0.00	0.00	0.00	0.00	1.40	34.85	58.08	5.67	100.00
T5-3 R2	0.00	0.00	0.00	0.00	1.39	38.97	56.59	3.06	100.01
T5-3 R3	0.00	0.00	0.00	0.00	0.06	27.70	64.29	7.94	99.99
T5-4 R1	0.00	0.00	0.00	0.00	1.23	33.28	59.51	5.98	100.00
T5-4 R2	0.00	0.00	0.00	0.00	0.01	26.07	66.02	7.89	99.99
T5-4 R3	0.00	0.00	0.00	0.00	0.00	20.20	66.51	13.29	100.00
T5-5 R1	0.00	0.00	0.00	0.00	0.60	33.55	60.75	5.10	100.00
T5-5 R2	0.00	0.00	0.00	0.00	0.20	27.15	66.13	6.70	100.18
T5-5 R3	0.00	0.00	0.00	0.00	0.00	49.48	50.52	0.00	100.00
T5-6 R1	0.00	0.00	0.00	0.00	0.88	32.75	59.52	6.86	100.01
T5-6 R2	0.00	0.00	0.00	0.00	1.83	36.52	56.89	4.76	100.00
T5-6 R3	0.00	0.00	0.00	0.00	0.44	30.11	62.08	7.36	99.99
T5-7 R1	0.00	0.00	0.00	0.00	0.15	34.89	60.59	4.37	100.00
T5-7 R2	0.00	0.00	0.00	0.00	0.09	31.32	62.63	6.15	100.19
T5-7 R3	0.00	0.00	0.00	0.00	0.15	35.35	60.34	4.16	100.00
T5-8 R1	0.00	0.00	0.00	0.00	0.09	28.72	64.21	6.97	99.99
T5-8 R2	0.00	0.00	0.00	0.00	0.05	27.42	64.42	8.12	100.01
T5-8 R3	0.00	0.00	0.00	0.00	0.08	29.93	63.97	6.03	100.01
T5-9 R1	0.00	0.00	0.00	0.00	0.28	31.64	61.46	6.63	100.01
T5-9 R2	0.00	0.00	0.00	0.00	0.00	21.96	70.02	8.02	100.00
T5-9 R3	0.00	0.00	0.00	0.00	1.26	36.43	58.06	4.25	100.00

D.5 Year 3 Diver-Based Results

Diver-Based Samples Year 3									
Station	% Clay	% Silt	% Coarse Silt	% Very Fine Sand	% Fine Sand	% Medium Sand	% Coarse Sand	% Very Coarse Sand	Total
Turbine Footprint									
FP-T1-1	18.45	22.26	4.45	7.93	12.51	19.65	14.07	0.68	100.00
FP-T1-2	17.08	20.46	3.66	5.96	9.38	23.89	19.20	0.38	100.01
FP-T3-1	0.00	0.00	0.00	0.00	0.35	34.31	59.81	5.52	99.99
FP-T3-2	4.23	5.95	1.40	3.40	0.65	30.75	50.77	2.84	99.99
FP-T3-3	0.00	0.00	0.00	0.00	0.13	35.36	60.39	4.12	100.00
FP-T3-4	0.00	0.00	0.00	0.00	0.16	36.31	59.10	4.43	100.00
FP-T3-5	0.00	0.00	0.00	0.00	0.56	37.07	58.50	3.86	99.99
FP-T5-1	0.00	0.00	0.00	0.00	1.23	29.85	54.95	13.96	99.99
FP-T5-2	0.00	0.00	0.00	0.00	0.67	25.73	54.74	18.85	99.99
FP-T5-3	4.71	6.18	1.47	2.19	2.92	28.62	42.91	10.99	99.99
FP-T5-4	0.00	0.00	0.00	0.00	1.03	27.39	54.32	17.26	100.00
FP-T5-5	0.00	0.00	0.00	0.00	0.50	23.99	55.83	19.68	100.00
Very Near-Field									
T1-S1-R1	4.44	5.11	1.20	1.51	6.89	43.61	36.71	0.54	100.01
T1-S1-R2	8.44	10.55	2.15	3.09	4.55	36.50	34.15	0.60	100.00
T1-S1-R3	11.42	15.36	3.45	5.64	9.12	30.10	24.50	0.41	100.00
T1-S2-R1	0.00	0.00	0.00	0.00	5.65	50.90	42.97	0.48	100.00
T1-S2-R2	0.00	0.00	0.00	0.00	8.20	53.10	38.47	0.23	100.00
T1-S2-R3	0.00	0.00	0.00	0.05	9.82	48.78	40.61	0.74	100.00
T1-S3-R1	0.00	0.00	0.00	0.00	5.40	48.56	45.24	0.81	100.01
T1-S3-R2	0.00	0.00	0.00	0.00	6.24	50.32	42.88	0.55	99.99
T1-S3-R3	0.00	0.00	0.00	0.00	7.76	50.62	41.03	0.59	100.00
T3-S1-R1	0.00	0.00	0.00	0.00	1.16	41.36	55.48	2.00	100.00
T3-S1-R2	0.00	0.00	0.00	0.00	0.12	34.70	60.40	4.78	100.00
T3-S1-R3	0.00	0.00	0.00	0.00	0.64	37.65	57.71	4.00	100.00
T3-S2-R1	0.00	0.00	0.00	0.00	0.12	35.68	60.71	3.49	100.00
T3-S2-R2	0.00	0.00	0.00	0.00	0.09	33.72	61.70	4.49	100.00
T3-S2-R3	0.00	0.00	0.00	0.00	0.06	33.14	63.28	3.53	100.01
T3-S3-R1	0.00	0.00	0.00	0.00	0.11	32.18	61.85	5.86	100.00
T3-S3-R2	0.00	0.00	0.00	0.00	0.00	23.59	68.05	8.36	100.00
T3-S3-R3	0.00	0.00	0.00	0.00	0.14	34.68	61.38	3.81	100.01
T5-S1-R1	0.00	0.00	0.00	0.00	0.05	27.68	64.79	7.47	99.99
T5-S1-R2	0.00	0.00	0.00	0.00	0.05	29.81	64.90	5.24	100.00
T5-S1-R3	0.00	0.00	0.00	0.00	0.00	21.29	70.95	7.76	100.00
T5-S2-R1	0.00	0.00	0.00	0.00	1.66	36.28	53.24	8.81	99.99





Diver-Based Samples Year 3									
Station	% Clay	% Silt	% Coarse Silt	% Very Fine Sand	% Fine Sand	% Medium Sand	% Coarse Sand	% Very Coarse Sand	Total
T5-S2-R2	0.00	0.00	0.00	0.00	1.41	40.65	55.79	2.15	100.00
T5-S2-R3	0.00	0.00	0.00	0.00	0.73	31.59	56.58	11.01	99.91
T5-S3-R1	0.00	0.00	0.00	0.00	0.95	34.04	56.50	8.51	100.00
T5-S3-R2	0.00	0.00	0.00	0.00	0.78	30.55	56.57	12.09	99.99
T5-S3-R3	0.00	0.00	0.00	0.00	1.61	40.33	56.08	1.98	100.00





D.6 Year 3 Method Comparison





Vessel vs Diver-Based Samples Year 3									
Station	% Clay	% Silt	% Coarse Silt	% Very Fine Sand	% Fine Sand	% Medium Sand	% Coarse Sand	% Very Coarse Sand	Total
Diver 1	9.27	14.00	4.27	10.06	27.87	25.15	9.29	0.08	99.99
Diver 2	10.07	14.54	4.29	9.77	30.23	25.70	5.40	0.00	100.00
Diver 3	8.53	17.17	5.86	5.46	10.13	29.93	22.63	0.28	99.99
Smith McIntyre 1	3.12	7.15	3.69	7.92	22.62	34.53	20.76	0.20	99.99
Smith McIntyre 2	8.94	20.27	7.47	12.63	27.67	20.02	3.00	0.00	100.00
Smith McIntyre 2	1.05	2.37	1.55	1.73	15.89	45.99	31.07	0.35	100.00





Appendix E – Results of the Seabed Video Analysis of Vessel-Based Data Collection





E.1 Vessel-Based Samples Year 1





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T1-1_Rep1	27.7	Homogeneous, sand waves, medium sand with little gravel. Very small amount of shell hash.	
T1-1_Rep2	28.1	Homogeneous, sand waves, medium sand with little gravel. Very small amount of shell hash.	
T1-1_Rep3	27.9	Homogeneous, sand waves, medium sand with some cobbles and some gravel. Very small amount of shell hash.	
T1-2_Rep1	27.8	Homogeneous, no visible bedform, medium sand with some cobbles and some gravel. Cobbles have growth on them (appear to be barnacles). Very small amount of shell hash. An unidentified white object (biological in nature).	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T1-2_Rep2	27.6	Homogeneous, sand waves, medium sand with little cobbles and some gravel. Very small amount of shell hash.	
T1-2_Rep3	27.6	Homogeneous, no visible bedform, medium sand with some cobbles and some gravel. Very small amount of shell hash.	
T1-3_Rep1	27.4	Homogeneous, no visible bedform, medium sand with some cobbles and some gravel. No shell hash. An unidentified white object (biological in nature).	
T1-3_Rep2	27.8	Homogeneous, no visible bedform, medium sand with some cobbles and some gravel. No shell hash.	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T1-3_Rep3	27.3	Homogeneous, sand waves, fine to medium sand with some cobbles and some gravel. No shell hash.	
T1-4_Rep1	28.5	N/A	N/A
T1-4_Rep2	28.2	Homogeneous, no visible bedform, medium sand with few cobbles and some gravel. Very small amount of shell hash.	
T1-4_Rep3	28.4	Homogeneous, no visible bedform, medium sand with some cobbles and some gravel. Cobbles have growth on them (appear to be barnacles). Very small amount of shell hash.	
T1-5_Rep1	28.3	Homogeneous, sand waves, medium to coarse sand with some gravel. Very small amount of shell hash.	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T1-5_Rep2	28.2	Homogeneous, sand waves, medium sand with few cobbles and some gravel. Very small amount of shell hash.	
T1-5_Rep3	28.0	Homogeneous, sand waves, medium sand with some gravel. Very small amount of shell hash.	
T1-6_Rep1	27.8	Homogeneous, sand waves, fine to medium sand. Very small amount of shell hash.	
T1-6_Rep2	27.9	Homogeneous, sand waves, fine to medium sand. Very small amount of shell hash.	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T1-6_Rep3	27.9	Homogeneous, sand waves, fine to medium sand. Very small amount of shell hash.	
T1-7_Rep1	27.4	Homogeneous, sand waves, fine to medium sand with little gravel. Very small amount of shell hash. Unidentified white object (biological in nature). In 2nd video from grab attempt that was not successful.	
T1-7_Rep2	27.5	Homogeneous, no visible bedform, fine to medium sand with some cobbles and some gravel. Very small amount of shell hash. Unidentified white object (biological in nature).	
T1-7_Rep3	27.4	Homogeneous, sand waves, fine to medium sand with few cobbles and some gravel. Very small amount of shell hash.	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T1-8_Rep1	27.5	Homogeneous, no visible bedform, fine to medium sand with some cobbles and some gravel. Very small amount of shell hash.	
T1-8_Rep2	27.0	Homogeneous, sand waves, fine to medium sand with few cobbles and some gravel. Very small amount of shell hash.	
T1-8_Rep3	27.5	Homogeneous, sand waves, fine to medium sand with few cobbles and some gravel. Some shell hash.	
T1-9_Rep1	28.3	Homogeneous, sand waves, fine to medium sand with few cobbles and some gravel. Some shell hash.	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T1-9_Rep2	28.6	1st drop: Homogeneous, sand waves, fine to medium sand with few cobbles and some gravel. Some shell hash.	
		2nd drop: Homogeneous, sand waves, fine to medium sand with few cobbles and lots of gravel. Quite a lot of shell hash.	
T1-9_Rep3	28.5	Homogeneous, sand waves, fine to medium sand with few cobbles and some gravel. Quite a lot of shell hash.	
T3-1_Rep1	26.2	Homogeneous, sand waves, medium to coarse sand with some gravel. Quite a lot of shell hash (blue mussel).	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T3-1_Rep2	25.8	Homogeneous, sand waves, medium to coarse sand with some gravel. Quite a lot of shell hash (blue mussel).	
T3-1_Rep3	25.9	Homogeneous, sand waves, medium to coarse sand with some gravel and cobble. Quite a lot of shell hash (blue mussel - seemingly juvenile shells).	
T3-2_Rep1	26.2	Homogeneous, sand waves, medium sand with little gravel. No shell hash.	
T3-2_Rep2	26.3	Homogeneous, sand waves, medium sand with some gravel. Very small amount of shell hash.	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T3-2_Rep3	26.1	Homogeneous, sand waves, medium sand with little gravel. Some shell hash (blue mussel).	
T3-3_Rep1	26.0	Homogeneous, no visible bedform, coarse sand with some gravel. Some shell hash.	
T3-3_Rep2	26.1	Homogeneous, sand waves, coarse sand with some gravel. Quite a lot of shell hash (blue mussel).	
T3-3_Rep3	26.1	Homogeneous, sand waves, medium to coarse sand with some gravel. A large amount of shell hash (blue mussel).	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T3-4_Rep1	25.8	Homogeneous, sand waves, medium to coarse sand with little gravel. Very small amount of shell hash.	
T3-4_Rep2	25.7	Homogeneous, sand waves, medium to coarse sand with some gravel. Very small amount of shell hash.	
T3-4_Rep3	25.9	Homogeneous, sand waves, medium to coarse sand with little gravel. Very small amount of shell hash.	
T3-5_Rep1	26.5	Homogeneous, sand waves, medium to coarse sand with little gravel. Very small amount of shell hash.	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T3-5_Rep2	26.5	Homogeneous, sand waves, medium to coarse sand with little gravel. Very small amount of shell hash.	
T3-5_Rep3	26.5	Homogeneous, sand waves, medium to coarse sand with little gravel. Very small amount of shell hash.	
T3-6_Rep1	25.7	Homogeneous, sand waves, coarse sand with some gravel. Small amount of shell hash.	
T3-6_Rep2	25.5	Homogeneous, sand waves, coarse sand with some gravel. Small amount of shell hash.	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T3-6_Rep3	26.0	Homogeneous, sand waves, coarse sand with some gravel. Small amount of shell hash.	
T3-7_Rep1	26.4	Homogeneous, sand waves, coarse sand with little gravel. Very small amount of shell hash.	
T3-7_Rep2	26.4	N/A	N/A
T3-7_Rep3	26.5	Homogeneous, sand waves, coarse sand with some gravel. Very small amount of shell hash.	
T3-8_Rep1	26.3	Homogeneous, sand waves, medium to coarse sand with very little gravel. Some shell hash.	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T3-8_Rep2	26.2	Homogeneous, sand waves, medium to coarse sand with very little gravel. Some shell hash.	
T3-8_Rep3	26.4	Homogeneous, sand waves, medium to coarse sand. Some shell hash.	
T3-9_Rep1	25.3	Homogeneous, sand waves, medium to coarse sand with lot of gravel. Quite a lot of shell hash.	
T3-9_Rep2	25.5	Homogeneous, sand waves, medium to coarse sand with some gravel. Some shell hash.	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T3-9_Rep3	26.1	Homogeneous, sand waves, medium to coarse sand with lot of gravel. Quite a lot of shell hash.	
T5-1_Rep1	22.8	Homogeneous, sand waves, medium to coarse sand with some gravel. Some shell hash. Image "b" attempts to show sand wave features. One clam visible - believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i> .	 Image a
			 Image b
T5-1_Rep2	22.8	Homogeneous, sand waves, medium to coarse sand with some gravel. Some shell hash. Image "b" attempts to show sand wave features. Several clams visible - believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i> .	 Image a





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
			 <p>Image b</p>
T5-1_Rep3	22.6	Homogeneous, sand waves, medium to coarse sand with some gravel. Some shell hash. Several clams visible - believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i> One sea star visible.	
T5-2_Rep1	23.6	Homogeneous, sand waves, medium to coarse sand with little gravel. Very small amount of shell hash. One clam visible - believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i> .	
T5-2_Rep2	23.7	Homogeneous, sand waves, medium to coarse sand with little gravel. Very small amount of shell hash. Several clams visible - believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i> .	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T5-2_Rep3	24.1	Homogeneous, sand waves, medium to coarse sand with little gravel. Very small amount of shell hash. Several clams visible - believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i> .	
T5-3_Rep1	23.3	Homogeneous, sand waves, medium to coarse sand with little gravel. Very small amount of shell hash.	
T5-3_Rep2	23.6	Homogeneous, sand waves, medium to coarse sand with little gravel. Very small amount of shell hash.	
T5-3_Rep3	23.4	Homogeneous, sand waves, medium to coarse sand with little gravel. Very small amount of shell hash.	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T5-4_Rep1	23.9	Homogeneous, sand waves, fine to medium sand. No shell hash.	
T5-4_Rep2	23.9	Homogeneous, sand waves, fine to medium sand. No shell hash. Few small blue mussel shells/fragments.	
T5-4_Rep3	24.1	Homogeneous, sand waves, medium to coarse sand with little gravel. Very small amount of shell hash.	
T5-5_Rep1	23.9	1st drop: Homogeneous, sand waves, medium to coarse sand with some gravel. Very small amount of shell hash. 2nd drop: Homogeneous, sand waves, medium to coarse sand with little gravel. Very small amount of shell hash. Several clams visible - believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i> .	 1 st drop





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
			 <p>2nd drop</p>
T5-5_Rep2	23.8	Homogeneous, sand waves, medium sand. No shell hash. Several clams visible - believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i> .	
T5-5_Rep3	24.1	Homogeneous, sand waves, medium sand. No shell hash.	
T5-6_Rep1	22.7	Homogeneous, sand waves, medium to coarse sand. Very small amount of shell hash.	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T5-6_Rep2	22.3	<p>1st drop: Homogeneous, sand waves, medium to coarse sand. Few large cobbles / small boulders nearby. Very small amount of shell hash. Several crabs in surrounding area (unknown species). Several clams visible - believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i>.</p>	 <p>1st drop</p>
		<p>2nd drop: Homogeneous, sand waves, medium to coarse sand. Very small amount of shell hash. Several clams visible - believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i>.</p>	 <p>2nd drop</p>
T5-6_Rep3	22.2	<p>Homogeneous, sand waves, medium to coarse sand. Some shell hash. Several clams visible - believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i>.</p>	
T5-7_Rep1	22.0	<p>1st drop: Homogeneous field of medium sand with small boulders and large cobbles (no gravel). Barnacle growth on cobbles and boulders (various densities). Very small amount of shell hash.</p>	 <p>1st drop</p>
		<p>2nd drop: Homogeneous, sand waves, medium sand with small boulders and large cobbles (no gravel). Barnacle growth on cobbles and boulders (various densities). Small</p>	

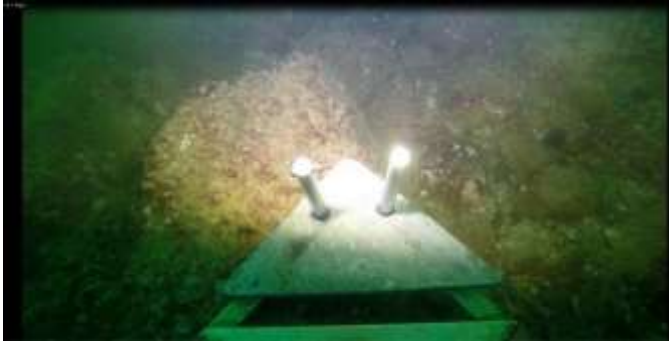



Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
		amount of red algae growth. Very small amount of shell hash.	 <p>2nd drop</p>
T5-7_Rep2	22.1	Homogeneous, sand waves, medium sand with few large cobbles and one small boulder with barnacle and red algae growth. Very small amount of shell hash.	
T5-7_Rep3	22.2	Homogeneous, sand waves, medium sand. Some shell hash. Few large cobbles and small boulders in surrounding area / background with some barnacle and red algae growth.	
T5-8_Rep1	22.6	Homogeneous, sand waves, medium sand. Very small amount of shell hash. Few large cobbles and small boulders in surrounding area / background with some barnacle and white algae growth. Several clams visible believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i> .	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T5-8_Rep2	22.8	Homogeneous, sand waves, medium to coarse sand. Very small amount of shell hash. Several large cobbles and small boulders in surrounding area and background with dense to fairly dense barnacle growth. Some red algae growth coming from seafloor.	
T5-8_Rep3	22.5	Homogeneous, sand waves, medium to coarse sand. Very small amount of shell hash. One small boulder / large cobble with dense barnacle growth. Several clams visible believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i> .	
T5-9_Rep1	22.3	Homogeneous, sand waves, medium to coarse sand. Very small amount of shell hash. Several clams visible - believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i> .	
T5-9_Rep2	22.5	Homogeneous, sand waves, medium to coarse sand. Very small amount of shell hash. One small boulder / large cobble with dense barnacle growth. Several clams visible - believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i> .	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T5-9_Rep3	22.7	Homogeneous, sand waves, medium to coarse sand. Some shell hash. Several large cobbles and small boulders in surrounding area and background with dense to fairly dense barnacle growth. Some red algae growth coming from seafloor. Several clams visible believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i> .	
C1-1_Rep1	21.5	1st drop (grab not recovered): Homogeneous, dense boulder field. Boulders of various sizes (large to small). Cobbles and gravel between boulders. Dense algae (red and white) growth on boulders. Some shell hash.	 1 st drop
		2nd drop: Homogeneous, sand waves, medium sand. Some red algae growth coming from seafloor. Dense shell hash - dominating feature.	 2 nd drop
C1-1_Rep2	22.3	1st video: Homogeneous, dense cobble and gravel covered seafloor. Some red algae growth on cobbles and gravel. Some shell hash.	 1 st video
		2nd video: Homogeneous, fine to medium sand with large cobbles and small boulders and some gravel. Dense shell hash. Dense algae (red and white) growth on cobbles and	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
		boulders. Some calcareous red algae present. Unidentified white object (biological in nature) - quite extensive here.	 <p>2nd video</p>
C1-1_Rep3	22.2	Homogeneous, mix of gravel and fine to medium sand with large cobbles and small boulders. Some algae (red and white) and barnacle growth on cobbles and boulders. Some shell hash. Few sea stars.	
C1-2_Rep1	21.1	Sand waves, patches of cobbles and gravel (one type of patch) and medium to coarse sand (another type of patch). Few small boulders. Barnacle growth on cobbles and boulders. Small amount of red algae growth coming from seafloor. Some shell hash.	
C1-2_Rep2	21.7	<p>1st drop: Homogeneous, no visible bedform, dense boulder (small), cobble and gravel covered seafloor. Dense algae (red and white) growth on boulders and cobbles. Some shell hash.</p> <p>2nd drop: No visible bedform, mixture of patches of boulders of various sizes (large to small), cobble, and gravel (one type of patch) and medium to coarse sand (another type of patch). Four sea stars (three on</p>	 <p>1st drop</p>





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
		<p>cobbles, one on small boulder). An unidentified white object that is biological in nature observed on large boulder. Dense barnacle growth on cobbles and boulders. Some patches on algae growth (red and white; on large boulder). Some shell hash.</p>	 <p>2nd drop</p>
C1-2_Rep3	21.7	<p>1st drop: Grab landed within what appears to be sand waves with clear distinction between trough and crest. Trough contains small cobbles, gravel, and quite a lot of shell hash. Some cobbles have barnacle growth. Crests contain medium to coarse sand with less shell hash. When grab is retrieved, it is clear grab landed just alongside an extensive area of large boulders.</p> <p>2nd drop: Homogeneous mixture of small boulders, cobbles, gravel, and medium to coarse sand. Quite a lot of shell hash. Barnacle growth on boulders and cobbles. Some red and white algae growth. One sea star (on boulder in the background) and one on sand in left side of image.</p> <p>3rd drop: Homogeneous mixture of small boulders, cobbles, gravel, and medium to coarse sand. Quite a lot of shell hash. Barnacle growth on boulders and cobbles. Some red and white algae growth. One sea star in the background.</p>	 <p>1st drop</p>  <p>2nd drop</p>  <p>3rd drop</p>



Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
C1-3_Rep1	21.7	1st drop (grab not recovered): Homogeneous, dense boulder area. Boulders of various sizes (large to small). Cobbles and gravel between boulders. Barnacle and algae (red and white) growth on boulders (of various densities). Very small amount of shell hash.	
		2nd drop: Homogeneous, sand waves, coarse sand with little gravel. Dense shell hash.	
C1-3_Rep2	21.4	Homogeneous, sand waves, coarse sand with some gravel. Some shell hash. Few large cobbles with barnacle growth.	
C1-3_Rep3	21.8	Homogeneous, sand waves, medium to coarse sand with little gravel. Dense shell hash. Several large cobbles and small boulders in surrounding area and background with fairly dense barnacle growth. Some red algae growth.	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
C1-4_Rep1	20.2	<p>1st drop: Homogeneous, mix of boulders, cobble, and gravel with fine to medium sand. No shell hash. Larger cobbles have some barnacle growth. Boulders have dense algae (red and white) growth. One sea star.</p>	 <p>1st drop</p>
		<p>2nd drop: Appears to be homogeneous bottom of dense cobbles covered in dense algae (red and white) growth with fine to medium sand between cobbles. No shell hash.</p>	 <p>2nd drop</p>
		<p>3rd drop: Homogenous, mix of cobbles and gravel on fine to medium sand. Very small amount of shell hash. Some algae (red and white) growth.</p>	 <p>3rd drop</p>
		<p>4th drop (grab recovered): Homogeneous, sand waves, fine to medium sand (crests) with lot of gravel (troughs). Very small amount of shell hash. Boulders in distant background. One clam visible believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i>.</p>	 <p>4th drop</p>





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
C1-4_Rep2	20.6	1st drop: Homogeneous, mix of cobbles and gravel on fine to medium sand. Very small amount of shell hash. Areas of dense algae (red and white) growth. Some barnacle growth on some cobbles. Boulders in distant background.	 1 st drop
		2nd drop: Very large boulder with dense barnacle growth, some algae (white) growth, and a few sea stars.	 2 nd drop
		3rd drop: Homogeneous, mix of boulders, cobble, and gravel on fine to medium sand. Some shell hash. Dense algae (red and white) growth and some barnacle growth on boulders and cobbles. Several sea stars.	 3 rd drop
C1-4_Rep3	20.4	1st drop: Homogeneous, dense mix of cobbles and gravel on fine to medium sand. Very small amount of shell hash. Dense algae (red and white) growth on cobbles. Boulders in distant background. 2nd drop: Homogeneous, mix of cobbles and gravel on fine to medium sand. No shell hash. Dense algae (red and white) and barnacle growth on cobbles. Few sea stars.	 1 st drop





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
			 <p>2nd drop</p>
C2-1_Rep1	26.5	Homogeneous, no visible bedform, equal mixture of fine to medium sand and gravel. No shell hash.	
C2-1_Rep2	26.5	Homogeneous, sand waves, fine to medium sand with lot of gravel. No shell hash.	
C2-1_Rep3	26.5	Homogeneous, no visible bedform, equal mixture of fine to medium sand and gravel. Few small cobbles. No shell hash.	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
C2-2_Rep1	27.2	Homogeneous, sand waves, fine to medium sand with some gravel and some cobbles. No shell hash. Some barnacle growth on cobbles. Small patch of red algae.	
C2-2_Rep2	26.5	1st drop: Homogeneous, sand waves, mixture of fine to medium sand and gravel. No shell hash.	
		2nd drop: Homogeneous, no visible bedform, dense gravel seafloor with fine to medium sand. No shell hash.	
C2-2_Rep3	26.8	Homogeneous, no visible bedform, medium to coarse sand with some gravel. No shell hash.	



Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
C2-3_Rep1	25.6	Homogeneous, no visible bedform, dense gravel with small cobbles and fine to medium sand. No shell hash, but some large pieces of broken shell. Skate egg case. Appears to be calcareous growth of some sort.	
C2-3_Rep2	26.2	Homogeneous, no visible bedform, fine to medium sand with lot of gravel. No shell hash, but some large pieces of broken shell.	
C2-3_Rep3	25.9	Homogeneous, no visible bedform, fine to medium sand with lot of gravel. No shell hash, but some large pieces of broken shell.	
C2-4_Rep1	26.0	Homogeneous, sand waves, medium to coarse sand with some gravel. Very small amount of shell hash.	

Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
C2-4_Rep2	26.0	1st drop: Homogeneous, sand waves, medium to coarse sand with some cobbles and a lot of gravel. Dense barnacle growth on cobbles. No shell hash.	
		2nd drop: Homogeneous, no visible bedform, fine to medium sand with some gravel and little cobble. No shell hash. Skate egg case.	1 st drop
		3rd drop: Homogeneous, no visible bedform, medium to coarse sand with some gravel. Few cobbles. Very small amount of shell hash.	
			2 nd drop
C2-4_Rep3	25.6	Homogeneous, sand waves, medium to coarse sand with some gravel. Very small amount of shell hash.	
C3-1_Rep1	27.1	Homogeneous, sand waves, dense gravel with fine to medium sand and some cobble. Very small amount of shell hash.	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
C3-1_Rep2	27.0	Homogeneous, sand waves, fine to medium sand with lot of gravel and some cobble. No shell hash. Some barnacle growth. Few sea stars.	
C3-1_Rep3	26.7	Homogeneous, sand waves, fine to medium sand with lot of gravel and some cobble. No shell hash. Some barnacle growth. Few sea stars.	
C3-2_Rep1	26.9	Homogeneous, sand waves, fine to medium sand with lot of gravel and some cobble. No shell hash. Some barnacle growth.	
C3-2_Rep2	26.8	Homogeneous, sand waves, fine to medium sand with some gravel and little cobble. No shell hash.	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
C3-2_Rep3	26.8	Homogeneous, sand waves, fine to medium sand with a lot of gravel and little cobble. No shell hash. Some barnacle growth.	
C3-3_Rep1	27.1	Homogeneous, sand waves, fine to medium sand with a lot of gravel and little cobble. No shell hash. Some barnacle growth.	
C3-3_Rep2	27.0	Homogeneous, sand waves, fine to medium sand with a lot of gravel and little cobble. No shell hash. Some barnacle growth.	
C3-3_Rep3	27.4	Homogeneous, sand waves, fine to medium sand with a lot of gravel and little cobble. No shell hash. Some barnacle growth.	





Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
C3-4_Rep1	27.2	Homogeneous, sand waves, fine to medium sand with a lot of gravel and little cobble. No shell hash.	
C3-4_Rep2	27.4	Homogeneous, sand waves, fine to medium sand with a lot of gravel and little cobble. No shell hash. Some barnacle growth.	
C3-4_Rep3	27.3	Homogeneous, sand waves, fine to medium sand with a lot of gravel and little cobble. No shell hash. Some barnacle growth.	
T1-QC	27.6	Homogeneous, sand waves, fine to medium sand with some gravel and little cobble. No shell hash. Some barnacle growth.	




Vessel-Based Samples Year 1			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T3-QC	26.4	Homogeneous, sand waves, fine to medium sand with little gravel. No shell hash.	
T5-QC	23.5	Homogeneous, sand waves, fine to medium sand with little gravel and little cobble. Dense barnacle growth on cobbles. No shell hash.	
C3-QC	26.8	N/A	N/A



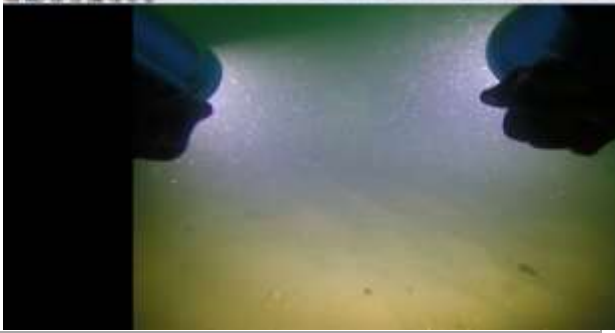

E.2 Vessel-Based Samples Year 2


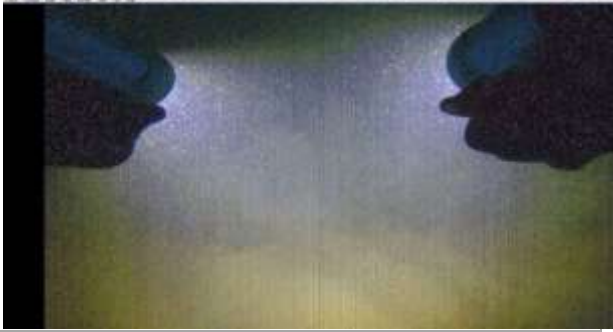

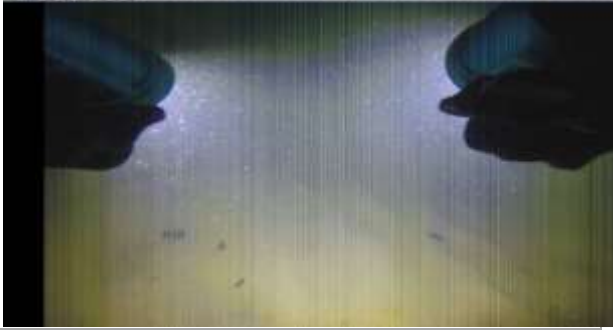
Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T1-1_Rep1	27.43	Homogeneous, sand waves (shallow/very low relief), medium sand, few small cobbles. Very small amount of shell hash. Small cluster of blue mussels (appear to be mature; unclear if living).	
T1-1_Rep2	27.65	Homogeneous, sand waves (shallow/very low relief), medium sand, few small cobbles, little gravel. Very small amount of shell hash. Few blue mussels (appear to be mature; unclear if living). *Poor quality video.	
T1-1_Rep3	27.71	Homogeneous, no visible bedform, dense pebble, gravel, and small cobble cover on top of medium-coarse sand. Some shell fragments. Small clusters of barnacles visible on few cobbles. *Poor quality video.	
T1-2_Rep1	26.97	Homogeneous, possible sand waves (shallow/very low relief), medium-coarse sand, few small cobbles, some gravel. Very small amount of shell hash. *Poor quality video.	





Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T1-2_Rep2	26.82	<p>Homogeneous, possible sand waves (shallow/very low relief) medium-coarse sand, few small cobbles, little gravel. Very small amount of shell hash.</p> <p>*Poor quality video.</p> <p>** In the failed grab video for this station, the white sponge (<i>Polymastia robusta</i>) is present.</p>	
T1-2_Rep3	27.07	<p>Homogeneous, possible sand waves (shallow/very low relief), medium-coarse sand, few small cobbles, little gravel. Very small amount of shell hash. *Poor quality video.</p>	
T1-3_Rep1	27.61	<p>Homogeneous, no visible bedform, medium-coarse sand, some small cobbles, some gravel. Very small amount of shell hash. *Poor quality video.</p>	
T1-3_Rep2	27.34	<p>Homogeneous, no visible bedform, medium-coarse sand, some small cobbles, some gravel. Very small amount of shell hash.</p>	





Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T1-3_Rep3	27.16	Homogeneous, no visible bedform, dense pebble, gravel, and small cobble cover on top of medium-coarse sand. Some shell hash. Some mature blue mussel shell halves. Small clusters of barnacles visible on few cobbles.	
T1-4_Rep1	26.85	Homogeneous, sand waves (shallow/very low relief), medium-coarse sand, some small cobbles, little gravel. Very small amount of shell hash. *Poor quality video.	
T1-4_Rep2	26.82	Homogeneous, sand waves (shallow/very low relief), medium-coarse sand, few small cobbles, little gravel. Very small amount of shell hash. *Poor quality video.	
T1-4_Rep3	26.67	Homogeneous, sand waves (shallow/very low relief), medium-coarse sand, few small cobbles, little gravel. Very small amount of shell hash. Possible small cluster of blue mussels (appear to be mature; unclear if living). *Poor quality video. ** The white sponge (<i>Polymastia robusta</i>) is present.	




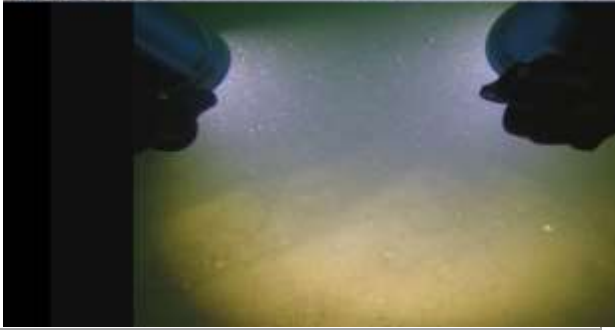
Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T1-5_Rep1	27.22	Homogeneous, sand waves (shallow/very low relief), medium-coarse sand, some small cobbles, some gravel. Very small amount of shell hash. *Poor quality video. ** In the failed grab video for this station, a small cluster of blue mussels and few individual blue mussels are scattered throughout frame (appear to be mature; unclear if living).	
T1-5_Rep2	27.31	Homogeneous, sand waves (shallow/very low relief), medium-coarse sand, few small cobbles, little gravel. Very small amount of shell hash. Possible small cluster of blue mussels (appear to be mature; unclear if living). *Poor quality video.	
T1-5_Rep3	27.37	Homogeneous, sand waves (shallow/very low relief), medium-coarse sand, few small cobbles, some gravel. Very small amount of shell hash. Few small clusters of blue mussels (appear to be mature; one cluster is empty shells, unclear if other two clusters are living). *Poor quality video.	n/a
T1-6_Rep1	27.61	Homogeneous, no visible bedform, medium-coarse sand, some gravel. Very small amount of shell hash. ** In the failed grab video for this station, denser concentration of small cobbles and gravel.	





Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T1-6_Rep2	27.61	Homogeneous, no visible bedform, medium-coarse sand, some small cobbles, some gravel. Very small amount of shell hash.	
T1-6_Rep3	27.65	Homogeneous, no visible bedform, medium-coarse sand, few small cobbles, little/some gravel. Very small amount of shell hash.	
T1-7_Rep1	27.52	Homogeneous, sand waves (shallow/very low relief), fine-medium sand, few small cobbles, very little gravel. Very small amount of shell hash.	
T1-7_Rep2	27.4	Homogeneous, sand waves (shallow/very low relief), fine-medium sand, few small cobbles, little gravel. Small amount of shell hash and shell fragments. Small cluster of barnacles visible on one cobble. Few individual blue mussels scattered throughout frame (appear to be mature; unclear if living). ** In the failed grab video for this station, small cluster of blue mussels (appear to be mature; unclear if living).	




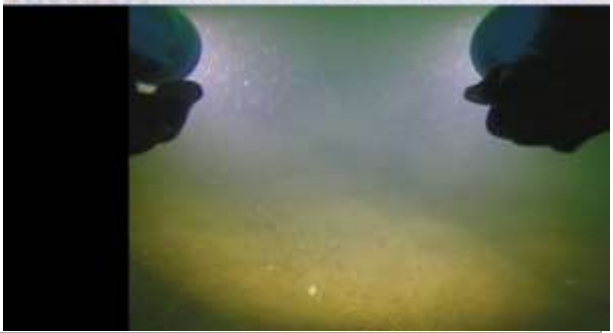
Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T1-7_Rep3	27.68	Homogeneous, sand waves (shallow/very low relief), fine-medium sand, very few small cobbles, very little gravel. Small amount of shell hash and shell fragments. Small cluster of barnacles visible on one cobble.	
T1-8_Rep1	27.43	Homogeneous, sand waves (shallow/very low relief), medium-coarse sand, no cobbles or gravel. Very small amount of shell hash. *Poor quality video.	
T1-8_Rep2	27.37	Homogeneous, sand waves (shallow/very low relief), medium-coarse sand, little gravel. Very small amount of shell hash. Small cluster of blue mussels (appear to be mature; unclear if living). *Poor quality video.	
T1-8_Rep3	27.25	Homogeneous, sand waves (shallow/very low relief), fine-medium sand, no cobbles or gravel. Very small amount of shell hash. Few individual blue mussels scattered throughout frame (appear to be mature; unclear if living) *Poor quality video.	





Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T1-9_Rep1	26.58	Homogeneous, sand waves (shallow/very low relief), medium-coarse sand, little gravel. Very small amount of shell hash. Small cluster of blue mussels (appear to be mature; unclear if living). *Poor quality video.	
T1-9_Rep2	26.52	Homogeneous, sand waves (shallow/very low relief), medium-coarse sand, few small cobbles, little gravel. Very small amount of shell hash. Small cluster of barnacles visible on one cobble. *Poor quality video.	
T1-9_Rep3	26.79	Homogeneous, sand waves (shallow/very low relief), medium-coarse sand, little gravel. Very small amount of shell hash. Few small clusters of blue mussels (appear to be mature; unclear if living). *Poor quality video. ** The white sponge (<i>Polymastia robusta</i>) is present (twice).	
T3-1_Rep1	25.42	Homogeneous, sand waves, medium-coarse sand, no cobbles or gravel. Small amount of shell hash. Few individual blue mussels scattered throughout frame (appear to be mature; unclear if living).	



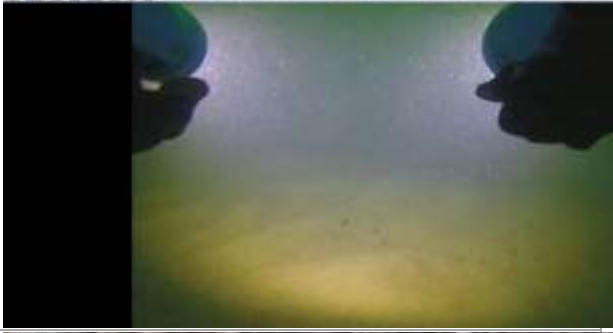
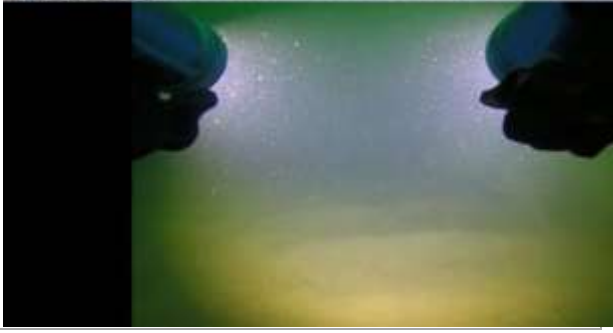
Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T3-1_Rep2	25.48	Homogeneous, sand waves, medium-coarse sand, little gravel (and possibly few small cobbles). Very small amount of shell hash.	
T3-1_Rep3	25.51	Homogeneous, sand waves, medium-coarse sand, no cobbles, little gravel. Small amount of shell hash. Few individual blue mussels scattered throughout frame (appear to be mature; unclear if living).	
T3-2_Rep1	25.02	Homogeneous, no visible bedform, medium-very coarse sand, no cobbles or gravel. Some shell hash. Few individual blue mussels scattered throughout frame (appear to be mature; appear empty).	
T3-2_Rep2	25.02	Homogeneous, no visible bedform, mostly very coarse sand, little gravel (and possibly few small cobbles). Some shell hash. Few individual blue mussels scattered throughout frame (appear to be mature; appear empty).	





Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T3-2_Rep3	25.05	Homogeneous, no visible bedform, medium-very coarse sand, no cobbles or gravel. Some shell hash. Few individual blue mussels scattered throughout frame (appear to be mature; appear empty).	
T3-3_Rep1	25.57	Homogeneous, sand waves, medium-coarse sand, no cobbles or gravel. Small amount of shell hash. Small cluster of blue mussels (appear to be mature; some empty; unclear if any living).	
T3-3_Rep2	25.66	Homogeneous, sand waves (shallow/very low relief), medium-very coarse sand, little gravel. Small amount of shell hash. Two small clusters of blue mussels (appear to be mature; some empty; unclear if any living).	
T3-3_Rep3	25.76	Homogeneous, sand waves, medium-coarse sand, no cobbles, little gravel. Small amount of shell hash.	





Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T3-4_Rep1	24.99	Homogeneous, sand waves (shallow/very low relief), medium-coarse sand, no cobbles, very little gravel. Small amount of shell hash.	
T3-4_Rep2	24.78	Homogeneous, sand waves (shallow/very low relief), medium-coarse sand, no cobbles, very little gravel. Small amount of shell hash.	
T3-4_Rep3	24.96	Homogeneous, sand waves (shallow/very low relief), medium-coarse sand, no cobbles, no gravel. Small amount of shell hash. *Skate (believe) captured swimming away as grab lands.	
T3-5_Rep1	25.05	Homogeneous, sand waves (shallow/very low relief), medium-very coarse sand, no cobbles, very little gravel. Small amount of shell hash.	



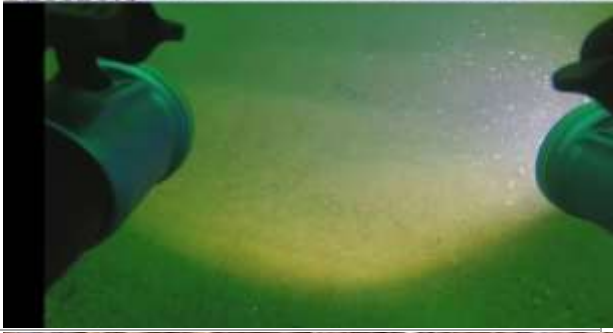

Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T3-5_Rep2	25.12	Homogeneous, sand waves, medium-very coarse sand, no cobbles, no gravel. Very small amount of shell hash. Small cluster of blue mussels (appear to be mature; unclear if living).	
T3-5_Rep3	25.3	Homogeneous, sand waves, medium-coarse sand, no cobbles, no gravel. Some shell hash. Few individual blue mussels scattered throughout frame (appear to be mature; unclear if living).	
T3-6_Rep1	25.24	Homogeneous, sand waves (shallow/very low relief), medium-very coarse sand, no cobbles, very little gravel. Very small amount of shell hash.	
T3-6_Rep2	25.42	Homogeneous, sand waves (shallow/very low relief), medium-very coarse sand, no cobbles, very little gravel. Small amount of shell hash.	

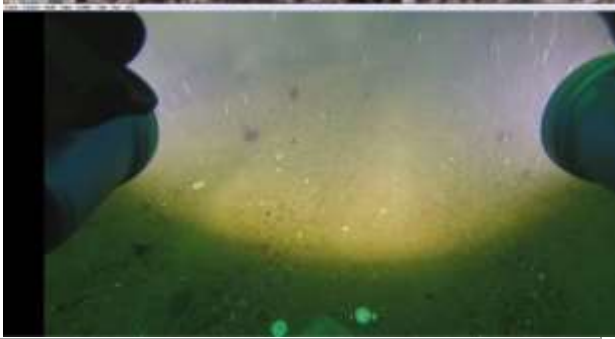
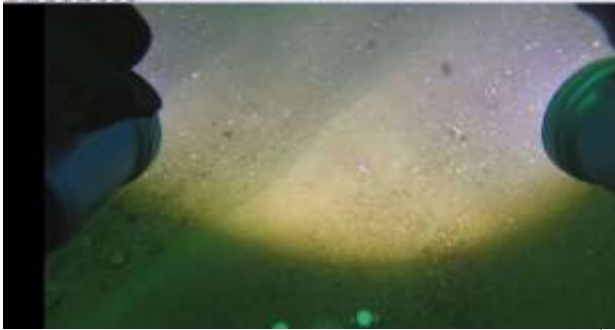

Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T3-6_Rep3	25.24	Homogeneous, sand waves (shallow/very low relief), medium-coarse sand, no cobbles, very little gravel. Small amount of shell hash. Few individual blue mussels scattered throughout frame (appear to be mature; unclear if living).	
T3-7_Rep1	25.57	Homogeneous, sand waves, medium sand, no cobbles, no gravel. Very small amount of shell hash.	
T3-7_Rep2	25.66	Homogeneous, sand waves (shallow/very low relief), medium-coarse sand, no cobbles, very little gravel. Very small amount of shell hash. *In the failed grab video for this station, grab appeared to have landed on/right next to a large cluster of blue mussels (appear to be mature; appear to be living).	
T3-7_Rep3	25.45	Homogeneous, sand waves, medium-coarse sand, no cobbles, no gravel. Very small amount of shell hash. One empty mature blue mussel shell. One half of a large clam shell.	





Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T3-8_Rep1	25.24	Homogeneous, sand waves (shallow/very low relief), medium-very coarse sand, no cobbles, very little gravel. Some shell hash. One small cluster and few individual blue mussels scattered throughout frame (appear to be mature; some empty shells; unclear if any living).	
T3-8_Rep2	25.66	Homogeneous, sand waves (shallow/very low relief), medium-very coarse sand, no cobbles, no gravel. Very small amount of shell hash. One blue mussel in back of frame (appears to be mature; unclear if living).	
T3-8_Rep3	25.21	Homogeneous, sand waves, medium-very coarse sand, no cobbles, little gravel. Very small amount of shell hash. One empty mature blue mussel shell.	
T3-9_Rep1	24.78	Homogeneous, sand waves, fine-medium sand, no cobbles, no gravel. No shell hash.	





Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T3-9_Rep2	25.12	Homogeneous, sand waves, fine-medium sand, no cobbles, no gravel. No shell hash.	
T3-9_Rep3	24.96	Homogeneous, sand waves, fine-medium sand, no cobbles, no gravel. No shell hash.	
T5-1_Rep1	22.16	Homogeneous, sand waves, fine-medium sand, no cobbles, no gravel. Very small amount of shell hash. One empty mature blue mussel shell.	
T5-1_Rep2	22.16	Homogeneous, sand waves, fine-medium sand, no cobbles, very little gravel. Very small amount of shell hash.	

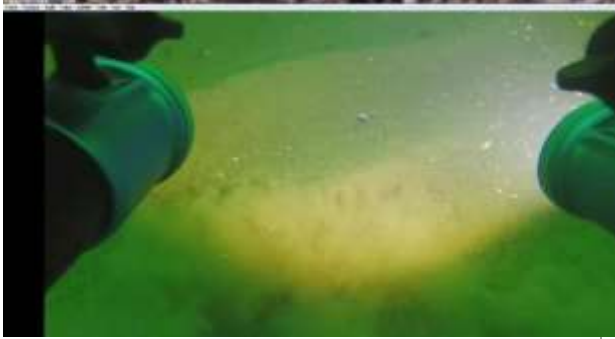



Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T5-1_Rep3	22.49	Homogeneous, sand waves, fine-medium sand, no cobbles, very little gravel. Small amount of shell hash. * In the failed grab video for this station, there are about a dozen empty mature blue mussel shells in the troughs of the sand waves.	
T5-2_Rep1	22.77	Homogeneous, sand waves, medium-very coarse sand, no cobbles, very little gravel. Small amount of shell hash and shell fragments. Few empty mature blue mussel shells.	
T5-2_Rep2	22.71	Homogeneous, sand waves, medium-very coarse sand, no cobbles, very little gravel. Small amount of shell hash and shell fragments. Few empty mature blue mussel shells.	
T5-2_Rep3	22.74	Homogeneous, sand waves, medium-coarse sand, no cobbles, very little gravel. Small amount of shell hash and shell fragments. Few empty mature blue mussel shells. * Unknown object in distance as grab is being lowered.	





Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T5-3_Rep1	21.34	Homogeneous, sand waves, medium-coarse sand, one small cobble, very little gravel. Very small amount of shell hash. Few empty mature blue mussel shells.	
T5-3_Rep2	21.43	Homogeneous, sand waves, medium sand, no cobbles, no gravel. Very small amount of shell hash and few shell fragments.	
T5-3_Rep3	21.85	Homogeneous, sand waves, medium sand, no cobbles, no gravel. Very small amount of shell hash. Few empty mature blue mussel shells.	
T5-4_Rep1	22.92	Homogeneous, sand waves, medium-coarse sand, no cobbles, no gravel. Some shell hash. About six blue mussel shells in the trough of the sand wave visible in the frame (appear to be mature; some empty; unclear if any living). * In distance, there are numerous blue mussel shells in the troughs of the sand waves (appear to be mature, unclear if living). Also present is gravel, a few small cobbles, and shell hash/fragments.	




Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T5-4_Rep2	23.29	Homogeneous, sand waves (shallow/very low relief), medium-coarse sand, no cobbles, very little gravel. Some shell hash. About six blue mussel shells in the troughs of the sand waves visible in the frame (appear to be mature; some empty; unclear if any living).	
T5-4_Rep3	23.16	Homogeneous, sand waves, medium-coarse sand, no cobbles, some gravel (mostly in troughs of sand waves). Some shell hash. Few blue mussel shells visible in frame (appear to be mature; some empty; unclear if any living). * Similar pattern in distance - there are numerous blue mussel shells in the troughs of the sand waves (appear to be mature, unclear if living). Also present is gravel, a few small cobbles, and shell hash/fragments.	
T5-5_Rep1	21.73	Homogeneous, sand waves, medium-coarse sand, no cobbles, very little gravel. Some shell hash. One empty mature blue mussel shell. * In the first failed grab video for this station, a few cobbles (and possibly small boulders) are present in frame and in distance. Small cluster of barnacles visible on cobbles. Video also shows sand waves (shallow/very low relief), medium-coarse sand, no gravel, small amount of shell hash. ** In the second failed grab video for this station, clump of red algae is present, along with sand waves (shallow/very low relief), medium-coarse sand, no cobble, no gravel, small amount of shell hash.	




Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T5-5_Rep2	21.98	Homogeneous, sand waves (shallow/very low relief), medium-coarse sand, no cobbles, very little gravel. Small amount of shell hash.	
T5-5_Rep3	22.59	Homogeneous, sand waves, medium-coarse sand, no cobbles, very little gravel. Very small amount of shell hash.	
T5-6_Rep1	23.41	Homogeneous, sand waves (shallow/very low relief), medium-very coarse sand, no cobbles, very little gravel. Some shell hash and shell fragments.	
T5-6_Rep2	23.53	Homogeneous, sand waves, medium-very coarse sand, no cobbles, very little gravel. Some shell hash. Few empty mature blue mussel shells. *In the failed grab video for this station, no well defined sand waves and denser gravel concentration with few small cobbles.	


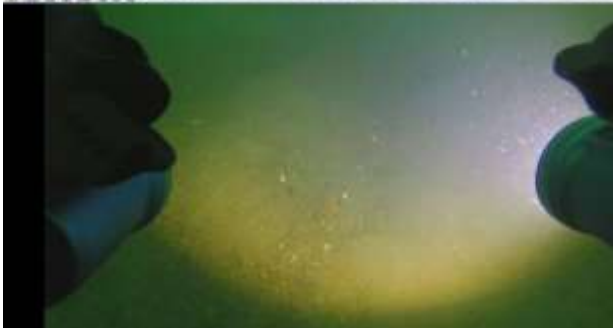

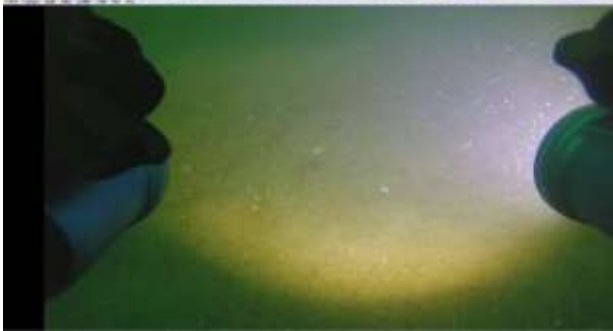
Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T5-6_Rep3	23.5	Homogeneous, sand waves (shallow/very low relief), medium-very coarse sand, no cobbles, very little gravel. Some shell hash. One empty mature blue mussel shell (not visible in screen shot).	
T5-7_Rep1	22.89	Homogeneous, sand waves, medium-very coarse sand, no cobbles, very little gravel. Some shell hash. Few empty mature blue mussel shells.	
T5-7_Rep2	23.29	Homogeneous, sand waves, medium-very coarse sand, no cobbles, very little gravel. Small amount of shell hash. Few empty mature blue mussel shells.	
T5-7_Rep3	22.56	Homogeneous, sand waves, medium-very coarse sand, no cobbles, very little gravel. Small amount of shell hash. One mature blue mussel shell (unclear if living).	




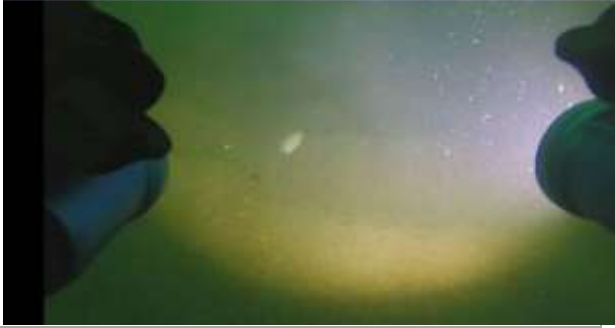
Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T5-8_Rep1	21.52	In first frame: Homogeneous, sand waves, medium-coarse sand, no cobbles, very little gravel. Small amount of shell hash. Few empty mature blue mussel shells. In second frame (camera moves few feet forward): Homogeneous, sand waves, medium-coarse sand, few small cobbles, little gravel. Small amount of shell hash. Barnacles visible on the cobbles.	
T5-8_Rep2	21.55	Homogeneous, sand waves (shallow/very low relief), medium sand, few large cobbles/small boulders, no gravel. Very small amount of shell hash. Cobbles/boulders have barnacles present. * In distance, more large cobbles/small boulders are visible.	
T5-8_Rep3	21.61	Homogeneous, sand waves, medium-coarse sand, one cobble, very little gravel. Small amount of shell hash. Cobble has barnacles on it. Few clumps of red algae present. * In distance, more cobbles/small boulders are visible.	
T5-9_Rep1	23.44	Homogeneous, sand waves, medium-very coarse sand, few small cobbles, some gravel. Some shell hash. Few empty mature blue mussel shells. *One red brick in middle of frame.	



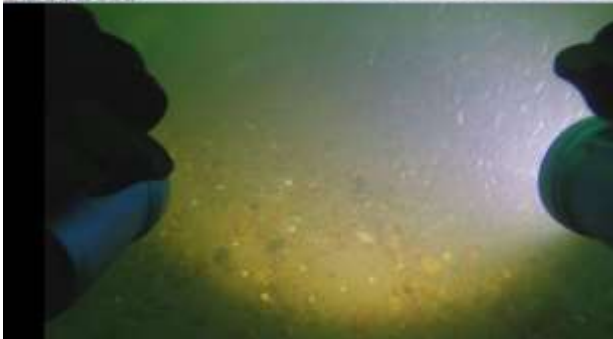
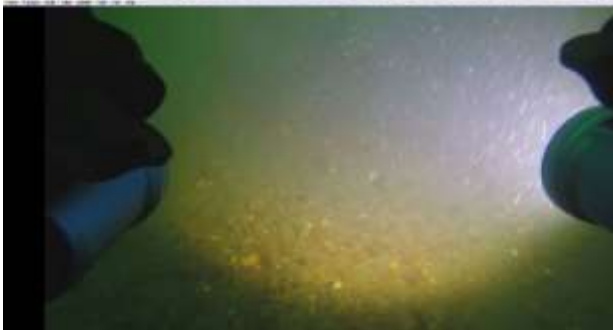
Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
T5-9_Rep2	23.53	Homogeneous, sand waves, medium-very coarse sand, no cobbles, little gravel. Some shell hash.	
T5-9_Rep3	23.44	Homogeneous, sand waves, medium-very coarse sand, few small cobbles, little gravel. Some shell hash.	
C1-1_Rep1	23.26	Homogeneous, appears to be shallow, broad-scale sand waves with clear distinction between trough and crest. Trough contains lot of cobbles (small to large), lot of gravel, and some shell hash. Some rocks have small amount of barnacle growth. One rock has one clump of red algae attached. Crests contain medium - very coarse sand with no cobbles, very little gravel, and some shell hash. * In the failed grab video for this station, sediment is medium-very coarse sand with some gravel, no cobbles, no visible bedform. But, cobbles (and possibly small boulders) visible in distance.	
C1-1_Rep2	23.41	Homogeneous, appears to be shallow, broad-scale sand waves. Trough contains cobbles (small to medium), gravel, and very coarse sand. Crests composed of medium-very coarse sand. No barnacles visible.	





Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
C1-1_Rep3	23.32	Area is somewhat patchy. No visible bedform, cobbles (small to large) and small boulders scattered on top of medium-very coarse sand. Some patches of dense gravel/cobble concentrations. Larger rocks have barnacles. One small boulder has clumps of red algae present.	
C1-2_Rep1	23.04	Homogeneous, sand waves. Medium sand on crests. In troughs, very coarse sand, little gravel, and some shell hash. One cobble with small amount of barnacle growth. Clumps of red algae throughout frame. * The white sponge (<i>Polymastia robusta</i>) is present. ** Same description for seafloor in the distance. *** In the failed grab video for this station, similar description applies, but a few small boulders are also present.	
C1-2_Rep2	23.01	Grab sampler bounced off the bottom several times. In all frames: Homogeneous, sand waves (shallow/very low relief), medium-very coarse sand, few cobbles/small boulders, little gravel, some shell hash. Some rocks have barnacles. Some small clumps of red algae.	



Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
C1-2_Rep3	22.74	<p>Homogeneous, no visible bedform, few small boulders, some cobbles (small to large), little gravel, some shell hash. Some rocks have barnacles. Few small clumps of red algae scattered throughout frame.</p> <p>* Same description for seafloor in the distance.</p> <p>** In the failed video for this station: Homogeneous, sand waves (shallow/very low relief), medium-very coarse sand, no cobble, little gravel, some shell hash and shell fragments, small clumps of red algae scattered throughout frame.</p> <p>*** The white sponge (<i>Polymastia robusta</i>) is present – perhaps most extensive one yet.</p>	
C1-3_Rep1	22.98	<p>Homogeneous, sand waves, few small boulders, few cobbles (small to large), little gravel, lot of shell hash and shell fragments. Some rocks have barnacles. Few small clumps of red algae scattered throughout frame. *Station is on the edge of an area with a dense concentration of cobbles and small boulders.</p>	
C1-3_Rep2	22.86	<p>Homogeneous, sand waves, medium-very coarse sand, no cobbles, very little gravel, some shell hash. Few clumps of red algae. *Few small fish present in video (have also seen these in a few other videos -- either station T5-4, -5 or -8, or within C1-1, -2, or -3). ** Few small boulders in distance.</p>	

Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
C1-3_Rep3	22.86	Homogeneous, sand waves, medium-coarse sand, few cobbles (small to large), very little gravel, some shell hash. Some rocks have barnacles. Few clumps of red algae. * Similar description for seafloor in the distance; possibly few small boulders mixed in.	
C2-1_Rep1	26.33	Homogeneous, no well-defined bedform, medium-coarse sand, no cobbles, little gravel. Small amount of shell hash.	
C2-1_Rep2	26.79	Homogeneous, no well-defined bedform, medium-coarse sand, no cobbles, no gravel. Small amount of shell hash.	
C2-1_Rep3	26.4	Homogeneous, no well-defined bedform, medium-coarse sand, no cobbles, no gravel. Small amount of shell hash. One clam visible - believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i> (unclear if living).	

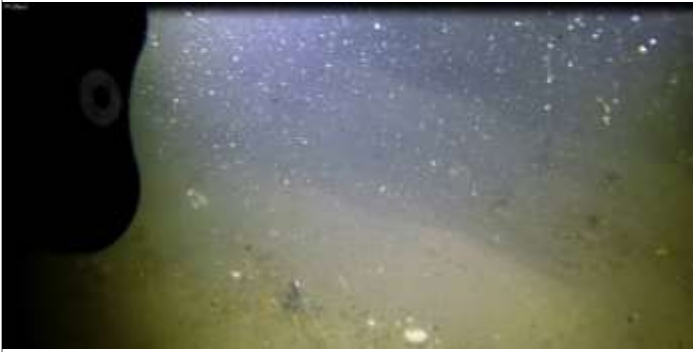



Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
C2-2_Rep1	25.73	Homogeneous, no well-defined bedform, medium-coarse sand, no cobbles, very little gravel. Small amount of shell hash. * Object in bottom left corner is a clam shell fragment.	
C2-2_Rep2	26.03	Homogeneous, no well-defined bedform, medium-coarse sand, no cobbles, no gravel. Small amount of shell hash. * Possible few blue mussel shells in bottom of frame (appear to be mature; unclear if living).	
C2-2_Rep3	25.51	Homogeneous, sand waves (shallow/very low relief), medium-very coarse sand, no cobbles, very little gravel. Small amount of shell hash. *One empty clam shell visible - believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i> . **Unknown yellow and white object in frame.	
C2-3_Rep1	26.85	Homogeneous, sand waves (shallow/very low relief), medium sand, no cobbles, no gravel. Very small amount of shell hash. Half of one large clam shell.	
C2-3_Rep2	26.79	n/a	n/a





Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
C2-3_Rep3	27.07	Homogeneous, no well-defined bedform, medium sand, no cobbles, no gravel. No shell hash. *One clam visible - believed to be <i>Astarte borealis</i> or <i>Astarte castanea</i> (in upper left corner of frame).	
C3-1_Rep1	28.25	Homogeneous, no visible bedform, dense gravel cover on top of medium-very coarse sand with few small cobbles. Very small amount of shell hash and shell fragments. (Note: Grain size tube in video calls this station C3-5-R1).	
C3-1_Rep2	28.01	Homogeneous, no visible bedform, dense gravel cover on top of medium-very coarse sand with few small cobbles. Very small amount of shell hash and shell fragments. (Note: Grain size tube in video calls this station C3-5-R2).	
C3-1_Rep3	28.41	Homogeneous, no visible bedform, dense gravel cover on top of medium-very coarse sand with few small cobbles. Very small amount of shell hash and shell fragments. (Note: Grain size tube in video calls this station C3-5-R3).	





Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
C3-2_Rep1	28.71	Homogeneous, no visible bedform, medium-coarse sand, few cobbles, lot of gravel. Small amount of shell hash and shell fragments. (Note: Grain size tube in video calls this station C3-4-R1).	
C3-2_Rep2	28.83	Homogeneous, no visible bedform, medium-coarse sand, few cobbles, lot of gravel. Small amount of shell hash and shell fragments. (Note: Grain size tube in video calls this station C3-4-R2).	
C3-2_Rep3	28.59	Homogeneous, no visible bedform, medium-coarse sand, few cobbles, some gravel. Small amount of shell hash and shell fragments. (Note: Grain size tube in video calls this station C3-4-R3).	
C3-3_Rep1	28.01	Homogeneous, sand waves (shallow/very low relief), medium-very coarse sand, no cobbles, some gravel. Small amount of shell hash and shell fragments.	





Vessel-Based Samples Year 2			
Station	Depth (m)	Video Description	Example Photograph
C3-3_Rep2	28.01	Homogeneous, no visible bedform, medium-very coarse sand, no cobbles, lot of gravel. Small amount of shell hash and shell fragments.	
C3-3_Rep3	28.25	Homogeneous, no visible bedform, dense gravel cover on top of medium-very coarse sand with few small cobbles. Small amount of shell hash and shell fragments.	





E.3 Vessel-Based Samples Year 3




Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T3-7 R1	86.4	Medium-coarse sand with some darker sediment, sand waves, little shell hash.	
T3-7 R2	87.1	Coarse sand and a few cobbles with some darker sediment, sand waves, 1 crab shell (looks empty), few mussel shells.	
T3-7 R3	86.5	Medium-coarse sand with some pebbles, a little darker sediment, sand waves, very little shell hash.	
T3-5 R1	86.5	Coarse sand with some darker sediment, sand waves, very little shell hash.	





Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T3-5 R2	85.8	Medium-coarse sand with little amount of pebbles, sand waves, very little shell hash.	
T3-5 R3	86.7	Medium-coarse sand only, sand waves, 1 (whole) mussel shell, no other shell hash.	
T3-3 R1	84.2	Coarse sand with a few pebbles, sand waves, very little shell hash.	
T3-3 R2	85.1	Coarse sand with pebbles and a few cobble, sand waves, 2 halves of mussel shells, no other shell hash.	




Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T3-3 R3	84.8	Medium-coarse sand with little pebble, sand waves, no shell hash, unknown fish.	
T3-8 R1	86.3	Medium-coarse sand only, some darker sediment, sand waves, no shell hash.	
T3-8 R2	85.3	Medium-coarse sand only, some darker sediment, sand waves, 1 slipper shell, no other shell hash.	
T3-8 R3	86.8	Coarse sand with pebbles and a few cobble, sand waves, 1 moon snail shell, no other shell hash.	



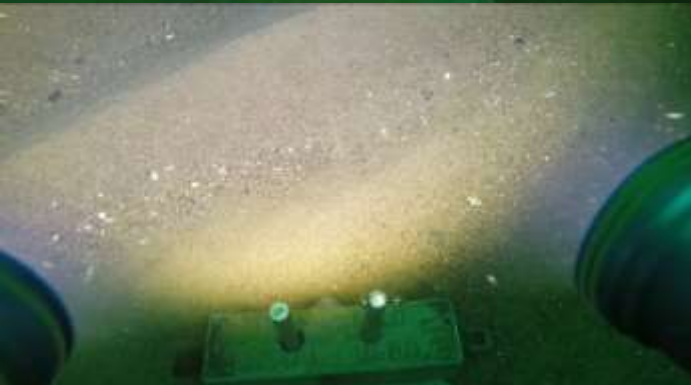

Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T3-1 R1	85.6	Coarse sand with some pebbles and other darker sediment, sand waves, no shell hash.	
T3-1 R2	85.6	Medium-coarse sand with some pebble, sand waves, 1 mussel shell half, no other shell hash.	
T3-1 R3	84.2	Medium-coarse sand with a few pebbles, sand waves, a few mussel shells, halves and whole.	
T3-4 R1	85.3	Medium-coarse sand with little pebble, sand waves, 1 slipper shell, no other shell hash.	




Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T3-4 R2	85.7	Coarse sand with cobbles and lots of pebbles, sand waves, 1 mussel shell halves, no other shell hash.	
T3-4 R3	84	Coarse sand with some pebbles and darker sediment, sand waves, fair amount of shell hash.	
T3-9 R1	84.2	Coarse sand with few cobbles and some pebble, sand waves, a few clumpings of mussel shells, small amount of other shell hash.	
T3-9 R2	84.4	Coarse sand with some pebbles and darker sediments, sand waves, no shell hash.	





Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T3-9 R3	84.7	Coarse sand with pebbles, other darker sediments, sand waves, little shell hash.	Not available
T3-6 R1	83.2	Medium to coarse sand with some pebbles, sand waves, a couple decent size clumpings of mussel shells.	
T3-6 R2	83.9	Medium-coarse sand with little pebble, sand waves, a little amount of shell hash.	
T3-6 R3	83.5	Fine sand, sand waves, quite a few clumpings of mussel shells, not a lot of other shell hash.	

Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T3-2 R1	83.1	Medium-coarse sand with few pebbles, sand waves, some decent size clumpings of mussel shells, no other shell hash.	
T3-2 R2	83.4	Coarse sand with pebbles and few cobble, sand waves, some shell hash.	
T3-2 R3	83	Coarse sand with some pebble, sand waves, no shell hash.	
T5-9 R1	74.6	Medium-coarse sand with a few cobble, sand waves, a couple slipper shells, and a few mussel shells, no other shell hash.	





Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T5-9 R2	74	Coarse sand with some pebbles and few cobble, sand waves, 1 small fish, no shell hash.	
T5-9 R3	73.5	Coarse sand with few cobbles and some pebble, sand waves, no shell hash.	
T5-4 R1	75	Coarse sand with some gravel and few pebbles, sand waves, little mussel shell hash, rock with barnacles.	
T5-4 R2	73.2	Coarse sand with some pebbles, sand waves, no shell hash.	





Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T5-4 R3	71.4	Coarse sand with few gravel and pebbles, sand waves, a little shell hash.	
T5-5 R1	71	Coarse sand with some pebbles and 3 large cobbles, sand waves, 2-3 mussel shell halves.	
T5-5 R2	71.6	Medium sand with some small pebbles and a couple cobbles, sand waves, little shell hash.	
T5-5 R3	70.9	Medium sand with 5 large cobbles, sand waves, some seaweed attached to rocks, no shell hash, rocks with barnacles.	

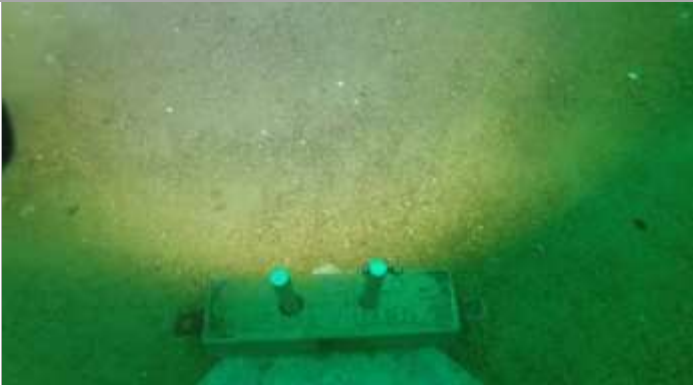



Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T5-8 R1	73	Coarse sand, some darker sediment, a few cobbles, sand waves, no shell hash.	
T5-8 R2	72.7	Coarse sand with some pebbles, sand waves, a couple small <i>Astarte</i> , no other shell hash.	
T5-8 R3	72.9	Coarse sand with some pebbles, sand waves, little shell hash.	
T5-3 R1	75.3	Coarse sand with some pebbles, sand waves, 1-2 halves of mussel shells, some other shell hash.	

Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T5-3 R2	76.1	Coarse sand with some pebbles and a few cobbles, sand waves, ~3 <i>Astarte</i> , a few mussel shells, some other shell hash.	
T5-3 R3	77.8	Coarse sand with some cobbles and pebbles, sand waves, good amount of shell hash.	
T5-7 R1	78.4	Coarse sand with some pebbles, ~5 <i>Astarte</i> , sand waves, some shell hash.	
T5-7 R2	71.8	Coarse sand with cobbles and some pebbles, sand waves, ~2 <i>Astarte</i> , some shell hash.	





Vessel-Based Samples Year 3





Sample ID	Depth (m)	Sediment Description	Example Photograph
T5-7 R3	78.4	Coarse sand with some pebbles and few cobbles, sand waves, ~2 <i>Astarte</i> , some shell hash.	
T5-1 R1	78.3	Coarse sand with some pebbles, sand waves, 1 <i>Astarte</i> , some other shell hash.	
T5-1 R2	78.1	Coarse sand with cobbles and few pebbles, sand waves, some shell hash.	
T5-1 R3	78.6	Medium sand with some small pebbles, sand waves, very little shell hash.	





Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T5-6 R1	74.6	Coarse sand with some pebbles, sand waves, a few mussel shell halves, a little shell hash.	
T5-6 R2	74.2	Coarse sand with some pebbles, sand waves, ~2 <i>Astarte</i> sp., some shell hash.	
T5-6 R3	74.2	Coarse sand with a few cobbles and some pebbles, sand waves, ~2 mussel shell halves, some other shell hash.	
T5-2 R1	75.1	Coarse sand with some pebbles, sand waves, ~5 mussel shell halves, some other shell hash.	

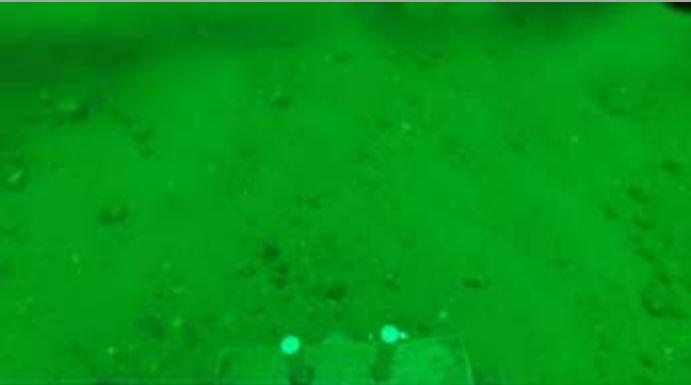



Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T5-2 R2	74.2	Coarse sand, sand waves, a couple mussel shell halves, no other shell hash.	
T5-2 R3	75.8	Coarse sand with some pebbles, sand waves ~3 mussel shell halves, some shell hash.	
T1-6 R1	93.4	Medium sand with gravel/some cobble/lots of pebbles, no visible bedform, no shell hash, flashlight was dropped and left on seafloor!	
T1-6 R2	92.9	Medium sand with gravel/small cobbles with growths (looks like barnacles), no visible bedform, no shell hash.	





Vessel-Based Samples Year 3





Sample ID	Depth (m)	Sediment Description	Example Photograph
T1-6 R3	93.7	Medium sand with gravel/lots of cobbles/pebbles also present, some cobbles have growths (looks like barnacles), no visible bedform, little shell hash.	
T1-9 R1	92.7	Medium sand with gravel/cobble, some cobbles have growths (looks like barnacles), no visible bedform, little shell hash.	
T1-9 R2	92.6	Medium sand, little gravel, no visible bedform, some shell hash (mussel shells are clumped together and have growth on them (looks like barnacles)).	
T1-9 R3	92.2	Medium sand, gravel/cobble, 1 crab, white sponge, <i>Polymastia robusta</i> , some shell hash with growth on them (looks like barnacles).	




Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T1-8 R1	90.4	Medium sand with some gravel/pebbles, sand waves, very little shell hash.	
T1-8 R2	90.3	Medium sand with gravel/cobbles and some pebbles, sand waves, very little shell hash.	
T1-8 R3	91.1	Medium sand with gravel/ small cobbles, some cobbles with growth on them(looks like barnacles), no visible bedform, no shell hash.	
T1-4 R1	92	Medium sand only, sand waves, no shell hash.	


Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T1-4 R2	92.4	Medium sand, sand waves, 1 small clumping of mussel shells and little shell hash.	
T1-4 R3	92	Medium sand with cobbles, sand waves, no shell hash.	
T1-7 R1	92.7	Medium sand with some gravel, no visible bedform, small amount of shell hash.	
T1-7 R2	93.5	Medium sand with gravel/smaller cobble, no visible bedform, small amount of shell hash.	

Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T1-7 R3	93.1	Medium sand with some gravel/ small cobble, no visible bedform, very little shell hash.	
C1-1 R1	97.8	Coarse sand with darker sediment, some pebbles, sand waves, no shell hash (maybe a few very small shell fragments).	
C3-3 R1	77.7	Medium sand with lots of pebble and few cobble, sand waves, little shell hash.	
C3-3 R2	77.6	Medium sand with few cobbles and some pebble, sand waves, shell hash.	

Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
C3-3 R3	77.4	Medium sand with some pebble, little cobble, sand waves, a little shell hash.	
T1-1 R1	88.5	Medium sand with gravel/small cobbles, some cobbles have growths (looks like barnacles), white sponge, Polymastia robusta, no visible bedform, little shell hash, elasmobranch egg case.	
T1-1 R2	89	Medium sand with gravel/ small cobbles, cobbles have growths (looks like barnacles), 2 sea stars, white sponge, Polymastia robusta, very few mussel shell fragments.	
T1-1 R3	88.7	Medium sand with gravel/ small cobble, cobbles have growths (looks like barnacles), sand waves, 3 sea stars, no shell hash.	

Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T1-3 R1	89.5	Medium sand with cobbles (some have barnacles on them), other small rocks scattered, sand waves, some mussel shell halves, no other shell hash.	
T1-3 R2	89.6	Medium sand with gravel/larger cobbles with growths on them (looks like barnacles), 2 sea stars, sand waves, very little shell hash (a few halves and 1 whole).	
T1-3 R3	89.3	Medium sand with gravel/ some small cobbles with growths (looks like barnacles), sand waves, no shell hash.	
T1-2 R1	88.6	Medium sand with lots of cobbles and quite a lot of small rocks (some have barnacle growths), 2 sea stars, sand waves, a couple mussel shell halves, no other shell hash.	

Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T1-2 R2	89.1	Medium sand with small cobbles with growths (looks like barnacles), sand waves, 1 moon snail shell - Naticidae, very little shell hash.	
T1-2 R3	88.8	Medium sand with gravel/small cobbles with growths (looks like barnacles), sand waves, 1 sea stars, little shell hash.	
T1-5 R1	88.1	Medium sand with gravel/cobble, cobbles have growths (looks like barnacles), 2 sea stars, no visible bedform, no shell hash.	
T1-5 R2	90.3	Medium sand, some gravel and small cobbles, no visible bedform, mussel shells (whole) and mussel shell hash covering the entire field of view.	

Vessel-Based Samples Year 3			
Sample ID	Depth (m)	Sediment Description	Example Photograph
T1-5 R3	90.6	Medium sand, no visible bedform, 1 sea star, mussel shells (whole) and hash covering entire field of view.	

Appendix F – Results of the Sediment Organic Analysis for Vessel-Based and Diver-Based Data Collection

F.1 Year 1 Vessel-Based Results

Vessel-Based Samples Year 1			
Sample ID	Date	Total Organic Matter (%)	Total Organic Carbon (%)
T1-1_1	12/20/2016	0.52	0.23
T1-1_2	12/20/2016	0.42	0.18
T1-1_3	12/20/2016	0.31	0.14
T1-2_1	12/20/2016	0.21	0.09
T1-2_2	12/20/2016	0.12	0.05
T1-2_3	12/20/2016	0.19	0.08
T1-3_1	12/20/2016	0.37	0.16
T1-3_2	12/20/2016	0.41	0.18
T1-3_3	12/20/2016	0.27	0.12
T1-4_1	12/20/2016	0.45	0.20
T1-4_2	12/20/2016	0.60	0.26
T1-4_3	12/20/2016	0.37	0.16
T1-5_1	12/20/2016	0.36	0.15
T1-5_2	12/20/2016	0.32	0.14
T1-5_3	12/20/2016	0.44	0.19
T1-6_1	12/20/2016	0.07	0.03
T1-6_2	12/20/2016	0.49	0.21
T1-6_3	12/20/2016	0.50	0.21
T1-7_1	12/20/2016	0.13	0.06
T1-7_2	12/20/2016	0.27	0.12
T1-7_3	12/20/2016	0.34	0.15
T1-8_1	12/20/2016	0.37	0.16
T1-8_2	12/20/2016	0.24	0.10
T1-8_3	12/20/2016	0.13	0.06
T1-9_1	12/20/2016	0.41	0.18
T1-9_2	12/20/2016	0.25	0.11
T1-9_3	12/20/2016	0.32	0.14
T3-1_1	12/20/2016	0.34	0.15
T3-1_2	12/20/2016	0.25	0.11
T3-1_3	12/20/2016	0.52	0.22
T3-2_1	12/20/2016	0.06	0.03
T3-2_2	12/20/2016	0.45	0.19
T3-2_3	12/20/2016	0.39	0.17
T3-3_1	12/20/2016	1.00	0.43
T3-3_2	12/20/2016	0.22	0.10
T3-3_3	12/20/2016	0.42	0.18

Vessel-Based Samples Year 1			
Sample ID	Date	Total Organic Matter (%)	Total Organic Carbon (%)
T3-4_1	12/20/2016	0.38	0.16
T3-4_2	12/20/2016	0.52	0.23
T3-4_3	12/20/2016	0.82	0.35
T3-5_1	12/20/2016	0.71	0.31
T3-5_2	12/20/2016	0.19	0.08
T3-5_3	12/20/2016	0.69	0.30
T3-6_1	12/20/2016	0.32	0.14
T3-6_3	12/20/2016	0.42	0.18
T3-6_2	12/20/2016	0.53	0.23
T3-7_1	12/20/2016	0.06	0.03
T3-7_2	12/20/2016	0.31	0.13
T3-7_3	12/20/2016	0.44	0.19
T3-8_1	12/20/2016	0.53	0.23
T3-8_2	12/20/2016	0.38	0.16
T3-8_3	12/20/2016	0.49	0.21
T3-9_1	12/20/2016	0.31	0.14
T3-9_2	12/20/2016	0.47	0.20
T3-9_3	1/20/2017	0.39	0.17
T5-1_1	1/20/2017	0.70	0.30
T5-1_2	1/20/2017	0.64	0.27
T5-1_3	1/20/2017	0.66	0.29
T5-2_1	1/20/2017	0.38	0.17
T5-2_2	1/20/2017	0.35	0.15
T5-2_3	1/20/2017	0.31	0.13
T5-3_1	1/20/2017	0.21	0.09
T5-3_2	1/20/2017	0.42	0.18
T5-3_3	1/20/2017	0.66	0.29
T5-4_1	1/20/2017	0.38	0.17
T5-4_2	1/20/2017	0.29	0.13
T5-4_3	1/20/2017	0.33	0.14
T5-5_1	1/20/2017	0.52	0.23
T5-5_2	1/20/2017	0.33	0.14
T5-5_3	1/20/2017	0.28	0.12
T5-6_1	1/20/2017	0.13	0.06
T5-6_2	1/20/2017	0.41	0.18
T5-6_3	12/20/2016	0.49	0.21
T5-7_1	1/20/2017	0.71	0.31
T5-7_2	1/20/2017	0.91	0.39
T5-7_3	1/20/2017	0.40	0.17
T5-8_1	1/20/2017	0.36	0.16
T5-8_2	1/20/2017	0.30	0.13
T5-8_3	1/20/2017	0.61	0.26
T5-9_1	1/20/2017	0.41	0.18

Vessel-Based Samples Year 1			
Sample ID	Date	Total Organic Matter (%)	Total Organic Carbon (%)
T5-9_2	1/20/2017	0.87	0.37
T5-9_3	1/20/2017	0.60	0.26
C1-1_1	1/20/2017	1.04	0.45
C1-1_2	1/20/2017	0.47	0.20
C1-1_3	1/20/2017	0.61	0.26
C1-2_1	1/20/2017	0.46	0.20
C1-2_2	1/20/2017	0.35	0.15
C1-2_3	1/20/2017	0.40	0.17
C1-3_1	1/20/2017	0.00	0.00
C1-3_2	1/20/2017	0.37	0.16
C1-3_3	1/20/2017	0.36	0.16
C1-4_1	1/20/2017	0.40	0.17
C1-4_2	1/20/2017	0.65	0.28
C1-4_3	1/20/2017	0.59	0.25
C2-1_1	1/20/2017	0.24	0.10
C2-1_2	12/20/2017	0.29	0.13
C2-1_3	1/20/2017	0.33	0.14
C2-2_1	1/20/2017	0.35	0.15
C2-2_2	1/20/2017	0.35	0.15
C2-2_3	1/20/2017	0.48	0.21
C2-3_1	1/20/2017	0.74	0.32
C2-3_2	1/20/2017	0.47	0.20
C2-3_3	1/20/2017	0.74	0.32
C2-4_1	1/20/2017	0.39	0.17
C2-4_2	1/20/2017	0.26	0.11
C2-4_3	1/20/2017	0.16	0.07
C3-1_1	3/21/2017	0.29	0.12
C3-1_2	3/21/2017	0.85	0.37
C3-1_3	3/21/2017	0.46	0.20
C3-2_1	3/21/2017	0.69	0.30
C3-2_2	3/21/2017	0.42	0.18
C3-2_3	3/21/2017	0.28	0.12
C3-3_1	3/21/2017	0.54	0.23
C3-3_2	3/21/2017	0.44	0.19
C3-3_3	3/21/2017	0.32	0.14
C3-4_1	3/21/2017	0.32	0.14
C3-4_2	3/21/2017	0.33	0.14
C3-4_3	3/21/2017	0.46	0.20
T1-QC	3/21/2017	0.58	0.25
T3-QC	3/21/2017	0.46	0.20
T5-QC	3/21/2017	0.64	0.28
C3-QC	3/21/2017	0.35	0.15

F.2 Year 2 Vessel-Based Results

Vessel-Based Samples Year 2			
Sample ID	Date	Total Organic Matter (%)	Total Organic Carbon (%)
C1-1 R1	01/12/2017	0.76	0.33
C1-1 R2	01/12/2017	0.48	0.21
C1-1 R3	01/12/2017	0.18	0.08
C1-2 R1	01/12/2017	0.86	0.37
C1-2 R2	01/12/2017	0.48	0.21
C1-2 R3	01/12/2017	0.79	0.34
C1-3 R1	01/12/2017	0.61	0.26
C1-3 R2	01/12/2017	0.54	0.23
C1-3 R3	01/12/2017	0.57	0.25
C2-1 R1	01/12/2017	0.26	0.11
C2-1 R2	01/12/2017	0.35	0.15
C2-1 R3	01/12/2017	0.40	0.17
C2-1 R3 (Duplicate)	01/12/2017	0.42	0.18
C2-2 R1	01/12/2017	0.44	0.19
C2-2 R2	01/12/2017	1.08	0.46
C2-2 R3	01/12/2017	0.42	0.18
C2-3 R1	01/12/2017	0.19	0.08
C2-3 R2	01/12/2017	0.54	0.23
C2-3 R3	01/12/2017	0.51	0.22
C3-3 R1	01/12/2017	0.40	0.17
C3-3 R2	01/12/2017	0.46	0.20
C3-3 R3	01/12/2017	0.54	0.23
C3-4 R1	01/12/2017	0.45	0.19
C3-4 R2	01/12/2017	0.43	0.19
C3-4 R3	01/12/2017	0.83	0.36
C3-5 R1	01/12/2017	0.42	0.18
C3-5 R2	01/12/2017	0.63	0.27
C3-5 R3	01/12/2017	0.38	0.17
T1-1 R1	30/11/2017	0.74	0.32
T1-1 R2	30/11/2017	0.19	0.08
T1-1 R3	30/11/2017	0.07	0.03
T1-2 R1	30/11/2017	0.63	0.27
T1-2 R2	30/11/2017	0.30	0.13
T1-2 R3	30/11/2017	0.53	0.23
T1-3 R1	30/11/2017	0.34	0.15
T1-3 R2	30/11/2017	0.41	0.18
T1-3 R3	30/11/2017	0.57	0.24
T1-4 R1	30/11/2017	0.56	0.24
T1-4 R2	30/11/2017	0.51	0.22
T1-4 R3	30/11/2017	0.21	0.09

Vessel-Based Samples Year 2			
Sample ID	Date	Total Organic Matter (%)	Total Organic Carbon (%)
T1-5 R1	30/11/2017	0.63	0.27
T1-5 R1 (Duplicate)	30/11/2017	0.49	0.21
T1-5 R2	30/11/2017	0.67	0.29
T1-5 R3	30/11/2017	1.21	0.52
T1-6 R1	30/11/2017	0.13	0.06
T1-6 R2	30/11/2017	0.55	0.24
T1-6 R3	30/11/2017	0.34	0.15
T1-7 R1	30/11/2017	0.44	0.19
T1-7 R2	30/11/2017	0.36	0.16
T1-7 R3	30/11/2017	0.68	0.29
T1-8 R1	30/11/2017	0.16	0.07
T1-8 R2	30/11/2017	0.37	0.16
T1-8 R3	30/11/2017	0.50	0.21
T1-9 R1	30/11/2017	0.27	0.12
T1-9 R2	30/11/2017	0.75	0.32
T1-9 R3	30/11/2017	0.37	0.16
T3-1 R1	30/11/2017	0.41	0.18
T3-1 R2	30/11/2017	0.62	0.27
T3-1 R3	30/11/2017	0.51	0.22
T3-2 R1	30/11/2017	0.51	0.22
T3-2 R2	30/11/2017	0.33	0.14
T3-2 R3	30/11/2017	0.26	0.11
T3-3 R1	30/11/2017	0.06	0.03
T3-3 R2	30/11/2017	0.47	0.20
T3-3 R3	30/11/2017	0.52	0.23
T3-4 R1	30/11/2017	0.55	0.24
T3-4 R2	30/11/2017	--	--
T3-4 R3	30/11/2017	0.31	0.14
T3-5 R1	30/11/2017	0.39	0.17
T3-5 R2	30/11/2017	0.52	0.23
T3-5 R3	30/11/2017	0.51	0.22
T3-6 R1	30/11/2017	0.51	0.22
T3-6 R2	30/11/2017	0.39	0.17
T3-6 R3	30/11/2017	0.53	0.23
T3-7 R1	30/11/2017	0.57	0.25
T3-7 R2	30/11/2017	0.41	0.18
T3-7 R3	30/11/2017	0.53	0.23
T3-8 R1	30/11/2017	0.40	0.17
T3-8 R2	30/11/2017	0.28	0.12
T3-8 R3	30/11/2017	0.40	0.17
T3-9 R1	30/11/2017	0.54	0.23

Vessel-Based Samples Year 2			
Sample ID	Date	Total Organic Matter (%)	Total Organic Carbon (%)
T3-9 R1 (Duplicate)	30/11/2017	0.14	0.06
T3-9 R2	30/11/2017	0.55	0.24
T3-9 R3	30/11/2017	0.40	0.17
T5-1 R1	01/12/2017	0.52	0.22
T5-1 R2	01/12/2017	0.63	0.27
T5-1 R3	01/12/2017	0.47	0.20
T5-2 R1	01/12/2017	0.14	0.06
T5-2 R2	01/12/2017	0.50	0.20
T5-2 R3	01/12/2017	1.73	0.75
T5-2 R3 (Duplicate)	01/12/2017	0.60	0.26
T5-3 R1	01/12/2017	0.21	0.09
T5-3 R2	01/12/2017	0.59	0.25
T5-3 R3	01/12/2017	0.50	0.22
T5-4 R1	01/12/2017	0.41	0.18
T5-4 R2	01/12/2017	0.06	0.03
T5-4 R3	01/12/2017	0.19	0.08
T5-5 R1	01/12/2017	0.48	0.21
T5-5 R2	01/12/2017	0.20	0.09
T5-5 R3	01/12/2017	0.46	0.20
T5-6 R1	30/11/2017	0.59	0.25
T5-6 R2	30/11/2017	0.37	0.16
T5-6 R3	30/11/2017	0.45	0.19
T5-7 R1	30/11/2017	0.27	0.12
T5-7 R2	30/11/2017	0.52	0.23
T5-7 R3	30/11/2017	0.65	0.28
T5-8 R1	01/12/2017	0.39	0.17
T5-8 R2	01/12/2017	0.33	0.14
T5-8 R3	01/12/2017	0.61	0.26
T5-8 R3 (Duplicate)	01/12/2017	0.48	0.21
T5-9 R1	30/11/2017	0.44	0.19
T5-9 R2	30/11/2017	0.37	0.16
T5-9 R3	30/11/2017	0.27	0.12

F.3 Year 2 Diver-Based Results

Diver-Based Samples Year 2			
Sample ID	Date	Total Organic Matter (%)	Total Organic Carbon (%)
Turbine 1 sample 1	08/06/2018	1.73	0.75
Turbine 1 sample 2	08/06/2018	2.27	0.98
Turbine 1 sample 3	08/06/2018	1.95	0.84
Turbine 1 sample 4	08/06/2018	1.30	0.56
Turbine 1 sample 5	08/06/2018	5.40	2.33
Turbine 3 sample 1	17/05/2018	0.60	0.26
Turbine 3 sample 2	17/05/2018	0.51	0.22
Turbine 3 sample 3	17/05/2018	0.75	0.33
Turbine 3 sample 4	17/05/2018	0.61	0.26
Turbine 3 sample 5	17/05/2018	0.25	0.11
Turbine 5 sample 1	07/06/2018	0.00	0.00
Turbine 5 sample 1 (Duplicate)	07/06/2018	0.34	0.15
Turbine 5 sample 2	07/06/2018	0.91	0.39
Turbine 5 sample 3	07/06/2018	0.52	0.22
Turbine 5 sample 4	07/06/2018	0.00	0.00
Turbine 5 sample 5	07/06/2018	0.15	0.06

F.4 Year 3 Vessel-Based Results

Vessel-Based Samples Year 3			
Sample ID	Date	Total Organic Matter (%)	Total Organic Carbon (%)
T1-1 R1	2/20/19	0.42	0.18
T1-1 R2	2/20/19	0.32	0.14
T1-1 R3	2/20/19	0.32	0.14
T1-2 R1	2/20/19	0.41	0.18
T1-2 R2	2/20/19	0.14	0.06
T1-2 R3	2/20/19	0.20	0.09
T1-3 R1	2/20/19	0.26	0.11
T1-3 R2	2/20/19	0.42	0.18
T1-3 R3	2/20/19	0.41	0.18
T1-4 R1	2/11/19	1.53	0.66
T1-4 R2	2/11/19	0.52	0.22
T1-4 R3	2/11/19	0.14	0.06
T1-5 R1	2/20/19	0.39	0.17
T1-5 R2	2/20/19	6.80	2.94
T1-5 R3	2/20/19	6.77	2.93
T1-6 R1	2/11/19	0.48	0.21
T1-6 R2	2/11/19	0.66	0.29
T1-6 R3	2/11/19	0.48	0.21
T1-7 R1	2/11/19	0.54	0.23
T1-7 R2	2/11/19	0.50	0.22
T1-7 R3	2/11/19	0.22	0.10
T1-8 R1	2/11/19	0.40	0.17
T1-8 R2	2/11/19	0.41	0.18
T1-8 R3	2/11/19	0.20	0.09
T1-9 R1	2/11/19	0.29	0.12
T1-9 R2	2/11/19	0.45	0.20
T1-9 R3	2/11/19	0.36	0.15
T3-1 R1	2/4/19	0.26	0.11
T3-1 R2	2/4/19	0.38	0.16
T3-1 R3	2/4/19	0.33	0.14
T3-2 R1	2/4/19	0.32	0.14
T3-2 R2	2/4/19	0.13	0.06
T3-2 R3	2/4/19	0.32	0.14
T3-3 R1	2/4/19	0.45	0.20
T3-3 R2	2/4/19	0.21	0.09
T3-3 R3	2/4/19	0.20	0.09
T3-4 R1	2/4/19	0.27	0.12
T3-4 R2	2/4/19	0.44	0.19
T3-4 R3	2/4/19	0.37	0.16

Vessel-Based Samples Year 3			
Sample ID	Date	Total Organic Matter (%)	Total Organic Carbon (%)
T3-5 R1	2/4/19	0.13	0.06
T3-5 R2	2/4/19	0.28	0.12
T3-5 R3	2/4/19	0.33	0.14
T3-6 R1	2/4/19	0.23	0.10
T3-6 R2	2/4/19	0.39	0.17
T3-6 R3	2/4/19	0.27	0.12
T3-7 R1	2/4/19	0.45	0.20
T3-7 R2	2/4/19	0.29	0.13
T3-7 R3	2/4/19	0.26	0.11
T3-8 R1	2/4/19	0.39	0.17
T3-8 R2	2/4/19	0.34	0.15
T3-8 R3	2/4/19	0.40	0.17
T3-9 R1	2/4/19	0.41	0.18
T3-9 R2	2/4/19	0.42	0.18
T3-9 R3	2/4/19	0.07	0.03
T5-1 R1	2/11/19	0.47	0.20
T5-1 R2	2/11/19	0.40	0.17
T5-1 R3	2/11/19	0.56	0.24
T5-2 R1	2/11/19	0.50	0.21
T5-2 R2	2/11/19	0.46	0.20
T5-2 R3	2/11/19	0.37	0.16
T5-3 R1	2/11/19	0.44	0.19
T5-3 R2	2/11/19	0.45	0.20
T5-3 R3	2/11/19	0.45	0.20
T5-4 R1	2/4/19	0.36	0.16
T5-4 R2	2/4/19	0.46	0.20
T5-4 R3	2/4/19	0.40	0.17
T5-5 R1	2/4/19	0.22	0.09
T5-5 R2	2/20/19	0.28	0.12
T5-5 R3	2/4/19	0.46	0.20
T5-6 R1	2/11/19	0.45	0.19
T5-6 R2	2/11/19	0.98	0.42
T5-6 R3	2/11/19	0.50	0.22
T5-7 R1	2/11/19	0.49	0.21
T5-7 R2	2/11/19	0.44	0.19
T5-7 R3	2/11/19	0.28	0.12
T5-8 R1	2/4/19	0.55	0.24
T5-8 R2	2/4/19	0.37	0.16
T5-8 R3	2/4/19	0.13	0.06
T5-9 R1	2/4/19	0.33	0.14

Vessel-Based Samples Year 3			
Sample ID	Date	Total Organic Matter (%)	Total Organic Carbon (%)
T5-9 R2	2/4/19	0.26	0.11
T5-9 R3	2/4/19	0.42	0.18
C1-1 R1	2/11/19	0.62	0.27
C1-1 R2	2/20/19	0.26	0.11
C1-1 R3	2/20/19	0.36	0.15
C1-2 R1	2/20/19	0.56	0.24
C1-2 R2	2/20/19	0.47	0.21
C1-2 R3	2/20/19	0.63	0.27
C1-3 R1	2/20/19	0.45	0.19
C1-3 R2	2/20/19	0.79	0.34
C1-3 R3	2/20/19	0.29	0.12
C2-1 R1	2/20/19	0.39	0.17
C2-1 R2	2/20/19	0.41	0.18
C2-1 R3	2/20/19	0.36	0.16
C2-2 R1	2/20/19	0.26	0.11
C2-2 R2	2/20/19	0.27	0.12
C2-2 R3	2/20/19	0.28	0.12
C2-3 R1	2/20/19	0.54	0.23
C2-3 R2	2/20/19	0.32	0.14
C2-3 R3	2/20/19	0.65	0.28
C3-1 R1	2/20/19	0.21	0.09
C3-1 R2	2/20/19	0.62	0.27
C3-1 R3	2/20/19	0.20	0.08
C3-2 R1	2/20/19	0.43	0.19
C3-2 R2	2/20/19	0.52	0.22
C3-2 R3	2/20/19	0.20	0.09
C3-3 R1	2/20/19	0.28	0.12
C3-3 R2	2/20/19	0.32	0.14
C3-3 R3	2/20/19	0.30	0.13

F.5 Year 3 Diver-Based Results

Diver-Based Samples Year 3			
Sample ID	Date	Total Organic Matter (%)	Total Organic Carbon (%)
Turbine Footprint			
FP-T1-1	8/20/19	4.7	2.0
FP-T1-2	8/20/19	1.6	0.7
FP-T3-1	10/5/19	1.2	0.5
FP-T3-2	10/5/19	1.7	0.7
FP-T3-3	10/5/19	0.5	0.2
FP-T3-4	10/5/19	0.7	0.3
FP-T3-5	10/5/19	0.3	0.1
FP-T5-1	9/29/19	0.3	0.1
FP-T5-2	9/29/19	0.4	0.2
FP-T5-3	9/29/19	1.3	0.6
FP-T5-4	9/29/19	0.6	0.3
FP-T5-5	9/29/19	0.9	0.4
Very Near-Field Area			
T1-S1-R1	10/25/19	0.5	0.2
T1-S1-R2	10/25/19	12.4	5.4
T1-S1-R3	10/25/19	1.7	0.7
T1-S2-R1	10/26/19	0.6	0.3
T1-S2-R2	10/26/19	0.4	0.2
T1-S2-R3	10/26/19	0.3	0.1
T1-S3-R1	10/26/19	0.4	0.2
T1-S3-R2	10/26/19	0.2	0.1
T1-S3-R3	10/26/19	0.6	0.3
T3-S1-R1	10/13/19	0.6	0.3
T3-S1-R2	10/13/19	0.8	0.3
T3-S1-R3	10/13/19	1.2	0.5
T3-S2-R1	10/13/19	0.5	0.2
T3-S2-R2	10/13/19	0.2	0.1
T3-S2-R3	10/13/19	0.3	0.1
T3-S3-R1	10/13/19	0.3	0.1
T3-S3-R2	10/13/19	0.3	0.1
T3-S3-R3	10/13/19	0.2	0.1
T5-S1-R1	10/19/20	1.2	0.5
T5-S1-R2	10/19/20	0.3	0.1
T5-S1-R3	10/19/20	0.5	0.2
T5-S2-R1	10/19/20	0.8	0.4
T5-S2-R2	10/19/20	0.3	0.1
T5-S2-R3	10/19/20	0.5	0.2
T5-S3-R1	10/25/19	0.3	0.1
T5-S3-R2	10/25/19	0.8	0.4
T5-S3-R3	10/25/19	0.5	0.2

F.6 Year 3 Method Comparison

Method Comparison Year 3			
Sample ID	Date	Total Organic Matter (%)	Organic Carbon Content (%)
Diver 1	11/9/2019	2.4	1.1
Diver 2	11/9/2019	2.3	1.0
Diver 3	11/9/2019	2.0	0.9
Smith McIntyre 1	11/9/2019	1.2	0.5
Smith McIntyre 2	11/9/2019	1.8	0.8
Smith McIntyre 3	11/9/2019	1.1	0.5

Appendix G – Macrofaunal Species List for Vessel-Based and Diver-Based Data Collection

G.1 Species List Year 1 (Winter 2016-2017) of Vessel-Based Grab Samples

Species	T1-1 rep1	T1-1 rep2	T1-1 rep3	T1-2 rep1	T1-2 rep2	T1-2 rep3	T1-3 rep1	T1-3 rep2	T1-3 rep3	T1-4 rep1	T1-4 rep2	T1-4 rep3	T1-5 rep1	T1-5 rep2
ACTINIARIA														
Actiniaria spp														
ARTHROPODA														
Amphipoda														
<i>Ampelisca vadorum</i>														
<i>Aeginina longicornis</i>														
<i>Byblis serrata</i>	1									6				1
<i>Caprella equilibra</i>														
<i>Caprella penantis</i>														
<i>Caprella unica</i>														
<i>Corophium</i> spp									10					
<i>Dulchia</i> sp														
<i>Erichthonius rubricornis</i>									79					
<i>Gammaropsis maculata</i>									3					
<i>Hippomedon serratus</i>	1													
<i>Ischyrocerus anguipes</i>											1			
<i>Jassa marmorata</i>														
<i>Lembos websteri</i>														
<i>Leptocheirus pinguis</i>										1				
<i>Luconacia incerta</i>									5					
<i>Melita dentata</i>														
<i>Microdeutopus anomalus</i>					1									
<i>Monoculodes</i> sp														
<i>Parametopella cypris</i>														1
<i>Phoxocephalus holbolli</i>														
<i>Pleustidae</i> sp														
<i>Pontogenia inermis</i>														
<i>Proboloides holmesi</i>														
<i>Protohaustorius wigleyi</i>		1	1					2						
<i>Psammonyx nobilis</i>														
<i>Pseudunciola obliquua</i>														
<i>Rhepoxynuis epistomus</i>	1			1				3						
<i>Siphonoecetes smithianus</i>														
<i>Stenopleustes gracilis</i>														
<i>Stenothoe minuta</i>									2					
<i>Unciola irrorata</i>					2	4	7	3	4	1	1	9	11	2

Species	T1-1 rep1	T1-1 rep2	T1-1 rep3	T1-2 rep1	T1-2 rep2	T1-2 rep3	T1-3 rep1	T1-3 rep2	T1-3 rep3	T1-4 rep1	T1-4 rep2	T1-4 rep3	T1-5 rep1	T1-5 rep2
Cumacea														
<i>Diastylis</i> sp					1									
<i>Pseudoleptocuma minor</i>										1				
Decapoda														
<i>Cancer borealis</i>														
<i>Cancer</i> sp juvenile <i>?irroratus</i>											1			
<i>Crangon septemspinosa</i>														
<i>Pagurus annulipes</i>														
Isopoda														
<i>Chiridotea</i> sp caeca				1										
<i>Chiridotea tuftsi</i>		1			1									
<i>Edotea triloba</i>	1													
<i>Erichsonella filiformis</i>														
<i>Politolana polita</i>														
Pycnogonida														
<i>Nymphon stromi</i>														
Sessilia														
<i>Balanus amphitrite</i>				1	22	20			33					
Tanaidacea														
<i>Leptochelia savignyi</i>														
<i>Tanaissus psammophilus</i>	8		1	3		1		1						1
ECHINODERMATA														
Asteroidea														
<i>Asterias</i> spp														
Echinoidea														
<i>Echinarachnius parma</i>														
Holothuroidea														
<i>Cucumaria</i> sp														
Ophiuroidea														
<i>Axiognathus squamatus</i>														
MOLLUSCA														
Bivalvia														
<i>Anadara transversa</i>														
<i>Anomia</i> spp (juveniles)														
<i>Astarte borealis</i>	1													

Species	T1-1 rep1	T1-1 rep2	T1-1 rep3	T1-2 rep1	T1-2 rep2	T1-2 rep3	T1-3 rep1	T1-3 rep2	T1-3 rep3	T1-4 rep1	T1-4 rep2	T1-4 rep3	T1-5 rep1	T1-5 rep2
<i>Astarte castanea</i>														
<i>Cerastoderma pinnulatum</i>													1	
<i>Crassinella mactracea</i>														
<i>Crenella decussata</i>														
<i>Cyclocardia borealis</i>										2				
<i>Ensis directus</i>														
<i>Lyonsia arenosa</i>	2		1							9			2	
<i>Lyonsia hyalina</i>														
<i>Mytilus edulis</i>						1			8		1			
<i>Nucula tenuis</i>														
<i>Pandora gouldiana</i>														
<i>Spisula solidissima</i>	1		1					2			1			
<i>Tellina agilis</i>			1			1				1			1	2
Gastropoda														
<i>Crepidula fornicata</i>					1			1	2	1				
<i>Crepidula plana</i>									8					
<i>Euspira heros</i>	1													
<i>Euspira triseriata</i>			1											
<i>Ilyanassa trivittata</i>									1					
<i>Retusa obtusa</i>														
<i>Turbonilla</i> sp														
Polyplacophora														
<i>Chaetopleura apiculata</i>														
ANNELIDA														
Oligochaeta														
<i>Oligochaeta</i> spp			1											
Polychaeta														
<i>Ampharete arctica</i>														
<i>Aricidea catherinae</i>	1			1						8			4	
<i>Asabellides oculata</i>													1	
<i>Asychis elongata</i>														
<i>Autolytus prolifer</i>														
<i>Cirrophorus</i> sp					2							2	5	
<i>Dipolydora</i> sp										2				
<i>Dodecaceria corallii</i>														
<i>Drilonereis magna</i>	1													
<i>Ephesiella minuta</i>										1				
<i>Eumida sanguinea</i>						1			3					
<i>Exogone hebes</i>	1			1	4	1		1		1	1		1	1
<i>Exogone naidina</i>														
<i>Glycera americana</i>														
<i>Glycera dibranchiata</i>														

Species	T1-1 rep1	T1-1 rep2	T1-1 rep3	T1-2 rep1	T1-2 rep2	T1-2 rep3	T1-3 rep1	T1-3 rep2	T1-3 rep3	T1-4 rep1	T1-4 rep2	T1-4 rep3	T1-5 rep1	T1-5 rep2
<i>Goniadella gracilis</i>	7		7	4	3	15	9	11		12	14		10	6
<i>Harmothoe</i> sp						1								
<i>Lepidonotus squamatus</i>									1					
<i>Lumbrinereis acuta</i>	7		3	1		3	2	1	1	17	1	3	2	
<i>Lumbrinereis fragilis</i>	1		3			3		2	1	2	2		2	
<i>Maldanidae</i> spp	1					1				3		1	13	
<i>Marphysa bellii</i>						1							1	
<i>Megalona</i> sp										1			2	
<i>Microphthalmus sckelkowi</i>														
<i>Monticellina baptisteae</i>	1				1		2		1	4		1	3	
<i>Mystides</i> sp														
<i>Nephtys bucera</i>	2	1	1	2	3	8	1	1	2	8	5	3	4	1
<i>Nephtys ciliata</i>														
<i>Nereis arenaceodonta</i>														
<i>Nereis zonata</i>														
<i>Odontosyllis fulgurans</i>	1										1		1	1
<i>Ophelia denticulata</i>														
<i>Ophioglycera gigantea</i>														
<i>Owenia fusiformis</i>														
<i>Paranaitis speciosa</i>														
<i>Paraonis</i> sp						1					1		1	
<i>Parapionosyllis longicirrata</i>	6		4	1	1	1		2			3	1	2	4
<i>Parougia caeca</i>	1					1							1	
<i>Phyllodoce arenae</i>														
<i>Phyllodoce maculata</i>														
<i>Pisione</i> sp													6	
<i>Pista</i> sp (juveniles)														
<i>Polycirrus eximius</i>										1			1	1
<i>Polydora</i> sp				1										
<i>Polygordius</i> spp	5	1	1	7	5		5	10	2	4	12	4	14	16
<i>Potamilla reniformis</i>				1										
<i>Proceraea?fasciata</i>						2			2					
<i>Sabellaria vulgaris</i>		1		1	6	31		15	225	26	5	14	1	2
<i>Scalibregma inflatum</i>														
<i>Sigalion arenicola</i>								1	1				1	
<i>Sphaerosyllis erinaceus</i>				3						3			3	1
<i>Spio setosa</i>														
<i>Spiochaetopterus oculatus</i>						1			1					1
<i>Spiophanes bombyx</i>						1				1			1	
<i>Spirorbis</i> spp														
<i>Syllides</i> sp														
<i>Travisia carnea</i>														
<i>Typosyllis coronata</i>														

Species	T1-1 rep1	T1-1 rep2	T1-1 rep3	T1-2 rep1	T1-2 rep2	T1-2 rep3	T1-3 rep1	T1-3 rep2	T1-3 rep3	T1-4 rep1	T1-4 rep2	T1-4 rep3	T1-5 rep1	T1-5 rep2
OTHER (PHYLUM: sp(p))														
CHORDATA: <i>Gobiosoma bosci</i>														
COPEPODA: <i>Harpacticoid</i> spp	1		1	1		1	1					2		
NEMERTEA: <i>Cerebratulus lacteus</i>									1					
NEMERTEA: <i>Nemertea</i> spp	1			1						1	1		7	
NEMATODA: <i>Nematoda</i> spp	42	2	18	9		22	4	18	2	11	5	4	15	13
Number of Species	25	6	15	18	14	23	8	16	24	26	17	11	29	16
Total Number of Organisms	96	7	45	40	53	122	31	74	398	128	56	44	117	54

G.1 Species List Year 1 (Winter 2016-2017) of Vessel-Based Grab Samples (Cont.)

Species	T1-5 rep3	T1-6 rep1	T1-6 rep2	T1-6 rep3	T1-7 rep1	T1-7 rep2	T1-7 rep3	T1-8 rep1	T1-8 rep2	T1-8 rep3	T1-9 rep1	T1-9 rep2	T1-9 rep3
ACTINIARIA													
<i>Actiniaria</i> spp													
ARTHROPODA													
Amphipoda													
<i>Ampelisca vadorum</i>											1	1	
<i>Aeginina longicornis</i>													
<i>Byblis serrata</i>													
<i>Caprella equilibra</i>		1											
<i>Caprella penantis</i>													
<i>Caprella unica</i>													
<i>Corophium</i> spp												1	
<i>Dulchia</i> sp													
<i>Erichthonius rubricornis</i>		1	1			1							
<i>Gammaropsis maculata</i>													
<i>Hippomedon serratus</i>													
<i>Ischyrocerus anguipes</i>													
<i>Jassa marmorata</i>													
<i>Lembos websteri</i>													
<i>Leptocheirus pinguis</i>													
<i>Luconacia incerta</i>		2											
<i>Melita dentata</i>													
<i>Microdeutopus anomalus</i>													
<i>Monoculodes</i> sp													
<i>Parametopella cypris</i>		3											
<i>Phoxocephalus holbolli</i>													
Pleustidae sp													
<i>Pontogenia inermis</i>													
<i>Probolooides holmesi</i>													
<i>Protohaustorius wigleyi</i>		1											
<i>Psammonyx nobilis</i>													
<i>Pseudunciola obliqua</i>		1	1										
<i>Rhepoxynuis epistomus</i>	1	2		1	1	1		1					1
<i>Siphonoecetes smithianus</i>													
<i>Stenopleustes gracilis</i>													
<i>Stenothoe minuta</i>													
<i>Unciola irrorata</i>	1				1		5	11	3	9	2	21	3
Cumacea													
<i>Diastylis</i> sp													
<i>Pseudoleptocuma minor</i>													
Decapoda													
<i>Cancer borealis</i>													

Species	T1-5 rep3	T1-6 rep1	T1-6 rep2	T1-6 rep3	T1-7 rep1	T1-7 rep2	T1-7 rep3	T1-8 rep1	T1-8 rep2	T1-8 rep3	T1-9 rep1	T1-9 rep2	T1-9 rep3
<i>Cancer</i> sp juvemile ? <i>irroratus</i>													
<i>Crangon septemspinosa</i>													
<i>Pagurus annulipes</i>													
Isopoda													
<i>Chiridotea</i> sp <i>caeca</i>					1						1		
<i>Chiridotea tuftsi</i>		1											
<i>Edotea triloba</i>				1						2			
<i>Erichsonella filiformis</i>													
<i>Politolana polita</i>													1
Pycnogonida													
<i>Nymphon stromi</i>													
Sessilia													
<i>Balanus amphitrite</i>								10					
Tanaidacea													
<i>Leptochelia savignyi</i>													
<i>Tanaissus psammophilus</i>		1	1	1					2			1	1
ECHINODERMATA													
Asteroidea													
<i>Asterias</i> spp													
Echinoidea													
<i>Echinarachnius parma</i>													
Holothuroidea													
<i>Cucumaria</i> sp													
Ophiuroidea													
<i>Axiognathus squamatus</i>													
MOLLUSCA													
Bivalvia													
<i>Anadara transversa</i>													
<i>Anomia</i> spp (juveniles)													
<i>Astarte borealis</i>		2	1										
<i>Astarte castanea</i>	1												
<i>Cerastoderma pinnulatum</i>													
<i>Crassinella mactracea</i>													
<i>Crenella decussata</i>													
<i>Cyclocardia borealis</i>													
<i>Ensis directus</i>													
<i>Lyonsia arenosa</i>	4									1	1		1

Species	T1-5 rep3	T1-6 rep1	T1-6 rep2	T1-6 rep3	T1-7 rep1	T1-7 rep2	T1-7 rep3	T1-8 rep1	T1-8 rep2	T1-8 rep3	T1-9 rep1	T1-9 rep2	T1-9 rep3
<i>Lyonsia hyalina</i>													
<i>Mytilus edulis</i>		3										1	
<i>Nucula tenuis</i>													
<i>Pandora gouldiana</i>													
<i>Spisula solidissima</i>		3	1							1			
<i>Tellina agilis</i>					1					1		1	1
Gastropoda													
<i>Crepidula fornicata</i>											1		
<i>Crepidula plana</i>													
<i>Euspira heros</i>													
<i>Euspira triseriata</i>													
<i>Ilyanassa trivittata</i>													
<i>Retusa obtusa</i>													
<i>Turbonilla</i> sp													
Polyplacophora													
<i>Chaetopleura apiculata</i>													
ANNELIDA													
Oligochaeta													
Oligochaeta spp			1										1
Polychaeta													
<i>Ampharete arctica</i>													
<i>Aricidea catherinae</i>	2									4	4	3	1
<i>Asabellides oculata</i>													
<i>Asychis elongata</i>													
<i>Autolytus prolifer</i>													
<i>Cirrophorus</i> sp	1	1		1							5	2	
<i>Dipolydora</i> sp													
<i>Dodecaceria coralii</i>													
<i>Drilonereis magna</i>		1	1		1								
<i>Ephesiella minuta</i>													
<i>Eumida sanguinea</i>							1					1	
<i>Exogone hebes</i>	2	1								2			2
<i>Exogone naidina</i>													
<i>Glycera americana</i>													
<i>Glycera dibranchiata</i>													
<i>Goniadella gracilis</i>	20	1	5	1	7		2	9		9	10	7	1
<i>Harmothoe</i> sp													
<i>Lepidonotus squamatus</i>													
<i>Lumbrinereis acuta</i>	23	2	4		1			1		6	18	3	6
<i>Lumbrinereis fragilis</i>	3	1	1	1						1	3		
Maldanidae spp	2	2			1		1	1			8	1	4
<i>Marphysa bellii</i>	1												

Species	T1-5 rep3	T1-6 rep1	T1-6 rep2	T1-6 rep3	T1-7 rep1	T1-7 rep2	T1-7 rep3	T1-8 rep1	T1-8 rep2	T1-8 rep3	T1-9 rep1	T1-9 rep2	T1-9 rep3
<i>Megalona</i> sp												1	1
<i>Microphthalmus sckelkowi</i>													
<i>Monticellina baptisteeae</i>	2	1	3	2	1	1		2		2	2	2	2
<i>Mystides</i> sp													
<i>Nephtys bucera</i>	1	1	2	2	1			1	1		1	3	2
<i>Nephtys ciliata</i>													
<i>Nereis arenaceodonta</i>													
<i>Nereis zonata</i>													
<i>Odontosyllis fulgurans</i>											1		
<i>Ophelia denticulata</i>													
<i>Ophioglycera gigantea</i>													
<i>Owenia fusiformis</i>													
<i>Paranaitis speciosa</i>													
<i>Paraonis</i> sp											2	1	1
<i>Parapionosyllis longicirrata</i>	2	1								3	2	3	5
<i>Parougia caeca</i>													
<i>Phyllodoce arenae</i>													
<i>Phyllodoce maculata</i>													
<i>Pisone</i> sp										1		5	
<i>Pistasp</i> (juveniles)													
<i>Polycirrus eximius</i>												1	
<i>Polydora</i> sp								3					
<i>Polygordius</i> spp		1			3		1	5	5	8	18	12	31
<i>Potamilla reniformis</i>													
<i>Proceraea ?fasciata</i>													
<i>Sabellaria vulgaris</i>							24	1		1	3	26	
<i>Scalibregma inflatum</i>													
<i>Sigalion arenicola</i>		1	1					1					
<i>Sphaerosyllis erinaceus</i>	1						1				3	1	9
<i>Spio setosa</i>													
<i>Spiochaetopterus oculatus</i>			1								1		
<i>Spiophanes bombyx</i>		1											
<i>Spirorbis</i> spp													
<i>Syllides</i> sp										1	1		
<i>Travisia carnea</i>													
<i>Typosyllis coronuta</i>													
OTHER (PHYLUM: sp(p))													
CHORDATA: <i>Gobiosoma bosci</i>													
COPEPODA: Harpacticoid spp	2	1					2	1				1	1
NEMERTEA: <i>Cerebratulus lacteus</i>													
NEMERTEA: Nemertea spp	1										2	2	1
NEMATODA: Nematoda spp	18	8	2	4	3	8	3	7	2	12	10	5	15
Number of Species	19	27	15	9	12	6	8	13	5	17	23	25	22
Total Number of Organisms	88	45	26	14	22	14	47	44	13	64	100	106	91

G.1 Species List Year 1 (Winter 2016-2017) of Vessel-Based Grab Samples (Cont.)

Species	T3-1 rep1	T3-1 rep2	T3-1 rep3	T3-2 rep1	T3-2 rep2	T3-2 rep3	T3-4 rep1	T3-4 rep2	T3-4 rep3	T3-5 rep1	T3-5 rep2	T3-5 rep3
ACTINIARIA												
<i>Actiniaria</i> spp				1								
ARTHROPODA												
Amphipoda												
<i>Ampelisca vadorum</i>												
<i>Aeginina longicornis</i>												
<i>Byblis serrata</i>												
<i>Caprella equilibra</i>												
<i>Caprella penantis</i>												
<i>Caprella unica</i>												
<i>Corophium</i> spp												
<i>Dulchia</i> sp												
<i>Erichthonius rubricornis</i>												
<i>Gammaropsis maculata</i>												
<i>Hippomedon serratus</i>												
<i>Ischyrocerus anguipes</i>												
<i>Jassa marmorata</i>												
<i>Lembos websteri</i>												
<i>Leptocheirus pinguis</i>												
<i>Luconacia incerta</i>												
<i>Melita dentata</i>												
<i>Microdeutopus anomalus</i>												
<i>Monoculodes</i> sp												
<i>Parametopella cypris</i>												
<i>Phoxocephalus holbolli</i>												
Pleustidae sp												
<i>Pontogenia inermis</i>												
<i>Probolooides holmesi</i>												
<i>Protohaustorius wigleyi</i>												
<i>Psammonyx nobilis</i>												1
<i>Pseudunciola obliqua</i>												
<i>Rhepoxynuis epistomus</i>												
<i>Siphonoecetes smithianus</i>												
<i>Stenopleustes gracilis</i>												
<i>Stenothoe minuta</i>												
<i>Unciola irrorata</i>	3			1	2		6	1	10	7	5	1
Cumacea												
<i>Diastylis</i> sp												
<i>Pseudoleptocuma minor</i>												
Decapoda												
<i>Cancer borealis</i>												

Species	T3-1 rep1	T3-1 rep2	T3-1 rep3	T3-2 rep1	T3-2 rep2	T3-2 rep3	T3-4 rep1	T3-4 rep2	T3-4 rep3	T3-5 rep1	T3-5 rep2	T3-5 rep3
<i>Cancer species juvenile ?irroratus</i>												
<i>Crangon septemspinosa</i>												
<i>Pagurus annulipes</i>												
Isopoda												
<i>Chiridotea sp caeca</i>			1					1			1	3
<i>Chiridotea tuftsi</i>												
<i>Edotea triloba</i>	1											
<i>Erichsonella filiformis</i>												
<i>Politolana polita</i>	1					2						
Pycnogonida												
<i>Nymphon stromi</i>												
Sessilia												
<i>Balanus amphitrite</i>			1									
Tanaidacea												
<i>Leptochelia savignyi</i>												
<i>Tanaissus psammophilus</i>												
ECHINODERMATA												
Asteroidea												
<i>Asterias spp</i>												
Echinoidea												
<i>Echinarachnius parma</i>										1		
Holothuroidea												
<i>Cucumaria sp</i>												
Ophiuroidea												
<i>Axiognathus squamatus</i>												
MOLLUSCA												
Bivalvia												
<i>Anadara transversa</i>												
<i>Anomia spp (juveniles)</i>												
<i>Astarte borealis</i>					1				1			
<i>Astarte castanea</i>		1										
<i>Cerastoderma pinnulatum</i>											1	
<i>Crassinella mactracea</i>												
<i>Crenella decussata</i>												
<i>Cyclocardia borealis</i>												
<i>Ensis directus</i>												
<i>Lyonsia arenosa</i>		2	1	1	2	1		2		1	2	

Species	T3-1 rep1	T3-1 rep2	T3-1 rep3	T3-2 rep1	T3-2 rep2	T3-2 rep3	T3-4 rep1	T3-4 rep2	T3-4 rep3	T3-5 rep1	T3-5 rep2	T3-5 rep3
<i>Lyonsia hyalina</i>												
<i>Mytilus edulis</i>			1	1		3						
<i>Nucula tenuis</i>												
<i>Pandora gouldiana</i>												
<i>Spisula solidissima</i>	2	1	1	1	2							
<i>Tellina agilis</i>												
Gastropoda												
<i>Crepidula fornicata</i>	1		2									
<i>Crepidula plana</i>												
<i>Euspira heros</i>												
<i>Euspira triseriata</i>												
<i>Ilyanassa trivittata</i>												
<i>Retusa obtusa</i>												
<i>Turbonilla</i> sp								1				
Polyplacophora												
<i>Chaetopleura apiculata</i>												
ANNELIDA												
Oligochaeta												
Oligochaeta spp		2			1		2					
Polychaeta												
<i>Ampharete arctica</i>												
<i>Aricidea catherinae</i>	2	3	12		12	7	4	7	2	2	5	3
<i>Asabellides oculata</i>												
<i>Asychis elongata</i>												
<i>Autolytus prolifer</i>												
<i>Cirrophorus</i> sp	7	4	1	8	14	1	3	3	7	1	2	9
<i>Dipolydora</i> sp												
<i>Dodecaceria corallii</i>												
<i>Drilonereis magna</i>												
<i>Ephesiella minuta</i>												
<i>Eumida sanguinea</i>		2			2					1		
<i>Exogone hebes</i>												1
<i>Exogone naidina</i>												
<i>Glycera americana</i>	1											
<i>Glycera dibranchiata</i>							1					
<i>Goniadella gracilis</i>	14	7	9	12	11	5	5	5	3	3	2	16
<i>Harmothoe</i> sp												
<i>Lepidonotus squamatus</i>												
<i>Lumbrinereis acuta</i>	21	27	18	15	23	29	9	31	7		4	8
<i>Lumbrinereis fragilis</i>	4	3	2			4	2	1		1		
Maldanidae spp	3	2	4		6	3	12	4	4	3	2	10
<i>Marphysa bellii</i>	3	1	1			1				1		

Species	T3-1 rep1	T3-1 rep2	T3-1 rep3	T3-2 rep1	T3-2 rep2	T3-2 rep3	T3-4 rep1	T3-4 rep2	T3-4 rep3	T3-5 rep1	T3-5 rep2	T3-5 rep3
<i>Megalona</i> sp												
<i>Microphthalmus sckelkowi</i>	3	2										
<i>Monticellina baptisteeae</i>		1	3	3	2	3			2		4	1
<i>Mystides</i> sp				2							1	
<i>Nephtys bucera</i>												
<i>Nephtys ciliata</i>												
<i>Nereis arenaceodonta</i>												
<i>Nereis zonata</i>												
<i>Odontosyllis fulgurans</i>	1	1		1	2	3	1				2	
<i>Ophelia denticulata</i>												
<i>Ophioglycera gigantea</i>												
<i>Owenia fusiformis</i>											1	
<i>Paranaitis speciosa</i>												
<i>Paraonis</i> sp												1
<i>Parapionosyllis longicirrata</i>	2	4		5	8	6	3	1	5	2	1	1
<i>Parougia caeca</i>	3	5		2	6	8				1	1	
<i>Phyllodoce arenae</i>												
<i>Phyllodoce maculata</i>												
<i>Pisone</i> sp	29	13	115	29	30	21	18	15	9	5	2	23
<i>Pistasp</i> (juveniles)												
<i>Polycirrus eximius</i>	4	5	12	13	20	40	40	23	21	57	1	36
<i>Polydora</i> sp												
<i>Polygordius</i> spp	21	25	27	15	8	1	14	5	14	12	17	10
<i>Potamilla reniformis</i>												
<i>Proceraea ?fasciata</i>												
<i>Sabellaria vulgaris</i>												
<i>Scalibregma inflatum</i>									1			
<i>Sigalion arenicola</i>				2		2	1			3		2
<i>Sphaerosyllis erinaceus</i>	3	2			6	6			1		1	1
<i>Spio setosa</i>						1						
<i>Spiochaetopterus oculatus</i>										1		
<i>Spiophanes bombyx</i>												
<i>Spirorbis</i> spp												
<i>Syllides</i> sp										1		
<i>Travisia carnea</i>												
<i>Typosyllis coronuta</i>												
OTHER (PHYLUM: sp(p))												
CHORDATA: <i>Gobiosoma bosci</i>												
COPEPODA: Harpacticoid spp		1			6					1	1	
NEMERTEA: <i>Cerebratulus lacteus</i>					1			2				
NEMERTEA: Nemertea spp		2	1	2	1	1	2		1			2
NEMATODA: Nematoda spp	43	88	62	73	58	50	8	8	20	16	6	18
Number of Species	22	24	19	19	23	22	17	16	16	20	21	19
Total Number of Organisms	172	204	274	187	224	198	131	110	108	120	62	147

G.1 Species List Year 1 (Winter 2016-2017) of Vessel-Based Grab Samples (Cont.)

Species	T3-6 rep1	T3-6 rep2	T3-6 rep3	T3-7 rep1	T3-7 rep2	T3-7 rep3	T3-8 rep1	T3-8 rep2	T3-8 rep3	T3-9 rep1	T3-9 rep2	T3-9 rep3
ACTINIARIA												
<i>Actiniaria</i> spp		1						2				
ARTHROPODA												
Amphipoda												
<i>Ampelisca vadorum</i>												
<i>Aeginina longicornis</i>												
<i>Byblis serrata</i>												
<i>Caprella equilibra</i>												
<i>Caprella penantis</i>												
<i>Caprella unica</i>												
<i>Corophium</i> spp												
<i>Dulchia</i> sp												
<i>Erichthonius rubricornis</i>												
<i>Gammaropsis maculata</i>												
<i>Hippomedon serratus</i>												
<i>Ischyrocerus anguipes</i>												
<i>Jassa marmorata</i>												
<i>Lembos websteri</i>												
<i>Leptocheirus pinguis</i>												
<i>Luconacia incerta</i>												
<i>Melita dentata</i>												
<i>Microdeutopus anomalus</i>												
<i>Monoculodes</i> sp									1			
<i>Parametopella cypris</i>												
<i>Phoxocephalus holbolli</i>											1	
Pleustidae sp												
<i>Pontogenia inermis</i>												
<i>Proboloides holmesi</i>												
<i>Protohaustorius wigleyi</i>												
<i>Psammonyx nobilis</i>												
<i>Pseudunciola obliqua</i>												
<i>Rhepoxynuis epistomus</i>												
<i>Siphonoecetes smithianus</i>	1											
<i>Stenopleustes gracilis</i>												
<i>Stenothoe minuta</i>												
<i>Unciola irrorata</i>	1	6	2	8	1	2	4		19		9	3
Cumacea												
<i>Diastylis</i> sp												
<i>Pseudoleptocuma minor</i>												
Decapoda												
<i>Cancer borealis</i>												

Species	T3-6 rep1	T3-6 rep2	T3-6 rep3	T3-7 rep1	T3-7 rep2	T3-7 rep3	T3-8 rep1	T3-8 rep2	T3-8 rep3	T3-9 rep1	T3-9 rep2	T3-9 rep3
<i>Cancer</i> species juvenile ? <i>irroratus</i>												
<i>Crangon septemspinosa</i>												
<i>Pagurus annulipes</i>												
Isopoda												
<i>Chiridotea</i> sp <i>caeca</i>	1		3	1	1	3	1	1	1	4	1	1
<i>Chiridotea tuftsi</i>												
<i>Edotea triloba</i>												
<i>Erichsonella filiformis</i>												
<i>Politolana polita</i>												
Pycnogonida												
<i>Nymphon stromi</i>												
Sessilia												
<i>Balanus amphitrite</i>							1					
Tanaidacea												
<i>Leptochelia savignyi</i>												
<i>Tanaissus psammophilus</i>	1			1								
ECHINODERMATA												
Asteroidea												
<i>Asterias</i> spp												
Echinoidea												
<i>Echinarachnius parma</i>												
Holothuroidea												
<i>Cucumaria</i> sp			1									
Ophiuroidea												
<i>Axiognathus squamatus</i>												
MOLLUSCA												
Bivalvia												
<i>Anadara transversa</i>												
<i>Anomia</i> spp (juveniles)												
<i>Astarte borealis</i>								1			1	
<i>Astarte castanea</i>			1									
<i>Cerastoderma pinnulatum</i>												
<i>Crassinella mactracea</i>												
<i>Crenella decussata</i>												
<i>Cyclocardia borealis</i>												
<i>Ensis directus</i>												
<i>Lyonsia arenosa</i>	1				2	2	1	2	2			4

Species	T3-6 rep1	T3-6 rep2	T3-6 rep3	T3-7 rep1	T3-7 rep2	T3-7 rep3	T3-8 rep1	T3-8 rep2	T3-8 rep3	T3-9 rep1	T3-9 rep2	T3-9 rep3
<i>Lyonsia hyalina</i>												
<i>Mytilus edulis</i>					1		1					
<i>Nucula tenuis</i>												
<i>Pandora gouldiana</i>												
<i>Spisula solidissima</i>						1	1	1		2		
<i>Tellina agilis</i>		1			2				1			
Gastropoda												
<i>Crepidula fornicata</i>			1									
<i>Crepidula plana</i>												
<i>Euspira heros</i>		1										
<i>Euspira triseriata</i>												
<i>Ilyanassa trivittata</i>							2					
<i>Retusa obtusa</i>												
<i>Turbonilla</i> sp												
Polyplacophora												
<i>Chaetopleura apiculata</i>												
ANNELIDA												
Oligochaeta												
Oligochaeta spp	2	1			1	1		1				
Polychaeta												
<i>Ampharete arctica</i>												
<i>Aricidea catherinae</i>	4	14	26	6	5	6	5	8	5		5	
<i>Asabellides oculata</i>												
<i>Asychis elongata</i>												
<i>Autolytus prolifer</i>												
<i>Cirrophorus</i> sp	3	5	5	6	17	16	5	14	15	1	7	4
<i>Dipolydora</i> sp												
<i>Dodecaceria corallii</i>												
<i>Drilonereis magna</i>	1											
<i>Ephesiella minuta</i>												
<i>Eumida sanguinea</i>		1		3	1			1			1	1
<i>Exogone hebes</i>												1
<i>Exogone naidina</i>												
<i>Glycera americana</i>												
<i>Glycera dibranchiata</i>												
<i>Goniadella gracilis</i>	10	2	4		3	3	3	6	7	12	6	5
<i>Harmothoe</i> sp												
<i>Lepidonotus squamatus</i>												
<i>Lumbrinereis acuta</i>	16	18	34	6	5	23	10	33	17	15	15	26
<i>Lumbrinereis fragilis</i>		2	1				2	5	1		1	1
Maldanidae spp	3	14	6		4	6	4	11	7		8	1
<i>Marphysa bellii</i>			1									

Species	T3-6 rep1	T3-6 rep2	T3-6 rep3	T3-7 rep1	T3-7 rep2	T3-7 rep3	T3-8 rep1	T3-8 rep2	T3-8 rep3	T3-9 rep1	T3-9 rep2	T3-9 rep3
<i>Megalona</i> sp												
<i>Microphthalmus sckelkowi</i>									1			
<i>Monticellina baptisteeae</i>		4	2		1	2			1	2	2	
<i>Mystides</i> sp		4	1		1	1						
<i>Nephtys bucera</i>												
<i>Nephtys ciliata</i>												
<i>Nereis arenaceodonta</i>												
<i>Nereis zonata</i>												
<i>Odontosyllis fulgurans</i>		12	3	1	8	2		1	4			
<i>Ophelia denticulata</i>												
<i>Ophioglycera gigantea</i>												
<i>Owenia fusiformis</i>						1						
<i>Paranaitis speciosa</i>												
<i>Paraonis</i> sp			1						1			
<i>Parapionosyllis longicirrata</i>		13	2		6	11	4	8	5	2	1	
<i>Parougia caeca</i>		4	3		4	3	3	3	1	2		
<i>Phyllodoce arenae</i>							1					
<i>Phyllodoce maculata</i>												
<i>Pisione</i> sp	32	23	37	3	24	21	27	46	20	10	8	11
<i>Pistasp</i> (juveniles)												
<i>Polycirrus eximius</i>	5	24	48	140	51	34	35	40	44	6	56	33
<i>Polydora</i> sp	2	7	2									
<i>Polygordiusspp</i>	10	24	36	11	19	36	5	45	19	11	7	6
<i>Potamilla reniformis</i>												
<i>Proceraea ?fasciata</i>												
<i>Sabellaria vulgaris</i>							4					
<i>Scalibregma inflatum</i>									1			1
<i>Sigalion arenicola</i>	2	1	1		1	3		2			3	2
<i>Sphaerosyllis erinaceus</i>		15	2		8	1			3			
<i>Spio setosa</i>		2										
<i>Spiochaetopterus oculatus</i>												
<i>Spiophanes bombyx</i>												
<i>Spirorbis</i> spp												
<i>Syllides</i> sp						1						
<i>Travisia carnea</i>		2							1			
<i>Typosyllis coronuta</i>												
OTHER (PHYLUM: sp(p))												
CHORDATA: <i>Gobiosoma bosci</i>												
COPEPODA: Harpacticoid spp		2			6			1			1	1
NEMERTEA: <i>Cerebratulus lacteus</i>	2			1		1		1			1	
NEMERTEA: Nemeritea spp		2	2	2		3	2					4
NEMATODA: Nematoda spp	10	66	123	3	106	38	87	128	56	19	17	6
Number of Species	19	28	26	14	24	25	22	23	24	12	20	18
Total Number of Organisms	107	271	348	192	278	221	208	361	233	86	151	111

G.1 Species List Year 1 (Winter 2016-2017) of Vessel-Based Grab Samples (Cont.)

Species	T5-1 rep1	T5-1 rep2	T5-1 rep3	T5-2 rep1	T5-2 rep2	T5-2 rep3	T5-3 rep1	T5-3 rep2	T5-3 rep3	T5-4 rep1	T5-4 rep2	T5-4 rep3	T5-5 rep1
ACTINIARIA													
<i>Actiniaria</i> spp									1				
ARTHROPODA													
Amphipoda													
<i>Ampelisca vadorum</i>			1										
<i>Aeginina longicornis</i>													
<i>Byblis serrata</i>			1										
<i>Caprella equilibra</i>													
<i>Caprella penantis</i>													
<i>Caprella unica</i>													
<i>Corophium</i> spp													
<i>Dulchia</i> sp													
<i>Erichthonius rubricornis</i>													
<i>Gammaropsis maculata</i>													
<i>Hippomedon serratus</i>													1
<i>Ischyrocerus anguipes</i>													
<i>Jassa marmorata</i>		1											
<i>Lembos websteri</i>													
<i>Leptocheirus pinguis</i>													
<i>Luconacia incerta</i>													
<i>Melita dentata</i>													
<i>Microdeutopus anomalus</i>													
<i>Monoculodes</i> sp						1				1		1	1
<i>Parametopella cypris</i>													
<i>Phoxocephalus holbolli</i>													
Pleustidae sp													
<i>Pontogenia inermis</i>													
<i>Probolooides holmesi</i>													
<i>Protohaustorius wigleyi</i>													
<i>Psammonyx nobilis</i>													
<i>Pseudunciola obliqua</i>										7	6		1
<i>Rhepoxynuis epistomus</i>										2	3		2
<i>Siphonoecetes smithianus</i>													
<i>Stenopleustes gracilis</i>													
<i>Stenothoe minuta</i>													
<i>Unciola irrorata</i>	2	2	1			1							
Cumacea													
<i>Diastylis</i> sp													
<i>Pseudoleptocuma minor</i>					1								
Decapoda													
<i>Cancer borealis</i>													

Species	T5-1 rep1	T5-1 rep2	T5-1 rep3	T5-2 rep1	T5-2 rep2	T5-2 rep3	T5-3 rep1	T5-3 rep2	T5-3 rep3	T5-4 rep1	T5-4 rep2	T5-4 rep3	T5-5 rep1
<i>Cancer</i> species juvenile ? <i>irroratus</i>													
<i>Crangon septemspinosa</i>													
<i>Pagurus annulipes</i>													
Isopoda													
<i>Chiridotea</i> sp caeca			1	2	3	2				1	1	1	
<i>Chiridotea tuftsi</i>													
<i>Edotea triloba</i>													
<i>Erichsonella filiformis</i>													
<i>Politolana polita</i>					1						1		1
Pycnogonida													
<i>Nymphon stromi</i>													
Sessilia													
<i>Balanus amphitrite</i>													
Tanaidacea													
<i>Leptochelia savignyi</i>													
<i>Tanaissus psammophilus</i>							1			20	15	1	1
ECHINODERMATA													
Asteroidea													
<i>Asterias</i> spp													
Echinoidea													
<i>Echinarachnius parma</i>										1			
Holothuroidea													
<i>Cucumaria</i> sp													
Ophiuroidea													
<i>Axiognathus squamatus</i>													
MOLLUSCA													
Bivalvia													
<i>Anadara transversa</i>													
<i>Anomia</i> spp (juveniles)													
<i>Astarte borealis</i>											2		
<i>Astarte castanea</i>		2	4		1								2
<i>Cerastoderma pinnulatum</i>													
<i>Crassinella mactracea</i>													
<i>Crenella decussata</i>													
<i>Cyclocardia borealis</i>													
<i>Ensis directus</i>													
<i>Lyonsia arenosa</i>		1	1							2			1

Species	T5-1 rep1	T5-1 rep2	T5-1 rep3	T5-2 rep1	T5-2 rep2	T5-2 rep3	T5-3 rep1	T5-3 rep2	T5-3 rep3	T5-4 rep1	T5-4 rep2	T5-4 rep3	T5-5 rep1
<i>Lyonsia hyalina</i>													
<i>Mytilus edulis</i>	2						1		2				
<i>Nucula tenuis</i>													
<i>Pandora gouldiana</i>													
<i>Spisula solidissima</i>				1	1	1				5	1	1	
<i>Tellina agilis</i>													
Gastropoda													
<i>Crepidula fornicata</i>													
<i>Crepidula plana</i>													
<i>Euspira heros</i>	1		1										
<i>Euspira triseriata</i>													
<i>Ilyanassa trivittata</i>													
<i>Retusa obtusa</i>													
<i>Turbonilla</i> sp													
Polyplacophora													
<i>Chaetopleura apiculata</i>													
ANNELIDA													
Oligochaeta													
Oligochaeta spp													
Polychaeta													
<i>Ampharete arctica</i>										1			
<i>Aricidea catherinae</i>	1			2					16				
<i>Asabellides oculata</i>													
<i>Asychis elongata</i>													
<i>Autolytus prolifer</i>													
<i>Cirrophorus</i> sp	2	3	1	3		3		2	6	1		1	1
<i>Dipolydora</i> sp													
<i>Dodecaceria coralii</i>													
<i>Drilonereis magna</i>													
<i>Ephesiella minuta</i>													
<i>Eumida sanguinea</i>	3	3	4					1	4				
<i>Exogone hebes</i>													
<i>Exogone naidina</i>													
<i>Glycera americana</i>			1		1								1
<i>Glycera dibranchiata</i>													
<i>Goniadella gracilis</i>	7			7	13	6	2	1	18	7	4	8	11
<i>Harmothoe</i> sp													
<i>Lepidonotus squamatus</i>													
<i>Lumbrinereis acuta</i>	15	17	1	24	26	28	6	16	61	4	4	14	8
<i>Lumbrinereis fragilis</i>		3	3	1		1		4	11	1		2	
Maldanidae spp	1			1			1	1	1	6	2	3	1
<i>Marphysa bellii</i>									6				

Species	T5-1 rep1	T5-1 rep2	T5- 1rep3	T5-2 rep1	T5-2 rep2	T5-2 rep3	T5-3 rep1	T5- 3rep2	T5-3 rep3	T5-4 rep1	T5-4 rep2	T5-4 rep3	T5-5 rep1
<i>Megalona</i> sp					1								1
<i>Microphthalmus sckelkowi</i>													
<i>Monticellina baptisteeae</i>				1	1	2				1	1		2
<i>Mystides</i> sp	1	1		1	1		1	1	2	2			1
<i>Nephtys bucera</i>										3	1		1
<i>Nephtys ciliata</i>													
<i>Nereis arenaceodonta</i>			1										
<i>Nereis zonata</i>													
<i>Odontosyllis fulgurans</i>													
<i>Ophelia denticulata</i>									2				
<i>Ophioglycera gigantea</i>													
<i>Owenia fusiformis</i>							1			1			
<i>Paranaitis speciosa</i>													
<i>Paraonis</i> sp												1	
<i>Parapionosyllis longicirrata</i>	1	2		3	3	3			14	3	1		3
<i>Parougia caeca</i>		2	6		2				6	1			
<i>Phyllodoce arenae</i>													
<i>Phyllodoce maculata</i>													
<i>Pisione</i> sp	19	15		8	22	3	3	24	43	3	1	9	6
<i>Pistasp</i> (juveniles)	1												
<i>Polycirrus eximius</i>	18	30	1	21	3	3	6	37	98	2			4
<i>Polydora</i> sp													
<i>Polygordius</i> spp	15	105	312	20	20	18	6	3	15	3	2	3	4
<i>Potamilla reniformis</i>													
<i>Proceraea ?fasciata</i>													
<i>Sabellaria vulgaris</i>	1												
<i>Scalibregma inflatum</i>													
<i>Sigalion arenicola</i>	1	1		4								1	
<i>Sphaerosyllis erinaceus</i>													
<i>Spio setosa</i>													
<i>Spiochaetopterus oculatus</i>													
<i>Spiophanes bombyx</i>									1				
<i>Spirorbis</i> spp													
<i>Syllides</i> sp										2			
<i>Travisia carnea</i>		1	1					2					
<i>Typosyllis coronuta</i>	1			1	1		1						
OTHER (PHYLUM: sp(p))													
CHORDATA: <i>Gobiosoma bosci</i>													
COPEPODA: Harpacticoid spp				1			1						
NEMERTEA: <i>Cerebratulus lacteus</i>					1								
NEMERTEA: Nemeritea spp			1		1					1	2	1	
NEMATODA: Nematoda spp	30	24	42	60	140	86	6	10	55	96	80	16	72
Number of Species	19	17	19	18	20	15	12	12	19	26	19	13	22
Total Number of Organisms	122	213	384	161	243	159	35	102	362	177	129	61	126

G.1 Species List Year 1 (Winter 2016-2017) of Vessel-Based Grab Samples (Cont.)

Species	T5-5 rep2	T5-5 rep3	T5-6 rep1	T5-6 rep2	T5-6 rep3	T5-7 rep1	T5-7 rep2	T5-7 rep3	T5-8 rep1	T5-8 rep2	T5-8 rep3	T5-9 rep1	T5-9 rep2	T5-9 rep3
ACTINIARIA														
Actiniaria spp														
ARTHROPODA														
Amphipoda														
<i>Ampelisca vadorum</i>														
<i>Aeginina longicornis</i>														
<i>Byblis serrata</i>		1												
<i>Caprella equilibra</i>						6								
<i>Caprella penantis</i>														
<i>Caprella unica</i>						1								
<i>Corophium</i> spp				1		7								
<i>Dulchia</i> sp														
<i>Erichthonius rubricornis</i>				7		31								
<i>Gammaropsis maculata</i>				5		33							1	
<i>Hippomedon serratus</i>		1												
<i>Ischyrocerus anguipes</i>														
<i>Jassa marmorata</i>				4		5		5			3			1
<i>Lembos websteri</i>														
<i>Leptocheirus pinguis</i>														
<i>Luconacia incerta</i>						1								
<i>Melita dentata</i>														
<i>Microdeutopus anomalous</i>														
<i>Monoculodes</i> sp								1						
<i>Parametopella cypris</i>														
<i>Phoxocephalus holbolli</i>														
Pleustidae sp														
<i>Pontogenia inermis</i>						2								
<i>Probolooides holmesi</i>													1	
<i>Protohaustorius wigleyi</i>														
<i>Psammonyx nobilis</i>														
<i>Pseudunciola obliquua</i>		1												
<i>Rhepoxynuis epistomus</i>	1	3												
<i>Siphonocetes smithianus</i>														
<i>Stenopleustes gracilis</i>														
<i>Stenothoe minuta</i>														
<i>Unciola irrorata</i>														1
Cumacea														
<i>Diastylis</i> sp														
<i>Pseudoleptocuma minor</i>														
Decapoda														
<i>Cancer borealis</i>														

Species	T5-5 rep2	T5-5 rep3	T5-6 rep1	T5-6 rep2	T5-6 rep3	T5-7 rep1	T5-7 rep2	T5-7 rep3	T5-8 rep1	T5-8 rep2	T5-8 rep3	T5-9 rep1	T5-9 rep2	T5-9 rep3
<i>Cancer</i> species juvenile ? <i>irroratus</i>														
<i>Crangon septemspinosa</i>												1		
<i>Pagurus annulipes</i>														
Isopoda														
<i>Chiridotea</i> sp <i>caeca</i>	1		1	2			4	2	2				1	1
<i>Chiridotea tuftsi</i>														
<i>Edotea triloba</i>		1				1								
<i>Erichsonella filiformis</i>														
<i>Politolana polita</i>	2			1										
Pycnogonida														
<i>Nymphon stromi</i>														
Sessilia														
<i>Balanus amphitrite</i>						8								
Tanaidacea														
<i>Leptochelia savignyi</i>														
<i>Tanaissus psammophilus</i>	3	5												
ECHINODERMATA														
Asteroidea														
<i>Asterias</i> spp							1							
Echinoidea														
<i>Echinarachnius parma</i>														
Holothuroidea														
<i>Cucumaria</i> sp														
Ophiuroidea														
<i>Axiognathus squamatus</i>														
MOLLUSCA														
Bivalvia														
<i>Anadara transversa</i>						2								
<i>Anomia</i> spp (juveniles)						3								
<i>Astarte borealis</i>														
<i>Astarte castanea</i>	1			3	1	1	3					4	8	4
<i>Cerastoderma pinnulatum</i>														
<i>Crassinella mactracea</i>				1										
<i>Crenella decussata</i>														
<i>Cyclocardia borealis</i>														
<i>Ensis directus</i>														
<i>Lyonsia arenosa</i>				1										

Species	T5-5 rep2	T5-5 rep3	T5-6 rep1	T5-6 rep2	T5-6 rep3	T5-7 rep1	T5-7 rep2	T5-7 rep3	T5-8 rep1	T5-8 rep2	T5-8 rep3	T5-9 rep1	T5-9 rep2	T5-9 rep3
<i>Lyonsia hyalina</i>														
<i>Mytilus edulis</i>					2	4			1		4	1		
<i>Nucula tenuis</i>									3					
<i>Pandora gouldiana</i>														
<i>Spisula solidissima</i>				1				1						
<i>Tellina agilis</i>		2												
Gastropoda														
<i>Crepidula fornicata</i>														
<i>Crepidula plana</i>											1			
<i>Euspira heros</i>														
<i>Euspira triseriata</i>														1
<i>Ilyanassa trivittata</i>														
<i>Retusa obtusa</i>														
<i>Turbonilla</i> sp														
Polyplacophora														
<i>Chaetopleura apiculata</i>														
ANNELIDA														
Oligochaeta														
Oligochaeta spp														
Polychaeta														
<i>Ampharete arctica</i>														
<i>Aricidea catherinae</i>								1					1	1
<i>Asabellides oculata</i>	1													
<i>Asychis elongata</i>														
<i>Autolytus prolifer</i>														
<i>Cirrophorus</i> sp	1		1		2		3					4	2	4
<i>Dipolydora</i> sp														
<i>Dodecaceria corallii</i>			1											
<i>Drilonereis magna</i>														
<i>Ephesiella minuta</i>														
<i>Eumida sanguinea</i>				2			7	1	2		1	2	7	4
<i>Exogone hebes</i>														
<i>Exogone naidina</i>														
<i>Glycera americana</i>														
<i>Glycera dibranchiata</i>														
<i>Goniadella gracilis</i>	5	3	8	3	11	1	3	2	2	1		4	6	1
<i>Harmothoe</i> sp														
<i>Lepidonotus squamatus</i>														
<i>Lumbrinereis acuta</i>	2		23		16		18	7	14	7	1	11	29	33
<i>Lumbrinereis fragilis</i>			2	1					1			1		
Maldanidae spp	1	1												
<i>Marphysa bellii</i>														

Species	T5-5 rep2	T5-5 rep3	T5-6 rep1	T5-6 rep2	T5-6 rep3	T5-7 rep1	T5-7 rep2	T5-7 rep3	T5-8 rep1	T5-8 rep2	T5-8 rep3	T5-9 rep1	T5-9 rep2	T5-9 rep3
<i>Megalona</i> sp														
<i>Microphthalmus sckelkowii</i>					1									
<i>Monticellina baptisteeae</i>	1		1				3		1	1			1	1
<i>Mystides</i> sp		1	1	4	3			1	1	1		4	2	
<i>Nephtys bucera</i>	1	1												
<i>Nephtys ciliata</i>														
<i>Nereis arenaceodonta</i>														
<i>Nereis zonata</i>														
<i>Odontosyllis fulgurans</i>														
<i>Ophelia denticulata</i>														
<i>Ophioglycera gigantea</i>														
<i>Owenia fusiformis</i>														
<i>Paranaitis speciosa</i>														
<i>Paraonis</i> sp														
<i>Parapionosyllis longicirrata</i>	2	1	4		1		5	1	5	2		7	6	4
<i>Parougia caeca</i>		1	1	1			2		1			6	6	5
<i>Phyllodoce arenae</i>						1								
<i>Phyllodoce maculata</i>														
<i>Pisione</i> sp	2	1	37	37	50	1	11	6	22	12	7	30	40	22
<i>Pistasp</i> (juveniles)						1								
<i>Polycirrus eximius</i>	1		50	54	63	7	63	55	70	36	15	55	77	94
<i>Polydora</i> sp														
<i>Polygordius</i> spp	2	2	33	24	15	16	50	1	33	14	20	30	68	26
<i>Potamilla reniformis</i>														
<i>Proceraea ?fasciata</i>						1								
<i>Sabellaria vulgaris</i>														
<i>Scalibregma inflatum</i>														
<i>Sigalion arenicola</i>	1			1	1								2	
<i>Sphaerosyllis erinaceus</i>	1		1				1						1	2
<i>Spio setosa</i>														
<i>Spiochaetopterus oculatus</i>														
<i>Spiophanes bombyx</i>														
<i>Spirorbis</i> spp														
<i>Syllides</i> sp		1												
<i>Travisia carnea</i>									3					
<i>Typosyllis coronuta</i>	1			1	1		2						1	
OTHER (PHYLUM: sp(p))														
CHORDATA: <i>Gobiosoma bosci</i>														
COPEPODA: Harpacticoid spp				1	2				1				1	8
NEMERTEA: <i>Cerebratulus lacteus</i>			2										1	
NEMERTEA: Nemeritea spp	1			2	1				2				1	
NEMATODA: Nematoda spp	36	60	68	90	80	4	50	26	52	4	4	64	148	98
Number of Species	21	17	16	23	16	22	17	13	17	8	9	15	23	19
Total Number of Organisms	67	86	234	247	250	137	227	109	215	77	56	224	411	311

G.1 Species List Year 1 (Winter 2016-2017) of Vessel-Based Grab Samples (Cont.)

Species	C1-1 rep1	C1-1 rep2	C1-1 rep3	C1-2 rep1	C1-2 rep2	C1-2 rep3	C1-3 rep1	C1-3 rep2	C1-3 rep3	C1-4 rep1	C1-4 rep2	C1-4 rep3
ACTINIARIA												
Actiniaria spp												
ARTHROPODA												
Amphipoda												
<i>Ampelisca vadorum</i>		2		1							1	
<i>Aeginina longicornis</i>												
<i>Byblis serrata</i>												
<i>Caprella equilibra</i>				1								
<i>Caprella penantis</i>		2		1						2		23
<i>Caprella unica</i>							2			1	5	10
<i>Corophium</i> spp		3	1				1			4	17	20
<i>Dulchia</i> sp												
<i>Erichthonius rubricornis</i>		8					1			6	6	8
<i>Gammaropsis maculata</i>		15					3		1	8	2	23
<i>Hippomedon serratus</i>												
<i>Ischyrocerus anguipes</i>											1	
<i>Jassa marmorata</i>		2					2			1	1	12
<i>Lembos websteri</i>		2	1							1	23	2
<i>Leptocheirus pinguis</i>												
<i>Luconacia incerta</i>										2		2
<i>Melita dentata</i>												
<i>Microdeutopus anomalus</i>												
<i>Monoculodes</i> sp												
<i>Parametopella cypris</i>												
<i>Phoxocephalus holbolli</i>		1								3	9	
Pleustidae sp												1
<i>Pontogenia inermis</i>		4								1		1
<i>Probolooides holmesi</i>		4								4	5	9
<i>Protohaustorius wigleyi</i>												
<i>Psammonyx nobilis</i>												
<i>Pseudunciola obliqua</i>												
<i>Rhepoxynuis epistomus</i>												
<i>Siphonoecetes smithianus</i>												
<i>Stenopleustes gracilis</i>												
<i>Stenothoe minuta</i>												3
<i>Unciola irrorata</i>	1		10	3			3			2	5	7
Cumacea												
<i>Diastylis</i> sp												
<i>Pseudoleptocuma minor</i>											2	6
Decapoda												
<i>Cancer borealis</i>		1										

Species	C1-1 rep1	C1-1 rep2	C1-1 rep3	C1-2 rep1	C1-2 rep2	C1-2 rep3	C1-3 rep1	C1-3 rep2	C1-3 rep3	C1-4 rep1	C1-4 rep2	C1-4 rep3
<i>Cancer</i> species juvenile ? <i>irroratus</i>												
<i>Crangon septemspinosa</i>												
<i>Pagurus annulipes</i>	3	1										1
Isopoda												
<i>Chiridotea</i> sp <i>caeca</i>	3		1	1			1	1	2			
<i>Chiridotea tuftsi</i>												
<i>Edotea triloba</i>												
<i>Erichsonella filiformis</i>		1										1
<i>Politolana polita</i>												
Pycnogonida												
<i>Nymphon stromi</i>										1		
Sessilia												
<i>Balanus amphitrite</i>	1		28	27	30	50				3	15	38
Tanaidacea												
<i>Leptochelia savignyi</i>												1
<i>Tanaissus psammophilus</i>	4		4								1	
ECHINODERMATA												
Asteroidea												
<i>Asterias</i> spp					2							
Echinoidea												
<i>Echinarachnius parma</i>												
Holothuroidea												
<i>Cucumaria</i> sp												
Ophiuroidea												
<i>Axiognathus squamatus</i>											4	
MOLLUSCA												
Bivalvia												
<i>Anadara transversa</i>												
<i>Anomia</i> spp (juveniles)		2	1	1		1			1	3	2	5
<i>Astarte borealis</i>												
<i>Astarte castanea</i>	2						4	3		1		
<i>Cerastoderma pinnulatum</i>	2		1									
<i>Crassinella mactracea</i>	2											
<i>Crenella decussata</i>	2		1				1		1			1
<i>Cyclocardia borealis</i>												
<i>Ensis directus</i>												
<i>Lyonsia arenosa</i>	1											

Species	C1-1 rep1	C1-1 rep2	C1-1 rep3	C1-2 rep1	C1-2 rep2	C1-2 rep3	C1-3 rep1	C1-3 rep2	C1-3 rep3	C1-4 rep1	C1-4 rep2	C1-4 rep3
<i>Lyonsia hyalina</i>												
<i>Mytilus edulis</i>						1						
<i>Nucula tenuis</i>							1					
<i>Pandora gouldiana</i>	1											1
<i>Spisula solidissima</i>	1						1		2	1		1
<i>Tellina agilis</i>												
Gastropoda												
<i>Crepidula fornicata</i>			2	1						6		4
<i>Crepidula plana</i>												
<i>Euspira heros</i>												
<i>Euspira triseriata</i>												
<i>Ilyanassa trivittata</i>												
<i>Retusa obtusa</i>											2	
<i>Turbonilla</i> sp												
Polyplacophora												
<i>Chaetopleura apiculata</i>											1	
ANNELIDA												
Oligochaeta												
Oligochaeta spp												
Polychaeta												
<i>Ampharete arctica</i>												
<i>Aricidea catherinae</i>			1									
<i>Asabellides oculata</i>												
<i>Asychis elongata</i>												
<i>Autolytus prolifer</i>												
<i>Cirrophorus</i> sp	1											
<i>Dipolydora</i> sp												
<i>Dodecaceria corallii</i>												
<i>Drilonereis magna</i>												
<i>Ephesiella minuta</i>												
<i>Eumida sanguinea</i>	6	1	3	1	1	2	13	4	6	3	1	4
<i>Exogone hebes</i>		2										
<i>Exogone naidina</i>												
<i>Glycera americana</i>												
<i>Glycera dibranchiata</i>												
<i>Goniadella gracilis</i>	6	1	4				1	4	1	2		3
<i>Harmothoe</i> sp											2	
<i>Lepidonotus squamatus</i>											1	
<i>Lumbrinereis acuta</i>	4		3				4	3	4			
<i>Lumbrinereis fragilis</i>	1		1					1				
Maldanidae spp										2		
<i>Marphysa bellii</i>												

Species	C1-1 rep1	C1-1 rep2	C1-1 rep3	C1-2 rep1	C1-2 rep2	C1-2 rep3	C1-3 rep1	C1-3 rep2	C1-3 rep3	C1-4 rep1	C1-4 rep2	C1-4 rep3
<i>Megalona</i> sp												
<i>Microphthalmus sckelkowi</i>												1
<i>Monticellina baptisteeae</i>	1		1									
<i>Mystides</i> sp												
<i>Nephtys bucera</i>												
<i>Nephtys ciliata</i>												
<i>Nereis arenaceodonta</i>												
<i>Nereis zonata</i>		1									1	
<i>Odontosyllis fulgurans</i>		7									1	
<i>Ophelia denticulata</i>									1			
<i>Ophioglycera gigantea</i>												
<i>Owenia fusiformis</i>												
<i>Paranaitis speciosa</i>												
<i>Paraonis</i> sp												
<i>Parapionosyllis longicirrata</i>	5		2					1	9	2		3
<i>Parougia caeca</i>	1											
<i>Phyllodoce arenae</i>												
<i>Phyllodoce maculata</i>		1										
<i>Pisione</i> sp	15	3	6	1			8	23	20	3		5
<i>Pistasp</i> (juveniles)		7	1							5	16	7
<i>Polycirrus eximius</i>	27		6	2			29	26	14	6		6
<i>Polydora</i> sp											1	
<i>Polygordius</i> spp	17	4	12	2			10	20	9	3	2	3
<i>Potamilla reniformis</i>		1								1		1
<i>Proceraea ?fasciata</i>		1								3	9	3
<i>Sabellaria vulgaris</i>					1	2			1		4	
<i>Scalibregma inflatum</i>												
<i>Sigalion arenicola</i>												
<i>Sphaerosyllis erinaceus</i>	1									1		
<i>Spio setosa</i>												
<i>Spiochaetopterus oculatus</i>												
<i>Spiophanes bombyx</i>			1									
<i>Spirorbis</i> spp		650	1						1	8	16	50
<i>Syllides</i> sp			1									
<i>Travisia carnea</i>	1			1				5		3		1
<i>Typosyllis coronuta</i>				1				1	1			
OTHER (PHYLUM: sp(p))												
CHORDATA: <i>Gobiosoma bosci</i>										1		
COPEPODA: Harpacticoid spp	1	2									2	6
NEMERTEA: <i>Cerebratulus lacteus</i>												
NEMERTEA: Nemeritea spp	1		1				1			1		
NEMATODA: Nematoda spp	32	58	18	6	4	12	48	24	44	12	72	38
Number of Species	28	28	26	15	5	12	13	13	17	34	31	37
Total Number of Organisms	143	787	112	50	38	80	122	116	118	106	230	311

G.1 Species List Year 1 (Winter 2016-2017) of Vessel-Based Grab Samples (Cont.)

Species	C2-1 rep1	C2-1 rep2	C2-1 rep3	C2-2 rep1	C2-2 rep2	C2-2 rep3	C2-3 rep1	C2-3 rep2	C2-3 rep3	C2-4 rep1	C2-4 rep2	C2-4 rep3
ACTINIARIA												
<i>Actiniaria</i> spp				2								
ARTHROPODA												
Amphipoda												
<i>Ampelisca vadorum</i>	5	20	4		128	32	50	101	45			
<i>Aeginina longicornis</i>			1				1					
<i>Byblis serrata</i>		3				3		10	8			
<i>Caprella equilibra</i>												
<i>Caprella penantis</i>												
<i>Caprella unica</i>												
<i>Corophium</i> spp							3					
<i>Dulchia</i> sp												
<i>Erichthonius rubricornis</i>							3					
<i>Gammaropsis maculata</i>				1			2					
<i>Hippomedon serratus</i>												
<i>Ischyrocerus anguipes</i>												
<i>Jassa marmorata</i>												
<i>Lembos websteri</i>												
<i>Leptocheirus pinguis</i>												
<i>Luconacia incerta</i>				1	1		1					
<i>Melita dentata</i>												
<i>Microdeutopus anomalous</i>												
<i>Monoculodes</i> sp										1		
<i>Parametopella cypris</i>												
<i>Phoxocephalus holbolli</i>				3	1	1						
Pleustidae sp												
<i>Pontogenia inermis</i>												
<i>Probolooides holmesi</i>												
<i>Protohaustorius wigleyi</i>												
<i>Psammonyx nobilis</i>												
<i>Pseudunciola obliqua</i>												
<i>Rhepoxynuis epistomus</i>												
<i>Siphonoecetes smithianus</i>												
<i>Stenopleustes gracilis</i>												
<i>Stenothoe minuta</i>												
<i>Unciola irrorata</i>	23	14	9	5	42	9	22	10	8	7	1	3
Cumacea												
<i>Diastylis</i> sp												
<i>Pseudoleptocuma minor</i>												
Decapoda												
<i>Cancer borealis</i>												

Species	C2-1 rep1	C2-1 rep2	C2-1 rep3	C2-2 rep1	C2-2 rep2	C2-2 rep3	C2-3 rep1	C2-3 rep2	C2-3 rep3	C2-4 rep1	C2-4 rep2	C2-4 rep3
<i>Cancer</i> species juvenile ? <i>irroratus</i>												
<i>Crangon septemspinosa</i>												
<i>Pagurus annulipes</i>						1						
Isopoda												
<i>Chiridotea</i> sp <i>caeca</i>	2			3		1						
<i>Chiridotea tuftsi</i>	1									1	1	
<i>Edotea triloba</i>	1				2							
<i>Erichsonella filiformis</i>												
<i>Politolana polita</i>												
Pycnogonida												
<i>Nymphon stromi</i>												
Sessilia												
<i>Balanus amphitrite</i>							1					
Tanaidacea												
<i>Leptochelia savignyi</i>												
<i>Tanaissus psammophilus</i>	1			2								
ECHINODERMATA												
Asteroidea												
<i>Asterias</i> spp												
Echinoidea												
<i>Echinarachnius parma</i>												
Holothuroidea												
<i>Cucumaria</i> sp												
Ophiuroidea												
<i>Axiognathus squamatus</i>												
MOLLUSCA												
Bivalvia												
<i>Anadara transversa</i>							1	1				1
<i>Anomia</i> spp (juveniles)					1		3					
<i>Astarte borealis</i>												
<i>Astarte castanea</i>				1								
<i>Cerastoderma pinnulatum</i>	1				5							
<i>Crassinella mactracea</i>												
<i>Crenella decussata</i>												
<i>Cyclocardia borealis</i>												
<i>Ensis directus</i>												
<i>Lyonsia arenosa</i>	1	1		3	4	2	3	1	3			1

Species	C2-1 rep1	C2-1 rep2	C2-1 rep3	C2-2 rep1	C2-2 rep2	C2-2 rep3	C2-3 rep1	C2-3 rep2	C2-3 rep3	C2-4 rep1	C2-4 rep2	C2-4 rep3
<i>Lyonsia hyalina</i>							1					
<i>Mytilus edulis</i>												
<i>Nucula tenuis</i>	2		1									
<i>Pandora gouldiana</i>		2					1		1			
<i>Spisula solidissima</i>	1	1	2	1		1		1			1	1
<i>Tellina agilis</i>					3		2		2	1		
Gastropoda												
<i>Crepidula fornicata</i>		1					1					
<i>Crepidula plana</i>												
<i>Euspira heros</i>												
<i>Euspira triseriata</i>												
<i>Ilyanassa trivittata</i>	3						1	1				
<i>Retusa obtusa</i>												
<i>Turbonilla</i> sp												
Polyplacophora												
<i>Chaetopleura apiculata</i>												
ANNELIDA												
Oligochaeta												
Oligochaeta spp	24											
Polychaeta												
<i>Ampharete arctica</i>												
<i>Aricidea catherinae</i>	17	3	4	2	7	6	2	2		1		1
<i>Asabellides oculata</i>												
<i>Asychis elongata</i>	1											
<i>Autolytus prolifer</i>				1								
<i>Cirrophorus</i> sp	3	1	5	4	2		1			2		1
<i>Dipolydora</i> sp		2	1		2		1					
<i>Dodecaceria corallii</i>												
<i>Drilonereis magna</i>												
<i>Ephesiella minuta</i>												
<i>Eumida sanguinea</i>	1	2		1								
<i>Exogone hebes</i>		2										
<i>Exogone naidina</i>												
<i>Glycera americana</i>	2				1			2	1	2		
<i>Glycera dibranchiata</i>												
<i>Goniadella gracilis</i>	16	7	10	8	14	3	4	6	5	4	1	1
<i>Harmothoe</i> sp												
<i>Lepidonotus squamatus</i>												
<i>Lumbrinereis acuta</i>	69	18	1	4	19	18	8	17	10	13	1	1
<i>Lumbrinereis fragilis</i>	9	5	8	3	8	5	7	19	5	4	2	1
Maldanidae spp	9	13	5	4	7	2	4	2	2	2	1	2
<i>Marphysa bellii</i>	10	3			5	2	8	10	4	3	1	

Species	C2-1 rep1	C2-1 rep2	C2-1 rep3	C2-2 rep1	C2-2 rep2	C2-2 rep3	C2-3 rep1	C2-3 rep2	C2-3 rep3	C2-4 rep1	C2-4 rep2	C2-4 rep3
<i>Megalona</i> sp												
<i>Microphthalmus sckelkowi</i>												
<i>Monticellina baptisteeae</i>	5	1		4	2		2	2	2	1		
<i>Mystides</i> sp												
<i>Nephtys bucera</i>				1			1	1	3	6	1	1
<i>Nephtys ciliata</i>		1										
<i>Nereis arenaceodonta</i>												
<i>Nereis zonata</i>												
<i>Odontosyllis fulgurans</i>												
<i>Ophelia denticulata</i>												
<i>Ophioglycera gigantea</i>								1				
<i>Owenia fusiformis</i>												
<i>Paranaitis speciosa</i>							1					
<i>Paraonis</i> sp							1	1				
<i>Parapionosyllis longicirrata</i>	11	5	5	3	1							1
<i>Parougia caeca</i>	6											1
<i>Phyllodoce arenae</i>	2	1	1									
<i>Phyllodoce maculata</i>												
<i>Pisone</i> sp	24	31	8	6	23	12						
<i>Pistasp</i> (juveniles)							1					
<i>Polycirrus eximius</i>	13	14	9	2	19	28	3	2	1		2	2
<i>Polydora</i> sp												
<i>Polygordius</i> spp	2	14	8	8	17	5	8		2	9	3	8
<i>Potamilla reniformis</i>							1					
<i>Proceraea ?fasciata</i>												
<i>Sabellaria vulgaris</i>	2	3		41	7		11	2	3		1	1
<i>Scalibregma inflatum</i>		2			1							
<i>Sigalion arenicola</i>				1								
<i>Sphaerosyllis erinaceus</i>	7		1	5	1					1	2	1
<i>Spio setosa</i>				1								
<i>Spiochaetopterus oculatus</i>	1			1			1					
<i>Spiophanes bombyx</i>												
<i>Spirorbis</i> spp												
<i>Syllides</i> sp	4			1		2						
<i>Travisia carnea</i>												
<i>Typosyllis coronuta</i>				2								
OTHER (PHYLUM: sp(p))												
CHORDATA: <i>Gobiosoma bosci</i>												
COPEPODA: Harpacticoid spp				2								3
NEMERTEA: <i>Cerebratulus lacteus</i>		1		1								
NEMERTEA: Nemeritea spp				1				1		2		
NEMATODA: Nematoda spp	120	90	24	66	20	10	20	8	14	12	12	10
Number of Species	34	28	19	35	27	21	34	21	18	18	14	19
Total Number of Organisms	399	261	107	195	343	145	180	200	119	72	30	41

G.1 Species List Year 1 (Winter 2016-2017) of Vessel-Based Grab Samples (Cont.)

Species	C3-1 rep1	C3-1 rep2	C3-1 rep3	C3-2 rep1	C3-2 rep2	C3-2 rep3	C3-3 rep1	C3-3 rep2	C3-3 rep3	C3-4 rep1	C3-4 rep2	C3-4 rep3	T1-QC	T3-QC	T5-QC	C3-QC
ACTINIARIA																
<i>Actiniaria</i> spp	1															1
ARTHROPODA																
Amphipoda																
<i>Ampelisca vadorum</i>	19	3	5				1	1	2	1	1	2				
<i>Aeginina longicornis</i>																
<i>Byblis serrata</i>		1	1							2	1	1	1	1		
<i>Caprella equilibra</i>																
<i>Caprella penantis</i>																
<i>Caprella unica</i>																
<i>Corophium</i> spp		1									1					
<i>Dulchia</i> sp					1											
<i>Erichthonius rubricornis</i>											2					
<i>Gammaropsis maculata</i>																
<i>Hippomedon serratus</i>																
<i>Ischyrocerus anguipes</i>											3	1				
<i>Jassa marmorata</i>																
<i>Lembos websteri</i>																
<i>Leptocheirus pinguis</i>																
<i>Luconacia incerta</i>																
<i>Melita dentata</i>	2						1									
<i>Microdeutopus anomalus</i>																
<i>Monoculodes</i> sp																
<i>Parametopella cypris</i>																
<i>Phoxocephalus holbolli</i>																
Pleustidae sp																
<i>Pontogenia inermis</i>																
<i>Probolooides holmesi</i>																
<i>Protohaustorius wigleyi</i>													3			1
<i>Psammonyx nobilis</i>		1														
<i>Pseudunciola obliqua</i>																
<i>Rhepoxynuis epistomus</i>							1	1							2	
<i>Siphonoecetes smithianus</i>																
<i>Stenopleustes gracilis</i>											1					
<i>Stenothoe minuta</i>																
<i>Unciola irrorata</i>	17	13	5	2		1	2	4	4	3	3			5	1	3
Cumacea																
<i>Diastylis</i> sp																
<i>Pseudoleptocuma minor</i>							2								1	
Decapoda																
<i>Cancer borealis</i>																

Species	C3-1 rep1	C3-1 rep2	C3-1 rep3	C3-2 rep1	C3-2 rep2	C3-2 rep3	C3-3 rep1	C3-3 rep2	C3-3 rep3	C3-4 rep1	C3-4 rep2	C3-4 rep3	T1- QC	T3- QC	T5- QC	C3- QC
<i>Cancer</i> species juvenile ? <i>irroratus</i>																
<i>Crangon septemspinosa</i>																
<i>Pagurus annulipes</i>																
Isopoda																
<i>Chiridotea</i> sp <i>caeca</i>			1	1				1							1	
<i>Chiridotea tuftsi</i>							1									
<i>Edotea triloba</i>								1								
<i>Erichsonella filiformis</i>																
<i>Politolana polita</i>										1					2	
Pycnogonida																
<i>Nymphon stromi</i>																
Sessilia																
<i>Balanus amphitrite</i>	8	35		1	3		1		2		102		32		9	
Tanaidacea																
<i>Leptochelia savignyi</i>																
<i>Tanaissus psammophilus</i>	2	16		3	6	1	9	13	3	3	2	3	1		7	2
ECHINODERMATA																
Asteroidea																
<i>Asterias</i> spp																
Echinoidea																
<i>Echinarachnius parma</i>																
Holothuroidea																
<i>Cucumaria</i> sp																
Ophiuroidea																
<i>Axiognathus squamatus</i>																
MOLLUSCA																
Bivalvia																
<i>Anadara transversa</i>																
<i>Anomia</i> spp (juveniles)																
<i>Astarte borealis</i>																
<i>Astarte castanea</i>															1	
<i>Cerastoderma pinnulatum</i>										1						
<i>Crassinella mactracea</i>																1
<i>Crenella decussata</i>		3		1			1						1			
<i>Cyclocardia borealis</i>		1														
<i>Ensis directus</i>								1								
<i>Lyonsia arenosa</i>		6	1	3			5	2	2	2		2		2	4	1

Species	C3-1 rep1	C3-1 rep2	C3-1 rep3	C3-2 rep1	C3-2 rep2	C3-2 rep3	C3-3 rep1	C3-3 rep2	C3-3 rep3	C3-4 rep1	C3-4 rep2	C3-4 rep3	T1-QC	T3-QC	T5-QC	C3-QC
<i>Lyonsia hyalina</i>								1								
<i>Mytilus edulis</i>	2		4	1	1		3	2		1	18	2	3	6	15	
<i>Nucula tenuis</i>		1					1									
<i>Pandora gouldiana</i>		1														
<i>Spisula solidissima</i>	1	2	2		2			2		3	2				6	1
<i>Tellina agilis</i>										1				1		
Gastropoda																
<i>Crepidula fornicata</i>																
<i>Crepidula plana</i>																
<i>Euspira heros</i>																
<i>Euspira triseriata</i>																
<i>Ilyanassa trivittata</i>											1					
<i>Retusa obtusa</i>																
<i>Turbonilla</i> sp																
Polyplacophora																
<i>Chaetopleura apiculata</i>																
ANNELIDA																
Oligochaeta																
Oligochaeta spp																
Polychaeta																
<i>Ampharete arctica</i>																
<i>Aricidea catherinae</i>	3	2	1			1		2						6		
<i>Asabellides oculata</i>		1										1				
<i>Asychis elongata</i>																
<i>Autolytus prolifer</i>																
<i>Cirrophorus</i> sp										1				11	1	
<i>Dipolydora</i> sp	3	3	2				4	1	1	1						
<i>Dodecaceria corallii</i>																
<i>Drilonereis magna</i>																1
<i>Ephesiella minuta</i>																
<i>Eumida sanguinea</i>		1	1				1				3	1			1	
<i>Exogone hebes</i>	1		2	1			3	1	2	5	1	2				
<i>Exogone naidina</i>												1				
<i>Glycera americana</i>														1		
<i>Glycera dibranchiata</i>																1
<i>Goniadella gracilis</i>	44	42	21	18	5	1	27	58	22	32	10	14	6	13	4	23
<i>Harmothoe</i> sp		1														
<i>Lepidonotus squamatus</i>	1															
<i>Lumbrinereis acuta</i>	12	11	16	15	4		11	16	17	19	6	16	3	25	12	15
<i>Lumbrinereis fragilis</i>			2	2			1		3		1		1	3	1	
Maldanidae spp	2	3	5				3	2		1	1	1		4		1
<i>Marphysa bellii</i>	5		1					3		1						

Species	C3-1 rep1	C3-1 rep2	C3-1 rep3	C3-2 rep1	C3-2 rep2	C3-2 rep3	C3-3 rep1	C3-3 rep2	C3-3 rep3	C3-4 rep1	C3-4 rep2	C3-4 rep3	T1-QC	T3-QC	T5-QC	C3-QC
<i>Megalona</i> sp																
<i>Microphthalmus sckelkowii</i>																
<i>Monticellina baptisteeae</i>	4	2	1	3	1		5	2	2	1		1		1		3
<i>Mystides</i> sp																
<i>Nephtys bucera</i>	2	2	3				1		1	5	1		3		3	1
<i>Nephtys ciliata</i>																
<i>Nereis arenaceodonta</i>																
<i>Nereis zonata</i>																
<i>Odontosyllis fulgurans</i>																
<i>Ophelia denticulata</i>																
<i>Ophioglycera gigantea</i>																
<i>Owenia fusiformis</i>																
<i>Paranaitis speciosa</i>																
<i>Paraonis</i> sp				1			1	1	2			1				
<i>Parapionosyllis longicirrata</i>	2	4	1	1			2	2	4	7	1			7	1	
<i>Parougia caeca</i>	1						1	1				1		4	2	
<i>Phyllodoce arenae</i>																
<i>Phyllodoce maculata</i>																
<i>Pisone</i> sp	1		1											42	1	1
<i>Pistasp</i> (juveniles)														31		
<i>Polycirrus eximius</i>	1	2														
<i>Polydora</i> sp																
<i>Polygordius</i> spp	17	2	16	5	1	1	11	11	1	7	10	9	14	20	4	
<i>Potamilla reniformis</i>			1										1			
<i>Proceraea ?fasciata</i>																
<i>Sabellaria vulgaris</i>		3	3		10		9		1		29	6	6		35	
<i>Scalibregma inflatum</i>																
<i>Sigalion arenicola</i>								1				2				
<i>Sphaerosyllis erinaceus</i>	2			1			4	4	1	1	1	1		4		
<i>Spio setosa</i>	1															
<i>Spiochaetopterus oculatus</i>							1									
<i>Spiophanes bombyx</i>																
<i>Spirorbis</i> spp																
<i>Syllides</i> sp									2							
<i>Travisia carnea</i>								1				1				
<i>Typosyllis coronuta</i>										1		1				
OTHER (PHYLUM: sp(p))																
CHORDATA: <i>Gobiosoma bosci</i>																
COPEPODA: Harpacticoid spp		1					1				4					
NEMERTEA: <i>Cerebratulus lacteus</i>	1												1			
NEMERTEA: Nemeritea spp		1	1				1	1	1					1	1	
NEMATODA: Nematoda spp	8	24	6	4	2		20	48	44	46	27	10	2	42	28	4
Number of Species	27	30	25	17	11	5	31	28	20	24	25	24	14	21	24	16
Total Number of Organisms	163	189	103	63	36	5	135	184	117	146	232	81	77	230	143	60

G.2 Species List Year 2 (Winter 2017) of Vessel-Based Grab Samples

Species	T1-1 rep1	T1-1 rep2	T1-1 rep3	T1-2 rep1	T1-2 rep2	T1-2 rep3	T1-3 rep1	T1-3 rep2	T1-3 rep3	T1-4 rep1	T1-4 rep2	T1-4 rep3	T1-5 rep1	T1-5 rep2	T1-5 rep3
ACTINIARIA															
Actiniaria spp															
ARTHROPODA															
Amphipoda															
<i>Ampelisca vadorum</i>			2						1				1		
<i>Byblis serrata</i>															
<i>Caprella linearis</i>									4						
<i>Gammaropsis maculata</i>									2						
<i>Hippomedon serratus</i>															
<i>Jassa marmorata</i>									1						
<i>Luconacia incerta</i>															
<i>Melita dentata</i>									1						
<i>Microdeutopus anomalous</i>															
<i>Monoculodes</i> sp								1							
<i>Phoxocephalus holbolli</i>			1						1		1				
<i>Pontogenia inermis</i>						1									
<i>Protohaustorius wigleyi</i>										1		2			
<i>Psammonyx nobilis</i>															
<i>Pseudunciola obliqua</i>	1														
<i>Rhepoxynuis epistomus</i>	1										1	1		1	
<i>Unciola irrorata</i>	1	2	30	1			3	1			1	10	5		2
Brachypoda															
<i>Hutchinsoniella macracantha</i>															
Cumacea															
<i>Diastylis</i> sp			1				1	1							
<i>oxyurostylis smithi</i>															
<i>Petalosarsia declivis</i>															
<i>Pseudoleptocuma minor</i>															
Decapoda															
<i>Cancer borealis</i>									1						
<i>Cancer irroratus</i>											1				
<i>Crangon septemspinosa</i>															
<i>Pagurus acadianus</i>															
<i>Pagurus annulipes</i>						1									
<i>Panopeus herbstii</i>								1							
<i>Pasiphaea</i> sp.															
<i>Pinnotheres maculatus</i>												2			
Isopoda															
<i>Asellota</i> sp									1						
<i>Chiridotea caeca</i>															
<i>Chiridotea tuftsi</i>															1
<i>Edotea triloba</i>															
<i>Idotea phosphorea</i>															

Species	T1-1 rep1	T1-1 rep2	T1-1 rep3	T1-2 rep1	T1-2 rep2	T1-2 rep3	T1-3 rep1	T1-3 rep2	T1-3 rep3	T1-4 rep1	T1-4 rep2	T1-4 rep3	T1-5 rep1	T1-5 rep2	T1-5 rep3
<i>Politolana polita</i>															
<i>Ptilanthura tenuis</i>															
Mysidacea															
<i>Heteromysis formosa</i>			2												
<i>Mysidopsis bigelowi</i>															
Sessilia															
<i>Balanus amphitrite</i>			1					1							
Tanaidacea															
<i>Tanaissus psammophilus</i>	6	1		1	1	1					1		1	3	4
ECHINODERMATA															
Holothuroidea															
<i>Cucumaria frondosa</i>															
<i>Leptosynapta</i> sp															
MOLLUSCA															
Bivalvia															
<i>Astarte borealis</i>		1													
<i>Astarte</i> spp					1										
<i>Cerastoderma pinnulatum</i>															
<i>Crassinella lunulata</i>															
<i>Crenella decussata</i>	1														
<i>Cyclocardia borealis</i>														1	
<i>Ensis directus</i>															
<i>Lyonsia arenosa</i>				1		2				1	1				
<i>Mytilus edulis</i>							1		3		1				
<i>Nucula tenuis</i>															
<i>Pitar morrhuanus</i>				1											
<i>Spisula solidissima</i>	2	1		2	1	1				5	2	2		2	1
<i>Tellina agilis</i>															
Gastropoda															
<i>Bittium varium</i>															
<i>Crepidula plana</i>															
<i>Crucibulum striatum</i>		1													
<i>Epitonium multistriatum</i>															
<i>Euspira heros</i>															
<i>Euspira triseriata</i>															
<i>Ilyanassa trivittata</i>															
<i>Mangelia</i> sp															
<i>Polinices immaculatus</i>															
<i>Onoba</i> sp															
<i>Testudinalia testudinalis</i>														1	
ANNELIDA															
Oligochaeta															
<i>Oligochaeta</i> spp				1				1				3	1	1	
Polychaeta															

Species	T1-1 rep1	T1-1 rep2	T1-1 rep3	T1-2 rep1	T1-2 rep2	T1-2 rep3	T1-3 rep1	T1-3 rep2	T1-3 rep3	T1-4 rep1	T1-4 rep2	T1-4 rep3	T1-5 rep1	T1-5 rep2	T1-5 rep3
<i>Ampharete arctica</i>															
<i>Aricidea catherinae</i>	1	3	2		2						1				
<i>Asabellides oculata</i>															
<i>Brania wellfleetensis</i>															
<i>Capitella</i> sp															
<i>Caulleriella venefica</i>	2	2	3	1		4	1		5		2	2			10
<i>Cirrophorus lyra</i>			1				1			1	1				1
<i>Cirrophorus furcatus</i>		3	1	1						1	4				1
<i>Dipolydora</i> sp									1					1	
<i>Drilonereis longa</i>															
<i>Drilonereis magna</i>															
<i>Eteone lactea</i>				1											
<i>Eumida sanguinea</i>															
<i>Exogone hebes</i>	2	1	2		2	1	3		1	1	4	3	4	3	3
<i>Glycera americana</i>							1								
<i>Glycera dibranchiata</i>															
<i>Goniadella gracilis</i>	3	11	10	9	6	23	17	3	2	5	15	9	18	15	16
<i>Harmothoe</i> sp															
<i>Leitoscoloplos robustus</i>			1			1			2						
<i>Lumbrinereis acuta</i>	7	6	5	3	1	12	14	2		1	7	2	3	8	3
<i>Lumbrinereis fragilis</i>	4		3	2		1	3		2		3		1	4	2
Maldanidae spp	1					2	1							1	
<i>Marphysa bellii</i>															
<i>Megalona</i> sp															1
<i>Microphthalmus sckelkowi</i>															
<i>Monticellina baptistae</i>	3	3	1	2	2	3	2	2			3	3	1	1	1
<i>Nephtys</i> spp		1	1		1	1									
<i>Ophelia denticulata</i>												3			
Orbinidae sp.															
<i>Paranaitis speciosa</i>															
<i>Paraonis</i> spp															1
<i>Parapionosyllis longicirrata</i>	3	11	7	2	7		2	5		3	22	31	3	15	3
<i>Parougia caeca</i>							1				1	1		1	
<i>Phyllodoce arenae</i>															
<i>Pisione</i> sp											2				
<i>Polycirrus eximius</i>			2												
<i>Polydora</i> spp						1									
<i>Polygordius</i> spp	5	22	35	18	16	16	13	11	42	17	18	11	8	11	22
<i>Potamilla reniformis</i>															
<i>Proceraea</i> sp															
<i>Pseudomystides</i> sp															
<i>Sabellaria vulgaris</i>															
<i>Scalibregma inflatum</i>	1					1									
<i>Scolecopsis bousfieldi</i>														1	
<i>Scolecopsis squamata</i>															
<i>Sigalion arenicola</i>		1								1					

Species	T1-1 rep1	T1-1 rep2	T1-1 rep3	T1-2 rep1	T1-2 rep2	T1-2 rep3	T1-3 rep1	T1-3 rep2	T1-3 rep3	T1-4 rep1	T1-4 rep2	T1-4 rep3	T1-5 rep1	T1-5 rep2	T1-5 rep3
<i>Sphaerosyllis erinaceus</i>	1	2	3					3		1	10	3		3	4
<i>Spio filicornis</i>															
<i>Spio setosa</i>														1	
<i>Spiochaetopterus oculatus</i>															
<i>Spiophanes bombyx</i>			1							1	1				
<i>Spiroris borealis</i>															
<i>Syllides longocirratu</i>		4	1				1				2	7		1	1
<i>Syllis gracilis</i>															
<i>Travisia carnea</i>															
<i>Typosyllis (Syllis) cornuta</i>															
OTHER (PHYLUM: sp(p))															
COPAPODA: Harpacticoid spp								1		3		1	10		2
NEMERTEA: Cerebratulus lacteus															1
NEMERTEA: Nemeritea spp	12	2	3	1								2	1		
NEMATODA: Nematoda spp	18	20	12	68	90	52	90	60	38	28	88	30	42	110	195
PORIFERA: Polymastia robusta															
SIPUNCULOIDEA: Golfingia sp															
No. species	20	20	25	17	13	18	18	12	18	15	25	19	16	22	18
Total Number of Organisms	75	98	131	115	131	124	156	91	110	70	193	126	101	195	263

G.2 Species List Year 2 (Winter 2017) of Vessel-Based Grab Samples (Cont.)

Species	T1-6 rep1	T1-6 rep2	T1-6 rep3	T1-7 rep1	T1-7 rep2	T1-7 rep3	T1-8 rep1	T1-8 rep2	T1-8 rep3	T1-9 rep1	T1-9 rep2	T1-9 rep3
ACTINIARIA												
<i>Actiniaria</i> spp					1							
ARTHROPODA												
Amphipoda												
<i>Ampelisca vadorum</i>	1	1				1				2		1
<i>Byblis serrata</i>												
<i>Caprella linearis</i>												
<i>Gammaropsis maculata</i>												
<i>Hippomedon serratus</i>												
<i>Jassa marmorata</i>												
<i>Luconacia incerta</i>											1	
<i>Melita dentata</i>												
<i>Microdeutopus anomalus</i>												
<i>Monoculodes</i> sp	1											1
<i>Phoxocephalus holbolli</i>												
<i>Pontogenia inermis</i>												
<i>Protohaustorius wigleyi</i>				1			1		2			
<i>Psammonyx nobilis</i>												
<i>Pseudunciola obliquua</i>						1			2			
<i>Rhepoxynuis epistomus</i>							3	1	1			
<i>Unciola irrorata</i>	2	1	2	2	5	2		12		2	2	3
Brachypoda												
<i>Hutchinsoniella macracantha</i>												
Cumacea												
<i>Diastylis</i> sp					1							
<i>oxyurostylis smithi</i>	1											
<i>Petalosarsia declivis</i>												
<i>Pseudoleptocuma minor</i>												
Decapoda												
<i>Cancer borealis</i>												
<i>Cancer irroratus</i>								1				
<i>Crangon septemspinosa</i>												
<i>Pagurus acadianus</i>												
<i>Pagurus annulipes</i>												
<i>Panopeus herbstii</i>												
<i>Pasiphaea</i> sp.												
<i>Pinnotheres maculatus</i>												
Isopoda												
<i>Asellota</i> sp												
<i>Chiridotea caeca</i>								1	2			
<i>Chiridotea tuftsi</i>				1								
<i>Edotea triloba</i>								2			2	
<i>Idotea phosphorea</i>												

Species	T1-6 rep1	T1-6 rep2	T1-6 rep3	T1-7 rep1	T1-7 rep2	T1-7 rep3	T1-8 rep1	T1-8 rep2	T1-8 rep3	T1-9 rep1	T1-9 rep2	T1-9 rep3
<i>Politolana polita</i>												
<i>Ptilanthura tenuis</i>					1							
Mysidacea												
<i>Heteromysis formosa</i>												
<i>Mysidopsis bigelowi</i>												
Sessilia												
<i>Balanus amphitrite</i>									3			
Tanaidacea												
<i>Tanaissus psammophilus</i>	2	1	1	1	2	2		2	2		2	
ECHINODERMATA												
Holothuroidea												
<i>Cucumaria frondosa</i>												
<i>Leptosynapta</i> sp												
MOLLUSCA												
Bivalvia												
<i>Astarte borealis</i>					1							
<i>Astarte</i> spp												
<i>Cerastoderma pinnulatum</i>												
<i>Crassinella lunulata</i>												
<i>Crenella decussata</i>										1		1
<i>Cyclocardia borealis</i>				1	1							
<i>Ensis directus</i>	1											
<i>Lyonsia arenosa</i>	1					1					1	
<i>Mytilus edulis</i>					1				1			
<i>Nucula tenuis</i>			1		1							
<i>Pitar morrhuanus</i>												
<i>Spisula solidissima</i>	4		2		4	2		5	1	2	8	2
<i>Tellina agilis</i>			1									
Gastropoda												
<i>Bittium varium</i>												
<i>Crepidula plana</i>												
<i>Crucibulum striatum</i>												
<i>Epitonium multistriatum</i>												
<i>Euspira heros</i>												
<i>Euspira triseriata</i>												
<i>Ilyanassa trivittata</i>												
<i>Mangelia</i> sp								1				
<i>Polinices immaculatus</i>												
<i>Onoba</i> sp												
<i>Testudinalia testudinalis</i>												
ANNELIDA												
Oligochaeta												
<i>Oligochaeta</i> spp		4									1	
Polychaeta												

Species	T1-6 rep1	T1-6 rep2	T1-6 rep3	T1-7 rep1	T1-7 rep2	T1-7 rep3	T1-8 rep1	T1-8 rep2	T1-8 rep3	T1-9 rep1	T1-9 rep2	T1-9 rep3
<i>Ampharete arctica</i>		1										
<i>Aricidea catherinae</i>			1	3	2			1		3		2
<i>Asabellides oculata</i>												
<i>Brania wellfleetensis</i>												
<i>Capitella</i> sp												
<i>Caulerliella venefica</i>	2	1	1		1	1			5	2	2	1
<i>Cirrophorus lyra</i>			1	2	3	5		1		1		1
<i>Cirrophorus furcatus</i>	1			1				8				
<i>Dipolydora</i> sp			1									
<i>Drilonereis longa</i>			1									
<i>Drilonereis magna</i>												
<i>Eteone lactea</i>			1									
<i>Eumida sanguinea</i>												
<i>Exogone hebes</i>	3	1	5	3	4	7	1	10	1	2	2	2
<i>Glycera americana</i>		1			1							
<i>Glycera dibranchiata</i>												1
<i>Goniadella gracilis</i>	18	10	22	8	12	12	4	28	2	4	19	2
<i>Harmothoe</i> sp												
<i>Leitoscoloplos robustus</i>				1		1						
<i>Lumbrinereis acuta</i>	20	10	23	6	11	8	1	9	3	4	3	3
<i>Lumbrinereis fragilis</i>	1	2	7	1	1	2						
Maldanidae spp		1	2	1	3			1				
<i>Marphysa bellii</i>								1				
<i>Megalona</i> sp												
<i>Microphthalmus sckelkowi</i>												
<i>Monticellina baptistae</i>	2	1	3	3	1	3		4		1		1
<i>Nephtys</i> spp	3	2	1	2	1	2		2	1	1	1	1
<i>Ophelia denticulata</i>												
Orbinidae sp.												
<i>Paranaitis speciosa</i>												
<i>Paraonis</i> spp		1										
<i>Parapionosyllis longicirrata</i>	8		3	4	9	20	2	29		13	7	8
<i>Parourgia caeca</i>	1	3	2	1	1	2		2		4		2
<i>Phyllodoce arenae</i>												
<i>Pisione</i> sp								1				
<i>Polycirrus eximius</i>					1							
<i>Polydora</i> spp						1						
<i>Polygordius</i> spp	29	39	18	3	39	53	4	32	5	18	13	23
<i>Potamilla reniformis</i>												
<i>Proceraea</i> sp												
<i>Pseudomystides</i> sp				1								
<i>Sabellaria vulgaris</i>												
<i>Scalibregma inflatum</i>			2	1								
<i>Scolecopsis bousfieldi</i>												
<i>Scolecopsis squamata</i>												

Species	T1-6 rep1	T1-6 rep2	T1-6 rep3	T1-7 rep1	T1-7 rep2	T1-7 rep3	T1-8 rep1	T1-8 rep2	T1-8 rep3	T1-9 rep1	T1-9 rep2	T1-9 rep3
<i>Sigalion arenicola</i>				1			2	1		1		1
<i>Sphaerosyllis erinaceus</i>	2		1	1	2	8		6	1	5		3
<i>Spio filicornis</i>			1									
<i>Spio setosa</i>						1						
<i>Spiochaetopterus oculatus</i>	1											
<i>Spiophanes bombyx</i>	1	2	2	1				4				
<i>Spiroris borealis</i>												
<i>Syllides longocirratus</i>								4			1	
<i>Syllis gracilis</i>												
<i>Travisia carnea</i>												
<i>Typosyllis (Syllis) cornuta</i>												
OTHER (PHYLUM: sp(p))												
COPAPODA: Harpacticoid spp			1			8	4					2
NEMERTEA: Cerebratulus lacteus						2			1			
NEMERTEA: Nemertea spp	1									2		1
NEMATODA: Nematoda spp	110	8	68	60	58	910	10	360	50	130	45	90
PORIFERA: Polymastia robusta												
SIPUNCULOIDEA: Golfingia sp												
No. Species	24	19	27	25	27	24	10	27	17	19	16	22
Total Number of Organisms	216	90	174	110	168	1055	32	529	83	198	110	152

G.2 Species List Year 2 (Winter 2017) of Vessel-Based Grab Samples (Cont.)

Species	T3-1 rep1	T3-1 rep2	T3-1 rep3	T3-2 rep1	T3-2 rep2	T3-2 rep3	T3-3 rep1	T3-3 rep2	T3-3 rep3	T3-4 rep1	T3-4 rep2	T3-4 rep3	T3-5 rep1	T3-5 rep2
ACTINIARIA														
Actinaria spp														
ARTHROPODA														
Amphipoda														
<i>Ampelisca vadorum</i>											1		1	
<i>Byblis serrata</i>														
<i>Caprella linearis</i>														
<i>Gammaropsis maculata</i>														
<i>Hippomedon serratus</i>														
<i>Jassa marmorata</i>														
<i>Luconacia incerta</i>														
<i>Melita dentata</i>														
<i>Microdeutopus anomalus</i>														
<i>Monoculodes</i> sp														
<i>Phoxocephalus holbolli</i>								1						
<i>Pontogenia inermis</i>														
<i>Protohaustorius wigleyi</i>														
<i>Psammonyx nobilis</i>														
<i>Pseudunciola obliquua</i>														
<i>Rhepoxynuis epistomus</i>														
<i>Unciola irrorata</i>	4		1	7	5	5		1	2	1	2	4	8	2
Brachypoda														
<i>Hutchinsoniella macracantha</i>														
Cumacea														
<i>Diastylis</i> sp														
<i>Oxyurostylis smithi</i>														
<i>Petalosarsia declivis</i>														
<i>Pseudoleptocuma minor</i>				1										
Decapoda														
<i>Cancer borealis</i>														
<i>Cancer irroratus</i>														
<i>Crangon septemspinosa</i>														
<i>Pagurus acadianus</i>														
<i>Pagurus annulipes</i>														
<i>Panopeus herbstii</i>														
<i>Pasiphaea</i> sp.														
<i>Pinnotheres maculatus</i>														
Isopoda														
<i>Asellota</i> sp														
<i>Chiridotea caeca</i>		4	5			1	3	1			1		1	2
<i>Chiridotea tuftsi</i>														
<i>Edotea triloba</i>				1										
<i>Idotea phosphorea</i>														

Species	T3-1 rep1	T3-1 rep2	T3-1 rep3	T3-2 rep1	T3-2 rep2	T3-2 rep3	T3-3 rep1	T3-3 rep2	T3-3 rep3	T3-4 rep1	T3-4 rep2	T3-4 rep3	T3-5 rep1	T3-5 rep2
<i>Politolana polita</i>		1					4					1		
<i>Ptilanthura tenuis</i>														
Mysidacea														
<i>Heteromysis formosa</i>														
<i>Mysidopsis bigelowi</i>	1		1											
Sessilia														
<i>Balanus amphitrite</i>									1					
Tanaidacea														
<i>Tanaissus psammophilus</i>														
ECHINODERMATA														
Holothuroidea														
<i>Cucumaria frondosa</i>														
<i>Leptosynapta</i> sp	1													
MOLLUSCA														
Bivalvia														
<i>Astarte borealis</i>														
<i>Astarte</i> spp														
<i>Cerastoderma pinnulatum</i>														
<i>Crassinella lunulata</i>														
<i>Crenella decussata</i>						1								
<i>Cyclocardia borealis</i>														
<i>Ensis directus</i>														
<i>Lyonsia arenosa</i>														
<i>Mytilus edulis</i>														
<i>Nucula tenuis</i>														
<i>Pitar morrhuanus</i>														
<i>Spisula solidissima</i>	1	1		2	1	2	1		1			3		
<i>Tellina agilis</i>														
Gastropoda														
<i>Bittium varium</i>														
<i>Crepidula plana</i>														
<i>Crucibulum striatum</i>														
<i>Epitonium multistriatum</i>														
<i>Euspira heros</i>				1										
<i>Euspira triseriata</i>						1								
<i>Ilyanassa trivittata</i>						1								
<i>Mangelia</i> sp														
<i>Polinices immaculatus</i>					1							1		
<i>Onoba</i> sp														
<i>Testudinalia testudinalis</i>														
ANNELIDA														
Oligochaeta														
<i>Oligochaeta</i> spp							2			2		2		

Species	T3-1 rep1	T3-1 rep2	T3-1 rep3	T3-2 rep1	T3-2 rep2	T3-2 rep3	T3-3 rep1	T3-3 rep2	T3-3 rep3	T3-4 rep1	T3-4 rep2	T3-4 rep3	T3-5 rep1	T3-5 rep2
Polychaeta														
<i>Ampharete arctica</i>									1				1	
<i>Aricidea catherinae</i>	15	13		9	4	31	19	8	11	14	8	24	6	7
<i>Asabellides oculata</i>														1
<i>Brania wellfleetensis</i>														
<i>Capitella</i> sp	1							8		1				
<i>Cautleriella venefica</i>	1						1		1		1			
<i>Cirrophorus lyra</i>	1			1		1	1	1	1	2				
<i>Cirrophorus furcatus</i>	13	6	11	6	17	7	24	4	5	12	9	18	6	15
<i>Dipolydora</i> sp		1								1				
<i>Drilonereis longa</i>														
<i>Drilonereis magna</i>														
<i>Eteone lactea</i>				1										
<i>Eumida sanguinea</i>										1				
<i>Exogone hebes</i>										1		3		
<i>Glycera americana</i>				1	1									
<i>Glycera dibranchiata</i>						1								
<i>Goniadella gracilis</i>	1	3	2	9	15	10	8	6	8	17	2	5	4	9
<i>Harmothoe</i> sp														
<i>Leitoscoloplos robustus</i>														
<i>Lumbrinereis acuta</i>	10	27	10	17	19	38	58	13	23	44	24	32	20	19
<i>Lumbrinereis fragilis</i>	4	2		4	6	2		4	3		1		3	1
Maldanidae spp	1	2		3		3		1	2	2	2	2	3	
<i>Marphysa bellii</i>	3					1			1	3				
<i>Megalona</i> sp														
<i>Microphthalmus sckelkowi</i>								1						
<i>Monticellina baptisteeae</i>	1	3	1	2	3	4	7	3	4	4	7	3	4	5
<i>Nephtys</i> spp														
<i>Ophelia denticulata</i>									1		2			
Orbinidae sp.														
<i>Paranaitis speciosa</i>														
<i>Paraonis</i> spp						1								
<i>Parapionosyllis longicirrata</i>	34	26	14	15	5	43	35	4	22	33	4	54	19	24
<i>Parougia caeca</i>	16	17	23	4	3	19	34	2	26	5	5	16	5	
<i>Phyllodoce arenae</i>														
<i>Pisione</i> sp	18	37	33	33	10	42	50	16	56	36	19	33	28	19
<i>Polycirrus eximius</i>	47	56	37	25	29	16	61	11	29	59	57	45	31	34
<i>Polydora</i> spp														
<i>Polygordius</i> spp	18	17	25	27	31	45	23	28	29	14	10	40	6	37
<i>Potamilla reniformis</i>						1								
<i>Proceraea</i> sp														
<i>Pseudomystides</i> sp	3	2	12	1			9	1	3	4	2	5	3	1
<i>Sabellaria vulgaris</i>														
<i>Scalibregma inflatum</i>		1											1	
<i>Scolelepis bousfieldi</i>														
<i>Scolelepis squamata</i>												1		

Species	T3-1 rep1	T3-1 rep2	T3-1 rep3	T3-2 rep1	T3-2 rep2	T3-2 rep3	T3-3 rep1	T3-3 rep2	T3-3 rep3	T3-4 rep1	T3-4 rep2	T3-4 rep3	T3-5 rep1	T3-5 rep2
<i>Sigalion arenicola</i>			1							1				
<i>Sphaerosyllis erinaceus</i>	30	16	18		9	16	23	8	11	19		38	15	16
<i>Spio filicornis</i>														
<i>Spio setosa</i>										1	1			
<i>Spiochaetopterus oculatus</i>														
<i>Spiophanes bombyx</i>							2							
<i>Spiroris borealis</i>														
<i>Syllides longocirratu</i>	5	2	4	4	5	16	3	4	8	7	2	22	4	9
<i>Syllis gracilis</i>														
<i>Travisia carnea</i>			1						1					
<i>Typosyllis (Syllis) cornuta</i>														
OTHER (PHYLUM: sp(p))														
COPAPODA: Harpacticoid spp	12	7	8				10	5	4	8	8	2	5	1
NEMERTEA: Cerebratulus lacteus		3						2	1	1	2			
NEMERTEA: Nemertea spp	1			4		1	3			1		3	1	
NEMATODA: Nematoda spp	640	340	180	600	800	510	960	220	830	1200	60	680	510	1004
PORIFERA: Polymastia robusta														
SIPUNCULOIDEA: Golfingia sp														
No. species	26	23	19	24	18	27	24	23	27	28	23	24	23	18
Total Number of Organisms	882	587	387	778	964	819	1342	352	1085	1494	230	1037	685	1206

G.2 Species List Year 2 (Winter 2017) of Vessel-Based Grab Samples (Cont.)

Species	T3-5 rep3	T3-6 rep1	T3-6 rep2	T3-6 rep3	T3-7 rep1	T3-7 rep2	T3-7 rep3	T3-8 rep1	T3-8 rep2	T3-8 rep3	T3-9 rep1	T3-9 rep2	T3-9 rep3
ACTINIARIA													
<i>Actinaria</i> spp													
ARTHROPODA													
Amphipoda													
<i>Ampelisca vadorum</i>	2			2					1				
<i>Byblis serrata</i>												1	
<i>Caprella linearis</i>													
<i>Gammaropsis maculata</i>													
<i>Hippomedon serratus</i>											1		1
<i>Jassa marmorata</i>			1										
<i>Luconacia incerta</i>													
<i>Melita dentata</i>													
<i>Microdeutopus anomalus</i>													
<i>Monoculodes</i> sp													
<i>Phoxocephalus holbolli</i>													
<i>Pontogenia inermis</i>													
<i>Protohaustorius wigleyi</i>											1	5	2
<i>Psammonyx nobilis</i>					1		1						
<i>Pseudunciola obliquua</i>													
<i>Rhepoxynuis epistomus</i>		1									1		2
<i>Unciola irrorata</i>	8	2	4	3				2	1	7			1
Brachypoda													
<i>Hutchinsoniella macracantha</i>													
Cumacea													
<i>Diastylis</i> sp													
<i>Oxyurostylis smithi</i>													
<i>Petalosarsia declivis</i>													
<i>Pseudoleptocuma minor</i>							1	1					
Decapoda													
<i>Cancer borealis</i>													
<i>Cancer irroratus</i>													
<i>Crangon septemspinosa</i>													
<i>Pagurus acadianus</i>													
<i>Pagurus annulipes</i>													
<i>Panopeus herbstii</i>													
<i>Pasiphaea</i> sp.													
<i>Pinnotheres maculatus</i>													
Isopoda													
<i>Asellota</i> sp													
<i>Chiridotea caeca</i>	2		1	1	1			1	3		1	2	3
<i>Chiridotea tuftsi</i>												1	
<i>Edotea triloba</i>								1					
<i>Idotea phosphorea</i>													

Species	T3-5 rep3	T3-6 rep1	T3-6 rep2	T3-6 rep3	T3-7 rep1	T3-7 rep2	T3-7 rep3	T3-8 rep1	T3-8 rep2	T3-8 rep3	T3-9 rep1	T3-9 rep2	T3-9 rep3
<i>Politolana polita</i>						1					2	2	2
<i>Ptilanthura tenuis</i>													
Mysidacea													
<i>Heteromysis formosa</i>													
<i>Mysidopsis bigelowi</i>													
Sessilia													
<i>Balanus amphitrite</i>													
Tanaidacea													
<i>Tanaissus psammophilus</i>		1									3	1	8
ECHINODERMATA													
Holothuroidea													
<i>Cucumaria frondosa</i>													
<i>Leptosynapta</i> sp													
MOLLUSCA													
Bivalvia													
<i>Astarte borealis</i>													
<i>Astarte</i> spp			1			1				1			
<i>Cerastoderma pinnulatum</i>													
<i>Crassinella lunulata</i>													
<i>Crenella decussata</i>													
<i>Cyclocardia borealis</i>													
<i>Ensis directus</i>													
<i>Lyonsia arenosa</i>											1		
<i>Mytilus edulis</i>													
<i>Nucula tenuis</i>						3		2					
<i>Pitar morrhuanus</i>													
<i>Spisula solidissima</i>	1	1			1	3		1	1			1	
<i>Tellina agilis</i>													
Gastropoda													
<i>Bittium varium</i>													
<i>Crepidula plana</i>													
<i>Crucibulum striatum</i>													
<i>Epitonium multistriatum</i>													
<i>Euspira heros</i>													
<i>Euspira triseriata</i>													
<i>Ilyanassa trivittata</i>													
<i>Mangelia</i> sp													
<i>Polinices immaculatus</i>													
<i>Onoba</i> sp	1												
<i>Testudinalia testudinalis</i>													
ANNELIDA													
Oligochaeta													
Oligochaeta spp	2			2				2		1			

Species	T3-5 rep3	T3-6 rep1	T3-6 rep2	T3-6 rep3	T3-7 rep1	T3-7 rep2	T3-7 rep3	T3-8 rep1	T3-8 rep2	T3-8 rep3	T3-9 rep1	T3-9 rep2	T3-9 rep3
Polychaeta													
<i>Ampharete arctica</i>													
<i>Aricidea catherinae</i>	14	8	9	7	5	6	2	3	7	23		1	
<i>Asabellides oculata</i>													
<i>Brania wellfleetensis</i>													
<i>Capitella</i> sp													
<i>Caulleriella venefica</i>		1										1	5
<i>Cirrophorus lyra</i>	2			4		1				1			
<i>Cirrophorus furcatus</i>	6	17	7	6	8	1	6	11	13	11	6	1	
<i>Dipolydora</i> sp						2				1			
<i>Drilonereis longa</i>			1										
<i>Drilonereis magna</i>						1							
<i>Eteone lactea</i>													
<i>Eumida sanguinea</i>					1					2			
<i>Exogone hebes</i>				1							2	2	1
<i>Glycera americana</i>			1					1			1		
<i>Glycera dibranchiata</i>										1			
<i>Goniadella gracilis</i>	3	12	5	10	6	10	6	5	4	6	7	3	1
<i>Harmothoe</i> sp													
<i>Leitoscoloplos robustus</i>													
<i>Lumbrinereis acuta</i>	19	14	5	25	23	9	9	16	21	24	6	11	1
<i>Lumbrinereis fragilis</i>	2		1	1		1		2		3			1
Maldanidae spp	1	1	3	3	1		1	1	1	7			
<i>Marphysa bellii</i>													
<i>Megalona</i> sp				1									
<i>Microphthalmus sckelkowi</i>							1	1	1				
<i>Monticellina baptisteeae</i>		2		4	1	1	1	5	4	6	1	3	
<i>Nephtys</i> spp													1
<i>Ophelia denticulata</i>									1		2		
Orbinidae sp.													
<i>Paranaitis speciosa</i>													
<i>Paraonis</i> spp	1										1		
<i>Parapionosyllis longicirrata</i>	49	15	5	11	15	10	18	8	37	64	9	42	11
<i>Parougia caeca</i>	9	7	8	3	28	22	9	25	9	28	2	14	7
<i>Phyllodoce arenae</i>													
<i>Pisione</i> sp	27	24	15		33	30	21	43	44	62	1	1	
<i>Polycirrus eximius</i>	62	10	13	26	15	31	21	28	33	61	1		
<i>Polydora</i> spp													
<i>Polygordius</i> spp	17	24	35	37	9	26	15	26	29	30	7	13	1
<i>Potamilla reniformis</i>													
Proceraea sp													
<i>Pseudomystides</i> sp	4	8	1	1	3	6	3		1	2	4	7	1
<i>Sabellaria vulgaris</i>													
<i>Scalibregma inflatum</i>										1			
<i>Scoelelepis bousfieldi</i>													
<i>Scoelelepis squamata</i>											2		

Species	T3-5 rep3	T3-6 rep1	T3-6 rep2	T3-6 rep3	T3-7 rep1	T3-7 rep2	T3-7 rep3	T3-8 rep1	T3-8 rep2	T3-8 rep3	T3-9 rep1	T3-9 rep2	T3-9 rep3
<i>Sigalion arenicola</i>			1		1	1						1	1
<i>Sphaerosyllis erinaceus</i>	22	8	4	4	23	5	15	4	18	54	4	1	
<i>Spio filicornis</i>							1						
<i>Spio setosa</i>	1												
<i>Spiochaetopterus oculatus</i>													
<i>Spiophanes bombyx</i>										1			1
<i>Spiroris borealis</i>													
<i>Syllides longocirratu</i>	13	8	1	2	10	7	4	2	1	9		19	
<i>Syllis gracilis</i>													
<i>Travisia carnea</i>	2		2							5			
<i>Typosyllis (Syllis) cornuta</i>													
OTHER (PHYLUM: sp(p))													
COPAPODA: Harpacticoid spp	3	2	12	14	8	18	6	3	8	2	6	2	3
NEMERTEA: Cerebratulus lacteus		4											1
NEMERTEA: Nemeritea spp			1	1	1	3		2	2	2			
NEMATODA: Nematoda spp	720	850	720	740	580	990	450	700	460	810	210	410	40
PORIFERA: Polymastia robusta													
SIPUNCULOIDEA: Golfingia sp													
No. Species	26	22	25	24	22	26	20	25	23	28	25	24	22
Total Number of Organisms	993	1020	857	909	774	1190	591	895	700	1225	282	545	95

G.2 Species List Year 2 (Winter 2017) of Vessel-Based Grab Samples (Cont.)

Species	T5-1 rep1	T5-1 rep2	T5-1 rep3	T5-2 rep1	T5-2 rep2	T5-2 rep3	T5-3 rep1	T5-3 rep2	T5-3 rep3	T5-4 rep1	T5-4 rep2	T5-4 rep3	T5-5 rep1	T5-5 rep2
ACTINIARIA														
<i>Actiniaria</i> spp				1								1		
ARTHROPODA														
Amphipoda														
<i>Ampelisca vadorum</i>														
<i>Byblis serrata</i>														
<i>Caprella linearis</i>														
<i>Gammaropsis maculata</i>														
<i>Hippomedon serratus</i>														
<i>Jassa marmorata</i>														
<i>Luconacia incerta</i>														
<i>Melita dentata</i>														
<i>Microdeutopus anomalous</i>														
<i>Monoculodes</i> sp														
<i>Phoxocephalus holbolli</i>														
<i>Pontogenia inermis</i>														
<i>Protohaustorius wigleyi</i>														
<i>Psammonyx nobilis</i>														
<i>Pseudunciola obliquua</i>														
<i>Rhepoxynuis epistomus</i>														
<i>Unciola irrorata</i>	1	2	4		2	3	2	2		4	3	1	2	
Brachypoda														
<i>Hutchinsoniella macracantha</i>														
Cumacea														
<i>Diastylis</i> sp														
<i>Oxyurostylis smithi</i>														
<i>Petalosarsia declivis</i>														
<i>Pseudoleptocuma minor</i>												1	1	
Decapoda														
<i>Cancer borealis</i>														
<i>Cancer irroratus</i>														
<i>Crangon septemspinosa</i>														
<i>Pagurus acadianus</i>														
<i>Pagurus annulipes</i>														
<i>Panopeus herbstii</i>														
<i>Pasiphaea</i> sp.														
<i>Pinnotheres maculatus</i>														
Isopoda														
<i>Asellota</i> sp														
<i>Chiridotea caeca</i>		4	2			1	7	1	2	2	5	1	1	
<i>Chiridotea tuftsi</i>														
<i>Edotea triloba</i>		1												
<i>Idotea phosphorea</i>														

Species	T5-1 rep1	T5-1 rep2	T5-1 rep3	T5-2 rep1	T5-2 rep2	T5-2 rep3	T5-3 rep1	T5-3 rep2	T5-3 rep3	T5-4 rep1	T5-4 rep2	T5-4 rep3	T5-5 rep1	T5-5 rep2
<i>Politolana polita</i>	1												1	
<i>Ptilanthura tenuis</i>														
Mysidacea														
<i>Heteromysis formosa</i>														
<i>Mysidopsis bigelowi</i>														
Sessilia														
<i>Balanus amphitrite</i>														
Tanaidacea														
<i>Tanaissus psammophilus</i>													1	
ECHINODERMATA														
Holothuroidea														
<i>Cucumaria frondosa</i>														
<i>Leptosynapta</i> sp								1			2		2	
MOLLUSCA														
Bivalvia														
<i>Astarte borealis</i>														
<i>Astarte</i> spp	1	1			2					1			1	
<i>Cerastoderma pinnulatum</i>														
<i>Crassinella lunulata</i>														
<i>Crenella decussata</i>				1										
<i>Cyclocardia borealis</i>														
<i>Ensis directus</i>														
<i>Lyonsia arenosa</i>								1				1	1	
<i>Mytilus edulis</i>				1	2			1				1		2
<i>Nucula tenuis</i>														
<i>Pitar morrhuanus</i>						1								
<i>Spisula solidissima</i>		1		4	3			3		2	1		2	2
<i>Tellina agilis</i>														
Gastropoda														
<i>Bittium varium</i>										1				
<i>Crepidula plana</i>													7	
<i>Crucibulum striatum</i>														
<i>Epitonium multistriatum</i>														
<i>Euspira heros</i>														
<i>Euspira triseriata</i>														
<i>Ilyanassa trivittata</i>														
<i>Mangelia</i> sp														
<i>Polinices immaculatus</i>					1					1				
<i>Onoba</i> sp														
<i>Testudinalia testudinalis</i>														
ANNELIDA														
Oligochaeta														
<i>Oligochaeta</i> spp											1			

Species	T5-1 rep1	T5-1 rep2	T5-1 rep3	T5-2 rep1	T5-2 rep2	T5-2 rep3	T5-3 rep1	T5-3 rep2	T5-3 rep3	T5-4 rep1	T5-4 rep2	T5-4 rep3	T5-5 rep1	T5-5 rep2
Polychaeta														
<i>Ampharete arctica</i>														
<i>Aricidea catherinae</i>	5	1	2	25	9	2	4	16	4	8	15	5	2	
<i>Asabellides oculata</i>														
<i>Brania wellfleetensis</i>														
<i>Capitella</i> sp						1						3		
<i>Caulleriella venefica</i>								1						
<i>Cirrophorus lyra</i>														
<i>Cirrophorus furcatus</i>	5	3	3	3		3	1	8	1	2	5	3	1	4
<i>Dipolydora</i> sp														
<i>Drilonereis longa</i>														
<i>Drilonereis magna</i>														
<i>Eteone lactea</i>														
<i>Eumida sanguinea</i>			1											
<i>Exogone hebes</i>														
<i>Glycera americana</i>														
<i>Glycera dibranchiata</i>														
<i>Goniadella gracilis</i>	4	2	1	4	8	2	8	1	1	5	9	5	7	4
<i>Harmothoe</i> sp														
<i>Leitoscoloplos robustus</i>														
<i>Lumbrinereis acuta</i>	18	7	27	31		27	22	27	10	15	32	18	12	14
<i>Lumbrinereis fragilis</i>	1	2	1	3	1				1					2
Maldanidae spp	1			1						2	1			2
<i>Marphysa bellii</i>	2			3	1	3				2	1		3	2
<i>Megalona</i> sp														
<i>Microphthalmus sckelkowi</i>	1		1						1		1			
<i>Monticellina baptistae</i>	1	1	3	4			3	3		4	7	1		2
<i>Nephtys</i> spp														
<i>Ophelia denticulata</i>			1		1							1		
Orbinidae sp.														
<i>Paranaitis speciosa</i>														
<i>Paraonis</i> spp														
<i>Parapionosyllis longicirrata</i>	11	3	17	116	34	16	32	43	14	21	102	32	17	40
<i>Parourgia caeca</i>	15	12	38	34	49	13	22	27	8	8	46	14	28	36
<i>Phyllococe arenae</i>														
<i>Pisione</i> sp	30	19	37	46	47	13	30	28	18	17	29	28	72	52
<i>Polycirrus eximius</i>	18	11	22	42	26	32	47	46	21	26	27	17	41	36
<i>Polydora</i> spp														
<i>Polygordius</i> spp	30	7	19	28	25	37	9	10	17	15	14	16	46	32
<i>Potamilla reniformis</i>														
<i>Proceraea</i> sp														
<i>Pseudomystides</i> sp	9	3	8	8	5	2	3	6	3	1	5	6	11	4
<i>Sabellaria vulgaris</i>														
<i>Scalibregma inflatum</i>														
<i>Scolelepis bousfieldi</i>														
<i>Scolelepis squamata</i>														

Species	T5-1 rep1	T5-1 rep2	T5-1 rep3	T5-2 rep1	T5-2 rep2	T5-2 rep3	T5-3 rep1	T5-3 rep2	T5-3 rep3	T5-4 rep1	T5-4 rep2	T5-4 rep3	T5-5 rep1	T5-5 rep2
<i>Sigalion arenicola</i>				1		1		1					1	2
<i>Sphaerosyllis erinaceus</i>	13	1	15	51	41	7	18	15	5	17	114	11	14	18
<i>Spio filicornis</i>														
<i>Spio setosa</i>														
<i>Spiochaetopterus oculatus</i>														
<i>Spiophanes bombyx</i>							1							
<i>Spiroris borealis</i>												1		
<i>Syllides longocirratu</i>	5	1	2	6	8	2	5	7		1	21	3	5	
<i>Syllis gracilis</i>														
<i>Travisia carnea</i>			1	5	3	2	1	2	1	3	2	3	12	14
<i>Typosyllis (Syllis) cornuta</i>														
OTHER (PHYLUM: sp(p))								3						
COPAPODA: Harpacticoid spp	15	6		26	14		30		4	3	32	3	7	24
NEMERTEA: Cerebratulus lacteus														
NEMERTEA: Nemertea spp		1		2	3	1	1	1		1	1	1	2	2
NEMATODA: Nematoda spp	480	800		1116	800		540	190	410	228	980	330	440	580
PORIFERA: Polymastia robusta														
SIPUNCULOIDEA: Golfingia sp											1			
No. Species	22	22	20	25	22	20	20	25	17	25	26	28	26	21
Total Number of Organisms	667	889	205	1562	1085	169	786	444	521	390	1457	515	732	874

G.2 Species List Year 2 (Winter 2017) of Vessel-Based Grab Samples (Cont.)

Species	T5-5 rep3	T5-6 rep1	T5-6 rep2	T5-6 rep3	T5-7 rep1	T5-7 rep2	T5-7 rep3	T5-8 rep1	T5-8 rep2	T5-8 rep3	T5-9 rep1	T5-9 rep2	T5-9 rep3
ACTINIARIA													
<i>Actinaria</i> spp					3		1						
ARTHROPODA													
Amphipoda													
<i>Ampelisca vadorum</i>											3		
<i>Byblis serrata</i>												1	
<i>Caprella linearis</i>													
<i>Gammaropsis maculata</i>										1			
<i>Hippomedon serratus</i>													
<i>Jassa marmorata</i>													
<i>Luconacia incerta</i>													
<i>Melita dentata</i>													
<i>Microdeutopus anomalus</i>							1						
<i>Monoculodes</i> sp													
<i>Phoxocephalus holbolli</i>													
<i>Pontogenia inermis</i>													
<i>Protohaustorius wigleyi</i>													
<i>Psammonyx nobilis</i>								1					
<i>Pseudunciola obliquua</i>													
<i>Rhepoxynuis epistomus</i>													
<i>Unciola irrorata</i>		2	5	5	5	5	1	1	4		6	13	5
Brachypoda													
<i>Hutchinsoniella macracantha</i>													
Cumacea													
<i>Diastylis</i> sp													
<i>Oxyurostylis smithi</i>													
<i>Petalosarsia declivis</i>			1										
<i>Pseudoleptocuma minor</i>									1				
Decapoda													
<i>Cancer borealis</i>													
<i>Cancer irroratus</i>					1				1				
<i>Crangon septemspinosa</i>													
<i>Pagurus acadianus</i>									1				
<i>Pagurus annulipes</i>													
<i>Panopeus herbstii</i>													
<i>Pasiphaea</i> sp.													
<i>Pinnotheres maculatus</i>													
Isopoda													
<i>Asellota</i> sp													
<i>Chiridotea caeca</i>	2	2	1	2	2	1			2	4		2	
<i>Chiridotea tuftsi</i>													
<i>Edotea triloba</i>									1				
<i>Idotea phosphorea</i>													
<i>Politolana polita</i>													

Species	T5-5 rep3	T5-6 rep1	T5-6 rep2	T5-6 rep3	T5-7 rep1	T5-7 rep2	T5-7 rep3	T5-8 rep1	T5-8 rep2	T5-8 rep3	T5-9 rep1	T5-9 rep2	T5-9 rep3
<i>Ptilanthura tenuis</i>													
Mysidacea													
<i>Heteromysis formosa</i>													
<i>Mysidopsis bigelowi</i>													
Sessilia													
<i>Balanus amphitrite</i>										17			
Tanaidacea													
<i>Tanaissus psammophilus</i>									1			1	
ECHINODERMATA													
Holothuroidea													
<i>Cucumaria frondosa</i>													
<i>Leptosynapta</i> sp								4					
MOLLUSCA													
Bivalvia													
<i>Astarte borealis</i>													
<i>Astarte</i> spp		1				1			1		1	2	1
<i>Cerastoderma pinnulatum</i>													
<i>Crassinella lunulata</i>													
<i>Crenella decussata</i>								2					
<i>Cyclocardia borealis</i>													
<i>Ensis directus</i>													
<i>Lyonsia arenosa</i>													
<i>Mytilus edulis</i>					1				1	5		1	
<i>Nucula tenuis</i>											1		
<i>Pitar morrhuanus</i>													
<i>Spisula solidissima</i>	2	1						2	4			1	
<i>Tellina agilis</i>													
Gastropoda													
<i>Bittium varium</i>								1					
<i>Crepidula plana</i>													
<i>Crucibulum striatum</i>													
<i>Epitonium multistriatum</i>													
<i>Euspira heros</i>													
<i>Euspira triseriata</i>													
<i>Ilyanassa trivittata</i>													
<i>Mangelia</i> sp													
<i>Polinices immaculatus</i>										1	1		
<i>Onoba</i> sp													
<i>Testudinalia testudinalis</i>													
ANNELIDA													
Oligochaeta													
<i>Oligochaeta</i> spp							4	1		1		1	1
Polychaeta													

Species	T5-5 rep3	T5-6 rep1	T5-6 rep2	T5-6 rep3	T5-7 rep1	T5-7 rep2	T5-7 rep3	T5-8 rep1	T5-8 rep2	T5-8 rep3	T5-9 rep1	T5-9 rep2	T5-9 rep3
<i>Ampharete arctica</i>		1			1							1	
<i>Aricidea catherinae</i>	2	2	6	2	7		9	2	3	1	2	9	9
<i>Asabellides oculata</i>													
<i>Brania wellfleetensis</i>							1						
<i>Capitella</i> sp													
<i>Caulleriella venefica</i>									3				
<i>Cirrophorus lyra</i>	1	1			1								1
<i>Cirrophorus furcatus</i>	1	2	1	2	4		5	2	1			4	1
<i>Dipolydora</i> sp						1							
<i>Drilonereis longa</i>													
<i>Drilonereis magna</i>													
<i>Eteone lactea</i>													
<i>Eumida sanguinea</i>					4			1				1	1
<i>Exogone hebes</i>									1				
<i>Glycera americana</i>					1	1						1	
<i>Glycera dibranchiata</i>													
<i>Goniadella gracilis</i>	2	9	2	2	3	3	2	5	6	2	1	3	11
<i>Harmothoe</i> sp													
<i>Leitoscoloplos robustus</i>													
<i>Lumbrinereis acuta</i>	3	6	20	18	46	14	10	7	14	1	12	14	16
<i>Lumbrinereis fragilis</i>			1		1	3						1	1
Maldanidae spp				1	1		1					1	
<i>Marphysa bellii</i>		1	2	1		2	2		1			1	3
<i>Megalona</i> sp													
<i>Microphthalmus sckelkowwi</i>										1			
<i>Monticellina baptisteeae</i>	1	1	1		5		2	2	2			2	4
<i>Nephtys</i> spp									1				
<i>Ophelia denticulata</i>													
Orbinidae sp.									1				
<i>Paranaitis speciosa</i>													
<i>Paraonis</i> spp													
<i>Parapionosyllis longicirrata</i>	7	4	10	19	85	4	44	19	19	15	1	5	11
<i>Parougia caeca</i>	24	1	3	10	4	4	36	17	7	7		19	1
<i>Phyllodoce arenae</i>													
<i>Pisione</i> sp	14	22	24	30	37	21	48	30	11	17	26	17	23
<i>Polycirrus eximius</i>	5	21	50	32	55	15	69	53	50	56	4	26	28
<i>Polydora</i> spp													
<i>Polygordius</i> spp	7	28	17	8	43	240	16	18	11	4	11	20	14
<i>Potamilla reniformis</i>										1			
<i>Proceraea</i> sp													1
<i>Pseudomystides</i> sp	4	2	5	7	5		2	18	1	2		4	3
<i>Sabellaria vulgaris</i>										2			
<i>Scalibregma inflatum</i>													
<i>Scolelepis bousfieldi</i>													
<i>Scolelepis squamata</i>												1	
<i>Sigalion arenicola</i>							1	1				1	1

Species	T5-5 rep3	T5-6 rep1	T5-6 rep2	T5-6 rep3	T5-7 rep1	T5-7 rep2	T5-7 rep3	T5-8 rep1	T5-8 rep2	T5-8 rep3	T5-9 rep1	T5-9 rep2	T5-9 rep3
<i>Sphaerosyllis erinaceus</i>	6			5	2		21	5	7	13		4	2
<i>Spio filicornis</i>													
<i>Spio setosa</i>													
<i>Spiochaetopterus oculatus</i>													
<i>Spiophanes bombyx</i>								1					
<i>Spiroris borealis</i>					4								
<i>Syllides longocirratu</i>	1				1		2	1	6	3			1
<i>Syllis gracilis</i>													
<i>Travisia carnea</i>	2			1		10	3		5	2		1	
<i>Typosyllis (Syllis) cornuta</i>													
OTHER (PHYLUM: sp(p))													
COPAPODA: Harpacticoid spp		6		18	8	1	8			4	7	2	2
NEMERTEA: Cerebratulus lacteus				1									
NEMERTEA: Nemertea spp	1	2	2		3		2	1	3		2	7	
NEMATODA: Nematoda spp	240	180	90	280	530	620	580	250	630	170	30	170	310
PORIFERA: Polymastia robusta													
SIPUNCULOIDEA: Golfingia sp													
No. species	19	21	18	19	28	17	25	25	31	23	15	32	24
Total Number of Organisms	325	295	241	444	863	946	871	445	800	330	108	337	451

G.2 Species List Year 2 (Winter 2017) of Vessel-Based Grab Samples (Cont.)

Species	C1-1 rep1	C1-1 rep2	C1-1 rep3	C1-2 rep1	C1-2 rep2	C1-2 rep3	C1-3 rep1	C1-3 rep2	C1-3 rep3
ACTINIARIA									
<i>Actinaria</i> spp				1					
ARTHROPODA									
Amphipoda									
<i>Ampelisca vadorum</i>	5	5	6				1		1
<i>Byblis serrata</i>									
<i>Caprella linearis</i>									
<i>Gammaropsis maculata</i>									
<i>Hippomedon serratus</i>									
<i>Jassa marmorata</i>									
<i>Luconacia incerta</i>									
<i>Melita dentata</i>									
<i>Microdeutopus anomalus</i>									
<i>Monoculodes</i> sp									
<i>Phoxocephalus holbolli</i>									
<i>Pontogenia inermis</i>									
<i>Protohaustorius wigleyi</i>									
<i>Psammonyx nobilis</i>									
<i>Pseudunciola obliqua</i>									
<i>Rhepoxynuis epistomus</i>									
<i>Unciola irrorata</i>	12	6	8	2	11	3	3	9	2
Brachypoda									
<i>Hutchinsoniella macracantha</i>									
Cumacea									
<i>Diastylis</i> sp									
<i>Oxyurostylis smithi</i>							1		
<i>Petalosarsia declivis</i>									
<i>Pseudoleptocuma minor</i>		1	1					1	
Decapoda									
<i>Cancer borealis</i>									
<i>Cancer irroratus</i>									
<i>Crangon septemspinosa</i>									
<i>Pagurus acadianus</i>									
<i>Pagurus annulipes</i>							1		
<i>Panopeus herbstii</i>									
<i>Pasiphaea</i> sp.				1					
<i>Pinnotheres maculatus</i>									
Isopoda									
<i>Asellota</i> sp									
<i>Chiridotea caeca</i>					1		1		1
<i>Chiridotea tuftsi</i>									
<i>Edotea triloba</i>		1	1		1		1		
<i>Idotea phosphorea</i>							1		
<i>Politolana polita</i>									

Species	C1-1 rep1	C1-1 rep2	C1-1 rep3	C1-2 rep1	C1-2 rep2	C1-2 rep3	C1-3 rep1	C1-3 rep2	C1-3 rep3
<i>Ptilanthura tenuis</i>									
Mysidacea									
<i>Heteromysis formosa</i>									
<i>Mysidopsis bigelowi</i>									
Sessilia									
<i>Balanus amphitrite</i>									
Tanaidacea									
<i>Tanaissus psammophilus</i>		2		1					
ECHINODERMATA									
Holothuroidea									
<i>Cucumaria frondosa</i>									
<i>Leptosynapta</i> sp					2		1	3	
MOLLUSCA									
Bivalvia									
<i>Astarte borealis</i>									
<i>Astarte</i> spp					1		1		
<i>Cerastoderma pinnulatum</i>									1
<i>Crassinella lunulata</i>								2	
<i>Crenella decussata</i>	3	2			4	4	3	4	2
<i>Cyclocardia borealis</i>									
<i>Ensis directus</i>									
<i>Lyonsia arenosa</i>		2		1	1	1	2	1	
<i>Mytilus edulis</i>									
<i>Nucula tenuis</i>									
<i>Pitar morrhuanus</i>									1
<i>Spisula solidissima</i>		2	1		6		1	1	1
<i>Tellina agilis</i>									
Gastropoda									
<i>Bittium varium</i>		2							
<i>Crepidula plana</i>									
<i>Crucibulum striatum</i>									
<i>Epitonium multistriatum</i>						1			
<i>Euspira heros</i>									
<i>Euspira triseriata</i>									
<i>Ilyanassa trivittata</i>									
<i>Mangelia</i> sp									
<i>Polinices immaculatus</i>							1		
<i>Onoba</i> sp									
<i>Testudinalia testudinalis</i>									
ANNELIDA									
Oligochaeta									
<i>Oligochaeta</i> spp			1		1		2	7	2
Polychaeta									
<i>Ampharete arctica</i>	2								1

Species	C1-1 rep1	C1-1 rep2	C1-1 rep3	C1-2 rep1	C1-2 rep2	C1-2 rep3	C1-3 rep1	C1-3 rep2	C1-3 rep3
<i>Aricidea catherinae</i>	8	5	4		3		1	2	3
<i>Asabellides oculata</i>									1
<i>Brania wellfleetensis</i>									
<i>Capitella</i> sp									
<i>Caulleriella venefica</i>									
<i>Cirrophorus lyra</i>			2		1		2	1	4
<i>Cirrophorus furcatus</i>					2			3	
<i>Dipolydora</i> sp									
<i>Drilonereis longa</i>									
<i>Drilonereis magna</i>									
<i>Eteone lactea</i>									
<i>Eumida sanguinea</i>							2	1	
<i>Exogone hebes</i>				1					
<i>Glycera americana</i>				1	1				
<i>Glycera dibranchiata</i>									
<i>Goniadella gracilis</i>		8	3	1	5	1	6		5
<i>Harmothoe</i> sp									
<i>Leitoscoloplos robustus</i>									
<i>Lumbrinereis acuta</i>	8	7	11		21		5	36	13
<i>Lumbrinereis fragilis</i>	2	1	2		1				
Maldanidae spp	2		1				1	1	
<i>Marphysa bellii</i>	2					1		1	1
<i>Megalona</i> sp									
<i>Microphthalmus sckelkowi</i>		1			1			2	
<i>Monticellina baptisteeae</i>	1				1				
<i>Nephtys</i> spp									
<i>Ophelia denticulata</i>									
Orbinidae sp.				1					
<i>Paranaitis speciosa</i>					1				
<i>Paraonis</i> spp									
<i>Parapionosyllis longicirrata</i>		3	16	1	39	4	1	16	18
<i>Parougia caeca</i>		8	4		6	1	1	14	6
<i>Phyllodoce arenae</i>									
<i>Pisone</i> sp	15	20	29	1	42	16	28	104	29
<i>Polycirrus eximius</i>	25	23	22	6	37	8	19	29	36
<i>Polydora</i> spp		1							
<i>Polygordius</i> spp	4	10	6	1	11	2	17	32	16
<i>Potamilla reniformis</i>									
<i>Proceraea</i> sp							1		
<i>Pseudomystides</i> sp								6	
<i>Sabellaria vulgaris</i>							4		
<i>Scalibregma inflatum</i>									
<i>Scolelepis bousfieldi</i>									
<i>Scolelepis squamata</i>									
<i>Sigalion arenicola</i>									
<i>Sphaerosyllis erinaceus</i>	3	1	7		34	4	5	28	49
<i>Spio filicornis</i>		1							

Species	C1-1 rep1	C1-1 rep2	C1-1 rep3	C1-2 rep1	C1-2 rep2	C1-2 rep3	C1-3 rep1	C1-3 rep2	C1-3 rep3
<i>Spio setosa</i>									
<i>Spiochaetopterus oculus</i>									
<i>Spiophanes bombyx</i>		1				1			1
<i>Spiroris borealis</i>							2		
<i>Syllides longocirratus</i>	2		5	1	5		1	5	5
<i>Syllis gracilis</i>		1							
<i>Travisia carnea</i>	1	4	4	1	11	10	12	13	20
<i>Typosyllis (Syllis) cornuta</i>									
OTHER (PHYLUM: sp(p))									
COPAPODA: Harpacticoid spp			2	8			10	24	40
NEMERTEA: <i>Cerebratulus lacteus</i>			90						
NEMERTEA: Nemertea spp	1	4	3	2	6		1	2	4
NEMATODA: Nematoda spp	48	72		116	860	66	210	210	180
PORIFERA: <i>Polymastia robusta</i>				1					
SIPUNCULOIDEA: <i>Golfingia</i> sp									
No. Species	18	27	23	19	29	15	34	28	27
Total Number of Organisms	144	194	229	148	1116	123	349	558	443

G.2 Species List Year 2 (Winter 2017) of Vessel-Based Grab Samples (Cont.)

Species	C2-1 rep1	C2-1 rep2	C2-1 rep3	C2-2 rep1	C2-2 rep2	C2-2 rep3	C2-3 rep1	C2-3 rep2	C2-3 rep3
ACTINIARIA									
<i>Actiniaria</i> spp									
ARTHROPODA									
Amphipoda									
<i>Ampelisca vadorum</i>	6	3	1	1	4	2		2	
<i>Byblis serrata</i>									
<i>Caprella linearis</i>									
<i>Gammaropsis maculata</i>									
<i>Hippomedon serratus</i>									
<i>Jassa marmorata</i>									
<i>Luconacia incerta</i>									
<i>Melita dentata</i>									
<i>Microdeutopus anomalus</i>									
<i>Monoculodes</i> sp									
<i>Phoxocephalus holbolli</i>									
<i>Pontogenia inermis</i>									
<i>Protohaustorius wigleyi</i>									
<i>Psammonyx nobilis</i>									
<i>Pseudunciola obliqua</i>									
<i>Rhepoxynuis epistomus</i>									
<i>Unciola irrorata</i>	6	16		7	21	7	1	2	
Brachypoda									
<i>Hutchinsoniella macracantha</i>							1		
Cumacea									
<i>Diastylis</i> sp									
<i>Oxyurostylis smithi</i>									
<i>Petalosarsia declivis</i>									
<i>Pseudoleptocuma minor</i>									
Decapoda									
<i>Cancer borealis</i>									
<i>Cancer irroratus</i>									
<i>Crangon septemspinosa</i>				1					
<i>Pagurus acadianus</i>									
<i>Pagurus annulipes</i>									
<i>Panopeus herbstii</i>									
<i>Pasiphaea</i> sp.									
<i>Pinnotheres maculatus</i>									
Isopoda									
<i>Asellota</i> sp									
<i>Chiridotea caeca</i>		2		2	1	4	3		
<i>Chiridotea tuftsi</i>									
<i>Edotea triloba</i>	1	1	1	1					
<i>Idotea phosphorea</i>									
<i>Politolana polita</i>									

Species	C2-1 rep1	C2-1 rep2	C2-1 rep3	C2-2 rep1	C2-2 rep2	C2-2 rep3	C2-3 rep1	C2-3 rep2	C2-3 rep3
<i>Ptilanthura tenuis</i>									
Mysidacea									
<i>Heteromysis formosa</i>									
<i>Mysidopsis bigelowi</i>									
Sessilia									
<i>Balanus amphitrite</i>									
Tanaidacea									
<i>Tanaissus psammophilus</i>								1	
ECHINODERMATA									
Holothuroidea									
<i>Cucumaria frondosa</i>							1		
<i>Leptosynapta</i> sp	1		2						
MOLLUSCA									
Bivalvia									
<i>Astarte borealis</i>									
<i>Astarte</i> spp	1								
<i>Cerastoderma pinnulatum</i>									
<i>Crassinella lunulata</i>									
<i>Crenella decussata</i>						1			
<i>Cyclocardia borealis</i>							1		
<i>Ensis directus</i>									
<i>Lyonsia arenosa</i>						3			
<i>Mytilus edulis</i>						1			
<i>Nucula tenuis</i>			1						
<i>Pitar morrhuanus</i>									
<i>Spisula solidissima</i>	5	1	2	5	3	10	4	2	
<i>Tellina agilis</i>									
Gastropoda									
<i>Bittium varium</i>						2			
<i>Crepidula plana</i>									
<i>Crucibulum striatum</i>									
<i>Epitonium multistriatum</i>									
<i>Euspira heros</i>									
<i>Euspira triseriata</i>									
<i>Ilyanassa trivittata</i>									
<i>Mangelia</i> sp									
<i>Polinices immaculatus</i>								1	
<i>Onoba</i> sp									
<i>Testudinalia testudinalis</i>									
ANNELIDA									
Oligochaeta									
<i>Oligochaeta</i> spp			2			2			
Polychaeta									
<i>Ampharete arctica</i>			1		1				

Species	C2-1 rep1	C2-1 rep2	C2-1 rep3	C2-2 rep1	C2-2 rep2	C2-2 rep3	C2-3 rep1	C2-3 rep2	C2-3 rep3
<i>Aricidea catherinae</i>	20	16	34	21	17	19	5	3	27
<i>Asabellides oculata</i>									
<i>Brania wellfleetensis</i>			1			3			
<i>Capitella</i> sp									
<i>Caulleriella venefica</i>									
<i>Cirrophorus lyra</i>	2	7			1	3			1
<i>Cirrophorus furcatus</i>	22	29	17	9	12	10	7	19	6
<i>Dipolydora</i> sp									
<i>Drilonereis longa</i>									
<i>Drilonereis magna</i>									
<i>Eteone lactea</i>									
<i>Eumida sanguinea</i>		2		1	1	1	1		
<i>Exogone hebes</i>									
<i>Glycera americana</i>									1
<i>Glycera dibranchiata</i>									
<i>Goniadella gracilis</i>	14	3	2	2	3	5	3	5	3
<i>Harmothoe</i> sp					1				
<i>Leitoscoloplos robustus</i>									
<i>Lumbrinereis acuta</i>	33	31	55	67	17	56	8	12	60
<i>Lumbrinereis fragilis</i>	1		2	2	1	2	3	1	2
Maldanidae spp	8	2	7	3		5	4	1	3
<i>Marphysa bellii</i>	1		4	6	1	3	2	1	2
<i>Megalona</i> sp									
<i>Microphthalmus sckelkowi</i>	3	1					2		
<i>Monticellina baptisteeae</i>		2	4	8	2	6	3		6
<i>Nephtys</i> spp									
<i>Ophelia denticulata</i>	1								
Orbinidae sp.									
<i>Paranaitis speciosa</i>									
<i>Paraonis</i> spp									
<i>Parapionosyllis longicirrata</i>	31	16	73	83	37	87	43	3	18
<i>Parougia caeca</i>	22	8	15	35	19	12	6	2	3
<i>Phyllodoce arenae</i>									
<i>Pisone</i> sp	32	43	29	30	49	75	52	12	33
<i>Polycirrus eximius</i>	103	64	89	65	35	140	63	34	84
<i>Polydora</i> spp				1	1				
<i>Polygordius</i> spp	37	68	30	27	36	35	18	11	12
<i>Potamilla reniformis</i>									
<i>Proceraea</i> sp									
<i>Pseudomystides</i> sp	2		2	5	3	8			
<i>Sabellaria vulgaris</i>									
<i>Scalibregma inflatum</i>							1		
<i>Scolelepis bousfieldi</i>									
<i>Scolelepis squamata</i>						1			
<i>Sigalion arenicola</i>			1				1		
<i>Sphaerosyllis erinaceus</i>	22	2	90	59	18	44	25	5	21
<i>Spio filicornis</i>			1						

Species	C2-1 rep1	C2-1 rep2	C2-1 rep3	C2-2 rep1	C2-2 rep2	C2-2 rep3	C2-3 rep1	C2-3 rep2	C2-3 rep3
<i>Spio setosa</i>									
<i>Spiochaetopterus oculus</i>									
<i>Spiophanes bombyx</i>	2				1		1		
<i>Spiroris borealis</i>						4			
<i>Syllides longocirratus</i>	12	3	10	12	8	15	14		2
<i>Syllis gracilis</i>		1			1	1			
<i>Travisia carnea</i>	1			2				1	
<i>Typosyllis (Syllis) cornuta</i>			1		1				
OTHER (PHYLUM: sp(p))									
COPAPODA: Harpacticoid spp	28	13	36	23	18	44	18	0	12
NEMERTEA: <i>Cerebratulus lacteus</i>	1								
NEMERTEA: Nemertea spp		2		3	2	3		1	
NEMATODA: Nematoda spp	690	360	1240	990	1140	720	1120	660	910
PORIFERA: <i>Polymastia robusta</i>									
SIPUNCULOIDEA: <i>Golfingia</i> sp									
No. species	29	25	29	28	30	34	28	22	19
Total Number of Organisms	1108	696	1753	1471	1455	1334	1411	779	1206

G.2 Species List Year 2 (Winter 2017) of Vessel-Based Grab Samples (Cont.)

Species	C3-3 rep1	C3-3 rep2	C3-3 rep3	C3-2 rep1	C3-2 rep2	C3-2 rep3	C3-3 rep1	C3-3 rep2	C3-3 rep3
ACTINIARIA									
<i>Actiniaria</i> spp									
ARTHROPODA									
Amphipoda									
<i>Ampelisca vadorum</i>	1	2	2	2		5	1	2	1
<i>Byblis serrata</i>			1						
<i>Caprella linearis</i>									
<i>Gammaropsis maculata</i>									
<i>Hippomedon serratus</i>									
<i>Jassa marmorata</i>									
<i>Luconacia incerta</i>									
<i>Melita dentata</i>									
<i>Microdeutopus anomalus</i>									
<i>Monoculodes</i> sp									
<i>Phoxocephalus holbolli</i>			1						
<i>Pontogenia inermis</i>									
<i>Protohaustorius wigleyi</i>									
<i>Psammonyx nobilis</i>									
<i>Pseudunciola obliquua</i>									
<i>Rhepoxynuis epistomus</i>									
<i>Unciola irrorata</i>	6	5	13		7	23	11	5	8
Brachypoda									
<i>Hutchinsoniella macracantha</i>									
Cumacea									
<i>Diastylis</i> sp									
<i>Oxyurostylis smithi</i>						1			
<i>Petalosarsia declivis</i>									
<i>Pseudoleptocuma minor</i>									
Decapoda									
<i>Cancer borealis</i>									
<i>Cancer irroratus</i>	1						1		
<i>Crangon septemspinosa</i>									
<i>Pagurus acadianus</i>									
<i>Pagurus annulipes</i>								1	
<i>Panopeus herbstii</i>									
<i>Pasiphaea</i> sp.									
<i>Pinnotheres maculatus</i>									
Isopoda									
<i>Asellota</i> sp									
<i>Chiridotea caeca</i>				1	1	1			
<i>Chiridotea tuftsi</i>									
<i>Edotea triloba</i>									
<i>Idotea phosphorea</i>									
<i>Politolana polita</i>									
<i>Ptilanthura tenuis</i>									

Species	C3-3 rep1	C3-3 rep2	C3-3 rep3	C3-2 rep1	C3-2 rep2	C3-2 rep3	C3-3 rep1	C3-3 rep2	C3-3 rep3
Mysidacea									
<i>Heteromysis formosa</i>									
<i>Mysidopsis bigelowi</i>									
Sessilia									
<i>Balanus amphitrite</i>									
Tanaidacea									
<i>Tanaissus psammophilus</i>									
ECHINODERMATA									
Holothuroidea									
<i>Cucumaria frondosa</i>									
<i>Leptosynapta</i> sp									
MOLLUSCA									
Bivalvia									
<i>Astarte borealis</i>									
<i>Astarte</i> spp									
<i>Cerastoderma pinnulatum</i>									
<i>Crassinella lunulata</i>									
<i>Crenella decussata</i>									
<i>Cyclocardia borealis</i>									
<i>Ensis directus</i>									
<i>Lyonsia arenosa</i>									
<i>Mytilus edulis</i>									
<i>Nucula tenuis</i>			1						
<i>Pitar morrhuanus</i>									
<i>Spisula solidissima</i>	2		2	1	2		1	2	1
<i>Tellina agilis</i>									1
Gastropoda									
<i>Bittium varium</i>									
<i>Crepidula plana</i>									
<i>Crucibulum striatum</i>									
<i>Epitonium multistriatum</i>									
<i>Euspira heros</i>									
<i>Euspira triseriata</i>									
<i>Ilyanassa trivittata</i>				1					
<i>Mangelia</i> sp									
<i>Polinices immaculatus</i>									
<i>Onoba</i> sp									
<i>Testudinalia testudinalis</i>									
ANNELIDA									
Oligochaeta									
<i>Oligochaeta</i> spp		1				1			
Polychaeta									
<i>Ampharete arctica</i>	1	2						1	
<i>Aricidea catherinae</i>	4		9	6	13	8	1	15	5
<i>Asabellides oculata</i>									
<i>Brania wellfleetensis</i>									

Species	C3-3 rep1	C3-3 rep2	C3-3 rep3	C3-2 rep1	C3-2 rep2	C3-2 rep3	C3-3 rep1	C3-3 rep2	C3-3 rep3
<i>Capitella</i> sp									
<i>Caulerliella venefica</i>	1								
<i>Cirrophorus lyra</i>	2	1	1			2	1		2
<i>Cirrophorus furcatus</i>	2	13	20	2	2	1	2	9	6
<i>Dipolydora</i> sp				2					1
<i>Drilonereis longa</i>					1				
<i>Drilonereis magna</i>									
<i>Eteone lactea</i>									
<i>Eumida sanguinea</i>									
<i>Exogone hebes</i>	3		2	6	3	2	1		
<i>Glycera americana</i>	1		1				1	1	
<i>Glycera dibranchiata</i>									
<i>Goniadella gracilis</i>		5	14	11	7	10	2	6	8
<i>Harmothoe</i> sp								1	
<i>Leitoscoloplos robustus</i>									
<i>Lumbrinereis acuta</i>	21	23	28	32	2	7	18	30	21
<i>Lumbrinereis fragilis</i>	6	6	4	8	9	6	4	8	7
Maldanidae spp	4	3	2	4	6	4	1	4	6
<i>Marphysa bellii</i>	3	2	5	5	1	4	1		6
<i>Megalona</i> sp									
<i>Microphthalmus sckelkowwi</i>									
<i>Monticellina baptisteeae</i>	2	5	12	3	2	1	3	4	1
<i>Nephtys</i> spp				1					
<i>Ophelia denticulata</i>									
Orbinidae sp.									
<i>Paranaitis speciosa</i>									
<i>Paraonis</i> spp									
<i>Parapionosyllis longicirrata</i>	5	5	4	11	3	20	1	54	10
<i>Parougia caeca</i>		3	2	9	1	3		4	2
<i>Phyllodoce arenae</i>				1				1	1
<i>Pisone</i> sp	6	6	3	10	10	10	5	11	4
<i>Polycirrus eximius</i>	2	2		6	5	3		4	1
<i>Polydora</i> spp		2							
<i>Polygordius</i> spp	13	16	14	70	4	62	14	39	35
<i>Potamilla reniformis</i>						1			
<i>Proceraea</i> sp									
<i>Pseudomystides</i> sp									
<i>Sabellaria vulgaris</i>									
<i>Scalibregma inflatum</i>					1	2			
<i>Scolecopsis bousfieldi</i>									
<i>Scolecopsis squamata</i>									
<i>Sigalion arenicola</i>									
<i>Sphaerosyllis erinaceus</i>	1	43	3	3	3	74	3	102	59
<i>Spio filicornis</i>									
<i>Spio setosa</i>									
<i>Spiochaetopterus oculatus</i>									
<i>Spiophanes bombyx</i>				3		1		1	

Species	C3-3 rep1	C3-3 rep2	C3-3 rep3	C3-2 rep1	C3-2 rep2	C3-2 rep3	C3-3 rep1	C3-3 rep2	C3-3 rep3
<i>Spiroris borealis</i>									
<i>Syllides longocirratus</i>	2	7	2	1	2	4		14	3
<i>Syllis gracilis</i>									
<i>Travisia carnea</i>									
<i>Typosyllis (Syllis) cornuta</i>									
OTHER (PHYLUM: sp(p))									
COPAPODA: Harpacticoid spp		4		2	1	22		10	10
NEMERTEA: Cerebratulus lacteus									
NEMERTEA: Nemertea spp	1	1		2	1	1	1		1
NEMATODA: Nematoda spp	30	360	280	126	192	300	54	360	480
PORIFERA: Polymastia robusta									
SIPUNCULOIDEA: Golfingia sp									
No. species	24	23	24	27	24	28	21	25	25
Total Number of Organisms	120	517	426	329	279	579	127	689	680

G.3 Species List Year 2 (Summer 2018) of Diver-Based Grab Samples

Species	T1-FP1	T1-FP2	T1-FP3	T1-FP4	T1-FP5	T3-FP1	T3-FP2	T3-FP3	T3-FP4	T3-FP5	T5-FP1	T5-FP2	T5-FP3	T5-FP4	T5-FP5
Amphipoda															
<i>Ampelisca agassizi</i>													7		
<i>Ampelisca vadorum</i>												1			
<i>Byblis serrata</i>							3	4	6			7	68	12	9
<i>Caprella linearis</i>										1					
<i>Corophium</i> spp															2
<i>Gammaropsis maculata</i>								1				1			1
<i>Jassa marmorata</i>								1			2	11			3
<i>Leptocheirus pinguis</i>								1							
<i>Monoculodes</i> sp								1	1						
<i>Photis</i> sp												1			
<i>Pontogenia inermis</i>								1			1	2			5
<i>Unciola irrorata</i>		3	3	13		5		20		1	15	49	12	15	23
Cumacea															
<i>Diastylis</i> sp												1			
Decapoda															
<i>Cancer borealis</i>					2										
<i>Cancer irroratus</i>			1		1										
<i>Crangon septemspinosa</i>												1			
<i>Pagurus acadianus</i>			1	1											
<i>Pagurus annulipes</i>						1									
<i>Pinnotheres maculatus</i>		1													
Isopoda															
<i>Chiridotea caeca</i>								1				2	2		
<i>Politolana polita</i>							1	2				2	2	1	
Sessilia															
<i>Balanus amphitrite</i>	79	7	17	19	8	46	1	6	12	11	13	6	1		17
MOLLUSCA															
Bivalvia															
<i>Aequipecten irradians</i> *									1		2	1			
<i>Anomia simplex</i>		1				1									
<i>Astarte</i> spp											3	4	1	1	
<i>Crassinella lunulata</i>											1				
<i>Crenella decussata</i>												1			
<i>Lyonsia arenosa</i>								1				1	1		
<i>Mytilus edulis</i>	15	33	11	7	23	7	1	12	2	7	80	118	29	23	300
<i>Spisula solidissima</i>												1			2
<i>Tellina agilis</i>										1					
Gastropoda															
<i>Crepidula plana</i>	1														
<i>Euspira heros</i>			2												
ANNELIDA															
Polychaeta															
<i>Ampharete arctica</i>		1					1							1	1

Species	T1-FP1	T1-FP2	T1-FP3	T1-FP4	T1-FP5	T3-FP1	T3-FP2	T3-FP3	T3-FP4	T3-FP5	T5-FP1	T5-FP2	T5-FP3	T5-FP4	T5-FP5
<i>Aricidea albatrossae</i>									1			1			
<i>Aricidea catherinae</i>									1			3	2	1	3
<i>Capitella</i> sp		3		1		1				1					
<i>Caulleriella venefica</i>												1			
<i>Dipolydora</i> sp		3		4											
<i>Eteone longa</i>	1	3		1											
<i>Eulalia viridis</i>					1										
<i>Eumida sanguinea</i>								1			1		1		
<i>Glycera dibranchiata</i>													2		
<i>Goniadella gracilis</i>		1	1				4	1	2		2	2	2	1	9
<i>Harmothoe</i> sp	3	7	1	2	7			2		1					
<i>Leitoscoloplos robustus</i>			1	1											
<i>Lepidonotus squamatus</i>		2													
<i>Lumbrinereis acuta</i>							1	2			8	10	3	1	3
<i>Lumbrinereis fragilis</i>	14	16	4	10	1	2	1	7	6		3	8	9	10	8
<i>Maldanidae</i> spp											1				
<i>Marphysa bellii</i>												1			1
<i>Microphthalmus sckelkowi</i>		1													2
<i>Monticellina baptisteeae</i>								2	1				2		
<i>Nephtys</i> spp												1			
<i>Nereis arenaceodonta</i>								1					1		
<i>Ophioglycera gigantea</i>			1	1							1		1		
<i>Parapionosyllis longicirrata</i>							1	4	2			7	13	2	
<i>Parougia caeca</i>		6					4	1	2		2	7	10		
<i>Phyllodoce maculata</i>	1														
<i>Pisone</i> sp						2	1	5		1	5	12	11	13	12
<i>Polycirrus eximius</i>			1			1		1			1	5	2		1
<i>Polydora</i> spp														1	
<i>Polygordius</i> spp						1	5	3	7	3	5	66	18	16	13
<i>Sigalion arenicola</i>														1	
<i>Sphaerosyllis erinaceus</i>													2		
<i>Spirorbis borealis</i>														1	
<i>Harpacticoid</i> spp													2		
<i>Nemertea</i> spp						1		1		1			2		
<i>Nematoda</i> spp	2	40	24	12	2	3	2	12	1	3	340	380	280	320	300
<i>Turbellaria</i> sp							3								1
No. Species	8	16	13	12	8	12	14	26	14	11	19	32	27	17	21
Total No. Individuals	116	128	68	72	45	71	29	94	45	31	486	714	486	420	716
* <i>Aequipecten irradians/Placopecten magellanicus</i> (juveniles)															

G.4 Species List Year 3 (Winter 2019) of Vessel-Based Grab Samples

SampleID	T1-1rep1_Y3	T1-1rep2_Y3	T1-1rep3_Y3	T1-2rep1_Y3	T1-2rep2_Y3	T1-2rep3_Y3	T1-3rep1_Y3	T1-3rep2_Y3	T1-3rep3_Y3	T1-4rep1_Y3	T1-4rep2_Y3	T1-4rep3_Y3
ACTINIARIA												
<i>Actinaria</i> spp.												
<i>Halcampa duodecimcirrata</i>												
ARTHROPODA												
Amphipoda												
<i>Ampelisca vadorum</i>												
<i>Byblis serrata</i>												
<i>Caprella linearis</i>								1			1	
<i>Corophium</i> sp.												
<i>Erichthonius brasiliensis</i>									1			
<i>Gammaropsis maculata</i>												
<i>Grandidierella</i> sp.												
<i>Hippomedon serratus</i>												
<i>Ischyrocerus anguipes</i>												
<i>Jassa marmorata</i>												1
<i>Lysianopsis alba</i>												
<i>Microdeutopus anomalus</i>												
<i>Monoculodes</i> sp.												
<i>Parametopella cypris</i>					1							
<i>Phoxocephalus holbolli</i>												
<i>Pontogeneia inermis</i>												
<i>Protohaustorius wigleyi</i>									1	6	3	4
<i>Wecomedon nobilis</i>												
<i>Pseudunciola obliquua</i>											1	2
<i>Rhepoxynuis epistomus</i>			1	1	1		2	2	3	1	3	1
<i>Siphonoecetes smithianus</i>												
<i>Stenopleustes inermis</i>												
<i>Unciola irrorata</i>	3	2	4	3	1			5	1			
Brachypoda												
<i>Hutchinsoniella macracantha</i>												
Cumacea												
<i>Diastylis</i> sp												
<i>Pseudoleptocuma minus</i>										1		
Decapoda												
<i>Cancer borealis</i>												

SampleID	T1-1rep1_Y3	T1-1rep2_Y3	T1-1rep3_Y3	T1-2rep1_Y3	T1-2rep2_Y3	T1-2rep3_Y3	T1-3rep1_Y3	T1-3rep2_Y3	T1-3rep3_Y3	T1-4rep1_Y3	T1-4rep2_Y3	T1-4rep3_Y3
<i>Cancer irroratus</i>												
<i>Crangon septemspinosa</i>												1
<i>Lebbeus zebra</i>												
<i>Pagurus acadianus</i>												
<i>Pagurus annulipes</i>		1										
<i>Pinnixa sayana</i>												
<i>Pinnotheres maculatus</i>												
Harpacticoida												
Harpacticoida			1	4		9		2	4	1		1
Isopoda												
<i>Chiridotea caeca</i>												
<i>Chiridotea tuftsi</i>												
<i>Edotia triloba</i>												
<i>Politolana polita</i>										1		
<i>Ptilanthura tenuis</i>			1									
Mysidacea												
<i>Heteromysis formosa</i>												
Sessilia												
<i>Balanus</i> spp.	1106	22	348	6	150	43	255	15	21			
Tanaidacea												
<i>Tanaissus psammophilus</i>	2	3		3	2		1			8	4	3
Perciformes												
<i>Gobiosoma bosc</i>												
ECHINODERMATA												
<i>Asterias</i> spp.	1											
<i>Echinarachnius parma</i>											1	
<i>Leptosynapta</i> sp												
<i>Amphipholis squamata</i>	1											
MOLLUSCA												
Bivalvia												
<i>Anomia</i> spp (juveniles)			1									
<i>Astarte</i> spp.		2					1		1		2	1
<i>Cerastoderma pinnulatum</i>												
<i>Crassinella</i> spp.												
<i>Crenella decussata</i>						1						
<i>Cyclocardia borealis</i>									1			
<i>Heteranomia squamula</i>												

SampleID	T1-1rep1_Y3	T1-1rep2_Y3	T1-1rep3_Y3	T1-2rep1_Y3	T1-2rep2_Y3	T1-2rep3_Y3	T1-3rep1_Y3	T1-3rep2_Y3	T1-3rep3_Y3	T1-4rep1_Y3	T1-4rep2_Y3	T1-4rep3_Y3
<i>Hiatella arctica</i>												
<i>Lyonsia arenosa</i>		3		1	3					1	1	
<i>Mysella planulata</i>												
<i>Mytilus edulis</i>	262	33	190	10	81	1	256	10	7		1	1
<i>Nucula proxima</i>												
<i>Nucula tenuis</i>						1						2
<i>Pandora gouldiana</i>						1						
<i>Periploma leanum</i>												
<i>Psammotreta brevifrons</i>												
<i>Spisula solidissima</i>									1	1		
<i>Tellina agilis</i>											1	
Gastropoda												
<i>Boonea bisuturalis</i>							1					
<i>Caecum cooperi</i>												
<i>Costoanachis translirata</i>												
<i>Crepidula fornicata</i>	7	1	3						1			
<i>Crepidula plana</i>												
<i>Euspira heros</i>												
<i>Euspira triseriata</i>												
<i>Ilyanassa trivittata</i>												
<i>Polinices immaculatus</i>												
<i>Onoba</i> sp.												
<i>Testudinalia testudinalis</i>		2										
ANNELIDA												
Oligochaeta												
<i>Oligochaeta</i> spp.						3			6	1	1	1
Polychaeta												
<i>Ampharete arctica</i>	1											
<i>Aricidea catherinae</i>		1			2	3						
<i>Aricidea cerrutii</i>					1						1	
<i>Aricidea wassi</i>												
<i>Asabellides oculata</i>			1	1	1	1						
<i>Capitella</i> sp.												
<i>Caulleriella venefica</i>		2	2		6	1	2	1	3	2	3	
<i>Cirratulidae</i>	1	2	2	2	6	13	1	9	3	1		
<i>Cirrophorus</i> spp.			1			2			1			
<i>Dipolydora</i> spp.	1		2			1	1		2			

SampleID	T1-1rep1_Y3	T1-1rep2_Y3	T1-1rep3_Y3	T1-2rep1_Y3	T1-2rep2_Y3	T1-2rep3_Y3	T1-3rep1_Y3	T1-3rep2_Y3	T1-3rep3_Y3	T1-4rep1_Y3	T1-4rep2_Y3	T1-4rep3_Y3
<i>Dorvilleidae</i>	1		3		2	1	2	3	2	1		
<i>Drilonereis longa</i>												
<i>Ephesiella minuta</i>												
<i>Eteone longa</i>												
<i>Eumida sanguinea</i>												
<i>Exogone</i> spp.	2	2	2	3	4	10	2	3	9	6	3	3
<i>Glycera americana</i>					1							
<i>Glycera dibranchiata</i>												
<i>Goniadella gracilis</i>	16	4	5	9	14	10	10	12	18	3		2
<i>Gyptis vittata</i>												
<i>Harmothoe</i> spp.	1											
<i>Lepidonotus squamatus</i>												
<i>Lumbrinereis acuta</i>	5	7	6	2	4	4	8	10	11	4	3	
<i>Lumbrinereis fragilis</i>	7	4	3		4	6	3	10	5		1	4
Maldanidae spp.	1		1									
<i>Marenzelleria viridis</i>												
<i>Marphysa bellii</i>	1		1									
<i>Megalona</i> sp.												
<i>Microphthalmus sckelkowwi</i>												
<i>Nephtys</i> spp.	8	17	9	5	2	3	6	5	5	5	4	2
<i>Neanthes arenaceodentata</i>								1				
<i>Notomastus</i> sp.												
<i>Ophelia denticulata</i>												
<i>Ophioglycera gigantea</i>												
Orbinidae spp.												
<i>Orbinia swani</i>						1						
<i>Paranaitis speciosa</i>						1						
<i>Paraonis</i> spp.	1				1							
<i>Parapionosyllis longicirrata</i>		2	1	12	6	32		3	16	6	20	10
<i>Pherusa affinis</i>												
<i>Phyllodoce arenae</i>	1	1										
<i>Phyllodoce maculata</i>												
<i>Pisone</i> sp.												
<i>Polycirrus eximius</i>	1		1					1				
<i>Polygordius</i> spp.	39	55	33	13	43	28	18	29	43	8	15	11
<i>Potamilla reniformis</i>												
<i>Pseudomystides</i> sp.												

SampleID	T1-1rep1_Y3	T1-1rep2_Y3	T1-1rep3_Y3	T1-2rep1_Y3	T1-2rep2_Y3	T1-2rep3_Y3	T1-3rep1_Y3	T1-3rep2_Y3	T1-3rep3_Y3	T1-4rep1_Y3	T1-4rep2_Y3	T1-4rep3_Y3
<i>Sabellaria vulgaris</i>	4	1						6	1			
<i>Scalibregma inflatum</i>												
<i>Scolecopsis bousfieldi</i>												
<i>Sigalion arenicola</i>											2	
<i>Sphaerosyllis erinaceus</i>		1		2	2	13		1	3			1
<i>Spio filicornis</i>												
<i>Spio setosa</i>												
<i>Spiochaetopterus oculatus</i>	1											
<i>Spiophanes bombyx</i>	2	1	3									
<i>Spirorbis</i> spp												
<i>Syllides</i> spp.				1	1	4			3	5	1	
<i>Travisia camea</i>						1						
<i>Typosyllis (Syllis) cornuta</i>												
OTHER PHYLA												
NEMERTEA	3	2	1	3	2	5	2		3	3	2	
<i>Cerebratulus lacteus</i>		1										1
NEMATODA	7	3	4	92	172	236	29	80	224	170	30	45
SIPUNCULA												
<i>Phascolopsis gouldii</i>												

G.4 Species List Year 3 (Winter 2019) of Vessel-Based Grab Samples (continued)

SampleID	T1-5rep1_Y3	T1-5rep2_Y3	T1-5rep3_Y3	T1-6rep1_Y3	T1-6rep2_Y3	T1-6rep3_Y3	T1-7rep1_Y3	T1-7rep2_Y3	T1-7rep3_Y3	T1-8rep1_Y3	T1-8rep2_Y3	T1-8rep3_Y3
ACTINIARIA												
<i>Actinaria</i> sp.												1
<i>Halcampa duodecimcirrata</i>												
ARTHROPODA												
Amphipoda												
<i>Ampelisca vadorum</i>	1					1						
<i>Byblis serrata</i>												
<i>Caprella linearis</i>												
<i>Corophium</i> sp.						5						
<i>Erichthonius brasiliensis</i>												
<i>Gammaropsis maculata</i>												
<i>Grandidierella</i> sp.						3						
<i>Hippomedon serratus</i>												
<i>Ischyrocerus anguipes</i>		1				1						
<i>Jassa marmorata</i>												
<i>Lysianopsis alba</i>												
<i>Microdeutopus anomalus</i>		1				3						
<i>Monoculodes</i> sp.												
<i>Parametopella cypris</i>												
<i>Phoxocephalus holbolli</i>						1						
<i>Pontogeneia inermis</i>												
<i>Protohaustorius wigleyi</i>							1			2	1	
<i>Wecomedon nobilis</i>												
<i>Pseudunciola obliqua</i>											3	
<i>Rhepoxynuis epistomus</i>							2				1	
<i>Siphonoecetes smithianus</i>												
<i>Stenopleustes inermis</i>		1	1									
<i>Unciola irrorata</i>	7	2		8	4	2	1	12	1	2	10	2
Brachypoda												
<i>Hutchinsoniella macracantha</i>												
Cumacea												
<i>Diastylis</i> sp.												
<i>Pseudoleptocuma minus</i>				1								
Decapoda												
<i>Cancer borealis</i>		10	7									

SampleID	T1-5rep1_Y3	T1-5rep2_Y3	T1-5rep3_Y3	T1-6rep1_Y3	T1-6rep2_Y3	T1-6rep3_Y3	T1-7rep1_Y3	T1-7rep2_Y3	T1-7rep3_Y3	T1-8rep1_Y3	T1-8rep2_Y3	T1-8rep3_Y3
<i>Cancer irroratus</i>												
<i>Crangon septemspinosa</i>												
<i>Lebbeus zebra</i>		6	6									
<i>Pagurus acadianus</i>												
<i>Pagurus annulipes</i>								1				
<i>Pinnixa sayana</i>		1										
<i>Pinnotheres maculatus</i>		2	3									
Harpacticoida												
Harpacticoida	1					1		8				
Isopoda												
<i>Chiridotea caeca</i>												
<i>Chiridotea tuftsi</i>												
<i>Edotia triloba</i>												
<i>Politolana polita</i>												
<i>Ptilanthura tenuis</i>						1		1				
Mysidacea												
<i>Heteromysis formosa</i>		10	10									
Sessilia												
<i>Balanus</i> spp.	369	3	2		156	812	2	5	32	40	12	16
Tanaidacea												
<i>Tanaissus psammophilus</i>	2				1			2			7	
Perciformes												
<i>Gobiosoma bosc</i>												
ECHINODERMATA												
<i>Asterias</i> spp.												
<i>Echinarachnius parma</i>										1		
<i>Leptosynapta</i> sp												
<i>Amphipholis squamata</i>		1						1				
MOLLUSCA												
Bivalvia												
<i>Anomia</i> spp (juveniles)						2				6		
<i>Astarte</i> spp.								2				
<i>Cerastoderma pinnulatum</i>												
<i>Crassinella</i> spp.								1				
<i>Crenella decussata</i>												
<i>Cyclocardia borealis</i>					1							
<i>Heteranomia squamula</i>												

SampleID	T1-5rep1_Y3	T1-5rep2_Y3	T1-5rep3_Y3	T1-6rep1_Y3	T1-6rep2_Y3	T1-6rep3_Y3	T1-7rep1_Y3	T1-7rep2_Y3	T1-7rep3_Y3	T1-8rep1_Y3	T1-8rep2_Y3	T1-8rep3_Y3
<i>Hiatella arctica</i>							1					
<i>Lyonsia arenosa</i>				1			1	4			1	
<i>Mysella planulata</i>												
<i>Mytilus edulis</i>	380	25	39	5	2	1380	2	13	4		8	
<i>Nucula proxima</i>					1	1						
<i>Nucula tenuis</i>												
<i>Pandora gouldiana</i>										1		1
<i>Periploma leanum</i>												
<i>Psammotreta brevifrons</i>											1	
<i>Spisula solidissima</i>								2			1	
<i>Tellina agilis</i>	1						1					
Gastropoda												
<i>Boonea bisuturalis</i>												
<i>Caecum cooperi</i>												
<i>Costoanachis translirata</i>		3										
<i>Crepidula fornicata</i>	2		1		1	1			2			
<i>Crepidula plana</i>												
<i>Euspira heros</i>												
<i>Euspira triseriata</i>												
<i>Ilyanassa trivittata</i>												
<i>Polinices immaculatus</i>												
<i>Onoba</i> sp.												
<i>Testudinalia testudinalis</i>												
ANNELIDA												
Oligochaeta												
<i>Oligochaeta</i> spp.							1	3				
Polychaeta												
<i>Ampharete arctica</i>												
<i>Aricidea catherinae</i>	1				1			4	1	1	3	
<i>Aricidea cerrutii</i>				1			1	15	1		1	
<i>Aricidea wassi</i>												
<i>Asabellides oculata</i>	1											1
<i>Capitella</i> sp.	1	10	3									
<i>Cautleriella venefica</i>				1	3	2	3					
<i>Cirratulidae</i>		1		3	3	7	4	11	4	3	5	1
<i>Cirrophorus</i> spp.	1			2	2		1	3	2		2	
<i>Dipolydora</i> spp.	1			33	7		4	42	9	6	4	2

SampleID	T1-5rep1_Y3	T1-5rep2_Y3	T1-5rep3_Y3	T1-6rep1_Y3	T1-6rep2_Y3	T1-6rep3_Y3	T1-7rep1_Y3	T1-7rep2_Y3	T1-7rep3_Y3	T1-8rep1_Y3	T1-8rep2_Y3	T1-8rep3_Y3
<i>Dorvilleidae</i>	1			1		1	5	4	16	1		1
<i>Drilonereis longa</i>												
<i>Ephesiella minuta</i>												
<i>Eteone longa</i>		3	4									
<i>Eumida sanguinea</i>						1						
<i>Exogone</i> spp.	5			5	7	1	8	7	5		1	
<i>Glycera americana</i>												
<i>Glycera dibranchiata</i>												1
<i>Goniadella gracilis</i>	5			18	17	3	7	11	7	8	26	2
<i>Gyptis vittata</i>			5									
<i>Harmothoe</i> spp.		17	12			1						
<i>Lepidonotus squamatus</i>		7	2			1						
<i>Lumbrinereis acuta</i>	8			11	3	4	7	10	7	1	8	5
<i>Lumbrinereis fragilis</i>	5		3	1	2	1	3	1	4		1	
Maldanidae spp.	1			4	2	1	1	1	3	2	3	1
<i>Marenzelleria viridis</i>												
<i>Marphysa bellii</i>						1			7		2	
<i>Megalona</i> sp.												
<i>Microphthalmus sckelkowwi</i>												
<i>Nephtys</i> spp.	12			1	6	2	4	1	11	4	4	2
<i>Neanthes arenaceodentata</i>	1											
<i>Notomastus</i> sp.												
<i>Ophelia denticulata</i>												
<i>Ophioglycera gigantea</i>												
Orbinidae spp.												1
<i>Orbinia swani</i>												
<i>Paranaitis speciosa</i>												
<i>Paraonis</i> spp.												
<i>Parapionosyllis longicirrata</i>				9	1		1	102	2	2	7	3
<i>Pherusa affinis</i>												
<i>Phyllodoce arenae</i>	1		1		1							
<i>Phyllodoce maculata</i>	1											
<i>Pisone</i> sp.				1				18				
<i>Polycirrus eximius</i>						1	1	4	2	1		
<i>Polygordius</i> spp.				29	23	73	3	82	42	20	40	10
<i>Potamilla reniformis</i>											14	
<i>Pseudomystides</i> sp.												

SampleID	T1-5rep1_Y3	T1-5rep2_Y3	T1-5rep3_Y3	T1-6rep1_Y3	T1-6rep2_Y3	T1-6rep3_Y3	T1-7rep1_Y3	T1-7rep2_Y3	T1-7rep3_Y3	T1-8rep1_Y3	T1-8rep2_Y3	T1-8rep3_Y3
<i>Sabellaria vulgaris</i>							7		2	2		
<i>Scalibregma inflatum</i>						2			1			
<i>Scolecopsis bousfieldi</i>											1	
<i>Sigalion arenicola</i>											1	
<i>Sphaerosyllis erinaceus</i>	1			2	1		2	56	1			
<i>Spio filicornis</i>	1					4						
<i>Spio setosa</i>												
<i>Spiochaetopterus oculatus</i>												
<i>Spiophanes bombyx</i>	2										1	
<i>Spirorbis</i> spp.												
<i>Syllides</i> spp.								14	2			
<i>Travisia carnea</i>										2		
<i>Typosyllis (Syllis) cornuta</i>												
OTHER PHYLA												
NEMERTEA	3			1			2	7	3	1		
<i>Cerebratulus lacteus</i>	1							1	3			
NEMATODA	14	8		16	8	26	54	322	38	15	46	14
SIPUNCULA												
<i>Phascolopsis gouldii</i>												

G.4 Species List Year 3 (Winter 2019) of Vessel-Based Grab Samples (continued)

SampleID	T1- 9rep1_Y3	T1- 9rep2_Y3	T1- 9rep3_Y3	T3- 1rep1_Y3	T3- 1rep2_Y3	T3- 1rep3_Y3	T3- 2rep1_Y3	T3- 2rep2_Y3	T3- 2rep3_Y3	T3- 3rep1_Y3	T3- 3rep2_Y3	T3- 3rep3_Y3
ACTINIARIA												
<i>Actinaria</i> sp.												
<i>Halcampa duodecimcirrata</i>												
ARTHROPODA												
Amphipoda												
<i>Ampelisca vadorum</i>			1									
<i>Byblis serrata</i>												
<i>Caprella linearis</i>												
<i>Corophium</i> sp.												
<i>Erichthonius brasiliensis</i>			1									
<i>Gammaropsis maculata</i>			1									
<i>Grandidierella</i> sp.												
<i>Hippomedon serratus</i>												
<i>Ischyrocerus anguipes</i>												
<i>Jassa marmorata</i>												
<i>Lysianopsis alba</i>						1						
<i>Microdeutopus anomalus</i>												
<i>Monoculodes</i> sp.						2		2	1	1		
<i>Parametopella cypris</i>												
<i>Phoxocephalus holbolli</i>			1									
<i>Pontogeneia inermis</i>												
<i>Protohaustorius wigleyi</i>												
<i>Wecomedon nobilis</i>												
<i>Pseudunciola obliqua</i>		4		1				1		1		2
<i>Rhepoxynuis epistomus</i>												
<i>Siphonoecetes smithianus</i>												
<i>Stenopleustes inermis</i>												
<i>Unciola irrorata</i>	4	1	11			3	1	4	5	21	11	4
Brachypoda												
<i>HHutchinsoniella macracantha</i>							2					
Cumacea												
<i>Diastylis</i> sp.												
<i>Pseudoleptocuma minus</i>			1									
Decapoda												
<i>Cancer borealis</i>												

SampleID	T1-9rep1_Y3	T1-9rep2_Y3	T1-9rep3_Y3	T3-1rep1_Y3	T3-1rep2_Y3	T3-1rep3_Y3	T3-2rep1_Y3	T3-2rep2_Y3	T3-2rep3_Y3	T3-3rep1_Y3	T3-3rep2_Y3	T3-3rep3_Y3
<i>Cancer irroratus</i>												
<i>Crangon septemspinosa</i>												
<i>Lebbeus zebra</i>												
<i>Pagurus acadianus</i>												
<i>Pagurus annulipes</i>												
<i>Pinnixa sayana</i>												
<i>Pinnotheres maculatus</i>												
Harpacticoida												
Harpacticoida			1									
Isopoda												
<i>Chiridotea caeca</i>								1		1		
<i>Chiridotea tuftsi</i>												
<i>Edotia triloba</i>												
<i>Politolana polita</i>												
<i>Ptilanthura tenuis</i>												
Mysidacea												
<i>Heteromysis formosa</i>												
Sessilia												
<i>Balanus</i> spp.	1057	632	1214									
Tanaidacea												
<i>Tanaissus psammophilus</i>	4	6	8									
Perciformes												
<i>Gobiosoma bosc</i>												
ECHINODERMATA												
<i>Asterias</i> spp.												
<i>Echinarachnius parma</i>					2							
<i>Leptosynapta</i> sp												
<i>Amphipholis squamata</i>												
MOLLUSCA												
Bivalvia												
<i>Anomia</i> spp (juveniles)			1									
<i>Astarte</i> spp.	1			3	2	2			2	1		2
<i>Cerastoderma pinnulatum</i>												
<i>Crassinella</i> spp.												
<i>Crenella decussata</i>												
<i>Cyclocardia borealis</i>		1										
<i>Heteranomia squamula</i>												

SampleID	T1-9rep1_Y3	T1-9rep2_Y3	T1-9rep3_Y3	T3-1rep1_Y3	T3-1rep2_Y3	T3-1rep3_Y3	T3-2rep1_Y3	T3-2rep2_Y3	T3-2rep3_Y3	T3-3rep1_Y3	T3-3rep2_Y3	T3-3rep3_Y3
<i>Hiatella arctica</i>												
<i>Lyonsia arenosa</i>	1	1	1									
<i>Mysella planulata</i>												
<i>Mytilus edulis</i>	864	60	1721	1		2			4			2
<i>Nucula proxima</i>												
<i>Nucula tenuis</i>												
<i>Pandora gouldiana</i>		1										
<i>Periploma leanum</i>												
<i>Psammotreta brevifrons</i>						1			1			
<i>Spisula solidissima</i>										1		
<i>Tellina agilis</i>	1	1	2									
Gastropoda												
<i>Boonea bisuturalis</i>												
<i>Caecum cooperi</i>												
<i>Costoanachis translirata</i>												
<i>Crepidula fornicata</i>	1	1	1									
<i>Crepidula plana</i>												
<i>Euspira heros</i>												
<i>Euspira triseriata</i>					2							
<i>Ilyanassa trivittata</i>												
<i>Polinices immaculatus</i>												
<i>Onoba</i> sp.												
<i>Testudinalia testudinalis</i>												
ANNELIDA												
Oligochaeta												
<i>Oligochaeta</i> spp.				1		1	1					
Polychaeta												
<i>Ampharete arctica</i>												5
<i>Aricidea catherinae</i>		1	1	7	1	2	19	7	17	7	3	
<i>Aricidea cerrutii</i>				12	4	2	15	6	15	4	6	4
<i>Aricidea wassi</i>												
<i>Asabellides oculata</i>												
<i>Capitella</i> sp.												
<i>Cautleriella venefica</i>	1		2				2				1	
<i>Cirratulidae</i>	2	6	2	1	1	2	19	2	3	2	1	
<i>Cirrophorus</i> spp.		1				2	1		1		1	
<i>Dipolydora</i> spp.	2	5	4									

SampleID	T1- 9rep1_Y3	T1- 9rep2_Y3	T1- 9rep3_Y3	T3- 1rep1_Y3	T3- 1rep2_Y3	T3- 1rep3_Y3	T3- 2rep1_Y3	T3- 2rep2_Y3	T3- 2rep3_Y3	T3- 3rep1_Y3	T3- 3rep2_Y3	T3- 3rep3_Y3
<i>Dorvilleidae</i>	2	2		21	11	7	9	2	16	2	5	29
<i>Drilonereis longa</i>										1		
<i>Ephesiella minuta</i>												
<i>Eteone longa</i>												
<i>Eumida sanguinea</i>		8						1				
<i>Exogone</i> spp.	3		2				1				1	
<i>Glycera americana</i>												1
<i>Glycera dibranchiata</i>												
<i>Goniadella gracilis</i>	17	26	15	3	3	5	18	4	4		1	10
<i>Gyptis vittata</i>												
<i>Harmothoe</i> spp.			4									
<i>Lepidonotus squamatus</i>			1									
<i>Lumbrinereis acuta</i>	8	1	3	41	31	19	50	17	29	9	16	6
<i>Lumbrinereis fragilis</i>	2	1	2	7	2	7	8	3	3	3		12
Maldanidae spp.	2	1	2	3		3	1	1	1	2	1	
<i>Marenzelleria viridis</i>												
<i>Marphysa bellii</i>			1			1						
<i>Megalona</i> sp.												
<i>Microphthalmus sckelkowwi</i>												4
<i>Nephtys</i> spp.	10	6	6		1		2		1		2	
<i>Neanthes arenaceodentata</i>												
<i>Notomastus</i> sp.												
<i>Ophelia denticulata</i>				1					2			
<i>Ophioglycera gigantea</i>												
Orbinidae spp.												
<i>Orbinia swani</i>												
<i>Paranaitis speciosa</i>												
<i>Paraonis</i> spp.												
<i>Parapionosyllis longicirrata</i>	1	2		4	2	1	19	2	27	5	2	13
<i>Pherusa affinis</i>												
<i>Phyllodoce arenae</i>												
<i>Phyllodoce maculata</i>												
<i>Pisone</i> sp.			1	29	20	24	30	2	44	35	6	46
<i>Polycirrus eximius</i>	2			163	88	102	24	20	59	120	194	40
<i>Polygordius</i> spp.	68	74	25	12	37	23	64	31	23	10	5	17
<i>Potamilla reniformis</i>												
<i>Pseudomystides</i> sp.				1	1	2			5	2	1	9

SampleID	T1- 9rep1_Y3	T1- 9rep2_Y3	T1- 9rep3_Y3	T3- 1rep1_Y3	T3- 1rep2_Y3	T3- 1rep3_Y3	T3- 2rep1_Y3	T3- 2rep2_Y3	T3- 2rep3_Y3	T3- 3rep1_Y3	T3- 3rep2_Y3	T3- 3rep3_Y3
<i>Sabellaria vulgaris</i>	5	1										
<i>Scalibregma inflatum</i>				1	1	1						
<i>Scolecopsis bousfieldi</i>												
<i>Sigalion arenicola</i>										1		1
<i>Sphaerosyllis erinaceus</i>			1	2			13		19	2		3
<i>Spio filicornis</i>	2		2				1	1				
<i>Spio setosa</i>												
<i>Spiochaetopterus oculatus</i>												
<i>Spiophanes bombyx</i>			1									
<i>Spirorbis</i> spp												
<i>Syllides</i> spp.						3	3		5	1	1	4
<i>Travisia carnea</i>				1	1	1	2		2	5	2	7
<i>Typosyllis (Syllis) cornuta</i>												
OTHER PHYLA												
NEMERTEA		2		4		1	4	1	2	3	1	3
<i>Cerebratulus lacteus</i>								1			1	
NEMATODA	262	68	9	36	26	48	380	92	136	88	116	140
SIPUNCULA												
<i>Phascolopsis gouldii</i>												

G.4 Species List Year 3 (Winter 2019) of Vessel-Based Grab Samples (continued)

SampleID	T3-4rep1_Y3	T3-4rep2_Y3	T3-4rep3_Y3	T3-5rep1_Y3	T3-5rep2_Y3	T3-5rep3_Y3	T3-6rep1_Y3	T3-6rep2_Y3	T3-6rep3_Y3	T3-7rep1_Y3	T3-7rep2_Y3	T3-7rep3_Y3
ACTINIARIA												
<i>Actinaria</i> sp.												
<i>Halcampa duodecimcirrata</i>												
ARTHROPODA												
Amphipoda												
<i>Ampelisca vadorum</i>												
<i>Byblis serrata</i>												
<i>Caprella linearis</i>												
<i>Corophium</i> sp.												
<i>Erichthonius brasiliensis</i>												
<i>Gammaropsis maculata</i>												
<i>Grandidierella</i> sp.												
<i>Hippomedon serratus</i>												
<i>Ischyrocerus anguipes</i>												
<i>Jassa marmorata</i>								2			1	
<i>Lysianopsis alba</i>												
<i>Microdeutopus anomalus</i>												
<i>Monoculodes</i> sp.												
<i>Parametopella cypris</i>												
<i>Phoxocephalus holbolli</i>											1	
<i>Pontogeneia inermis</i>												
<i>Protohaustorius wigleyi</i>												
<i>Wecomedon nobilis</i>											1	
<i>Pseudunciola obliqua</i>			1		1	1			1	1		1
<i>Rhepoxynuis epistomus</i>												
<i>Siphonoecetes smithianus</i>												
<i>Stenopleustes inermis</i>												
<i>Unciola irrorata</i>	1	14	3	1	1	6	22	6		4	3	
Brachypoda												
<i>Hutchinsoniella macracantha</i>												
Cumacea												
<i>Diastylis</i> sp.						1						
<i>Pseudoleptocuma minus</i>												1
Decapoda												
<i>Cancer borealis</i>												

SampleID	T3-4rep1_Y3	T3-4rep2_Y3	T3-4rep3_Y3	T3-5rep1_Y3	T3-5rep2_Y3	T3-5rep3_Y3	T3-6rep1_Y3	T3-6rep2_Y3	T3-6rep3_Y3	T3-7rep1_Y3	T3-7rep2_Y3	T3-7rep3_Y3
<i>Cancer irroratus</i>												
<i>Crangon septemspinosa</i>												
<i>Lebbeus zebra</i>												
<i>Pagurus acadianus</i>												
<i>Pagurus annulipes</i>												
<i>Pinnixa sayana</i>												
<i>Pinnotheres maculatus</i>												
Harpacticoida												
Harpacticoida			1			2				1	5	
Isopoda												
<i>Chiridotea caeca</i>	2	2		3	2	2		1	2	1	1	
<i>Chiridotea tuftsi</i>												
<i>Edotia triloba</i>		1										
<i>Politolana polita</i>												
<i>Ptilanthura tenuis</i>												
Mysidacea												
<i>Heteromysis formosa</i>												
Sessilia												
<i>Balanus</i> spp.												
Tanaidacea												
<i>Tanaissus psammophilus</i>		1				1	1		1			
Perciformes												
<i>Gobiosoma bosc</i>												
ECHINODERMATA												
<i>Asterias</i> spp.												
<i>Echinarachnius parma</i>									1		3	
<i>Leptosynapta</i> sp												
<i>Amphipholis squamata</i>												
MOLLUSCA												
Bivalvia												
<i>Anomia</i> spp (juveniles)												
<i>Astarte</i> spp.	1		1	4	1	1		1		1	5	3
<i>Cerastoderma pinnulatum</i>												
<i>Crassinella</i> spp.											1	
<i>Crenella decussata</i>												
<i>Cyclocardia borealis</i>												
<i>Heteranomia squamula</i>												

SampleID	T3-4rep1_Y3	T3-4rep2_Y3	T3-4rep3_Y3	T3-5rep1_Y3	T3-5rep2_Y3	T3-5rep3_Y3	T3-6rep1_Y3	T3-6rep2_Y3	T3-6rep3_Y3	T3-7rep1_Y3	T3-7rep2_Y3	T3-7rep3_Y3
<i>Hiatella arctica</i>												
<i>Lyonsia arenosa</i>												
<i>Mysella planulata</i>												
<i>Mytilus edulis</i>	7		2	4	1	10		3			5	5
<i>Nucula proxima</i>												
<i>Nucula tenuis</i>												
<i>Pandora gouldiana</i>												
<i>Periploma leanum</i>												
<i>Psammotreta brevifrons</i>			1									
<i>Spisula solidissima</i>				1								1
<i>Tellina agilis</i>												
Gastropoda												
<i>Boonea bisuturalis</i>												
<i>Caecum cooperi</i>						3						
<i>Costoanachis translirata</i>												
<i>Crepidula fornicata</i>												
<i>Crepidula plana</i>											1	
<i>Euspira heros</i>								1				
<i>Euspira triseriata</i>		1										
<i>Ilyanassa trivittata</i>												
<i>Polinices immaculatus</i>						2						
<i>Onoba</i> sp.												
<i>Testudinalia testudinalis</i>												
ANNELIDA												
Oligochaeta												
<i>Oligochaeta</i> spp.	1								3	1	3	
Polychaeta												
<i>Ampharete arctica</i>												
<i>Aricidea catherinae</i>	1	5	2	13	3	4	21	5	1	9	6	
<i>Aricidea cerrutii</i>	1	2	1	4	2	6	15	6	9	5		
<i>Aricidea wassi</i>												
<i>Asabellides oculata</i>				1							1	
<i>Capitella</i> sp.												
<i>Caulleriella venefica</i>				1								
Cirratulidae				4		6	10	3	5	1	1	
<i>Cirrophorus</i> spp.		1		4		1	1	4	1			
<i>Dipolydora</i> spp.												

SampleID	T3-4rep1_Y3	T3-4rep2_Y3	T3-4rep3_Y3	T3-5rep1_Y3	T3-5rep2_Y3	T3-5rep3_Y3	T3-6rep1_Y3	T3-6rep2_Y3	T3-6rep3_Y3	T3-7rep1_Y3	T3-7rep2_Y3	T3-7rep3_Y3
<i>Dorvilleidae</i>	15	4		18	2	45	5	4	2	27	33	4
<i>Drilonereis longa</i>												
<i>Ephesiella minuta</i>												
<i>Eteone longa</i>												
<i>Eumida sanguinea</i>				2	1						4	1
<i>Exogone</i> spp.				1					3			
<i>Glycera americana</i>												
<i>Glycera dibranchiata</i>												
<i>Goniadella gracilis</i>	5	12		5	2	1	4	1	3	2	17	6
<i>Gyptis vittata</i>												
<i>Harmothoe</i> spp.												1
<i>Lepidonotus squamatus</i>												
<i>Lumbrinereis acuta</i>	2	18	2	61	5	21	22	17	10	15	7	10
<i>Lumbrinereis fragilis</i>	1	3	1	6	2	1	5	1		4		1
Maldanidae spp.		1		4	2	3		2			2	
<i>Marenzelleria viridis</i>												
<i>Marphysa bellii</i>		2		1			3				2	
<i>Megalona</i> sp.												
<i>Microphthalmus sckelkowwi</i>												
<i>Nephtys</i> spp.	1							1	1			
<i>Neanthes arenaceodentata</i>												
<i>Notomastus</i> sp.												
<i>Ophelia denticulata</i>		1							2			
<i>Ophioglycera gigantea</i>												
Orbinidae spp.												
<i>Orbinia swani</i>												
<i>Paranaitis speciosa</i>												
<i>Paraonis</i> spp.												
<i>Parapionosyllis longicirrata</i>	2	3		14	1	19	1	2	9	21	44	14
<i>Pherusa affinis</i>												
<i>Phyllodoce arenae</i>												
<i>Phyllodoce maculata</i>												
<i>Pisone</i> sp.	51	21	8	20	12	72	15	31	1	42	28	53
<i>Polycirrus eximius</i>	92	201	4	67	93	169	76	106	4	196	133	146
<i>Polygordius</i> spp.	3	38	19	54	28	31	43	14	13	37	29	12
<i>Potamilla reniformis</i>												
<i>Pseudomystides</i> sp.	6			5	1	5	1	3	2		2	3

SampleID	T3-4rep1_Y3	T3-4rep2_Y3	T3-4rep3_Y3	T3-5rep1_Y3	T3-5rep2_Y3	T3-5rep3_Y3	T3-6rep1_Y3	T3-6rep2_Y3	T3-6rep3_Y3	T3-7rep1_Y3	T3-7rep2_Y3	T3-7rep3_Y3
<i>Sabellaria vulgaris</i>												
<i>Scalibregma inflatum</i>					1							
<i>Scolecopsis bousfieldi</i>												
<i>Sigalion arenicola</i>						1		1				
<i>Sphaerosyllis erinaceus</i>			1	5		10	1	1		11	15	
<i>Spio filicornis</i>		2										
<i>Spio setosa</i>												
<i>Spiochaetopterus oculatus</i>												
<i>Spiophanes bombyx</i>												
<i>Spirorbis</i> spp .												
<i>Syllides</i> spp.	1		1		1	2	2	3	2	5	6	1
<i>Travisia carnea</i>	2			2	1	2	10	2	1		6	1
<i>Typosyllis (Syllis) cornuta</i>												
OTHER PHYLA												
NEMERTEA	2	1	1	4	3	2	1	3	3	4	1	1
<i>Cerebratulus lacteus</i>				1				1			1	
NEMATODA	110	83	14	280	90	243	40	93	18	165	182	170
SIPUNCULA												
<i>Phascolopsis gouldii</i>												

G.4 Species List Year 3 (Winter 2019) of Vessel-Based Grab Samples (continued)

SampleID	T3-8rep1_Y3	T3-8rep2_Y3	T3-8rep3_Y3	T3-9rep1_Y3	T3-9rep2_Y3	T3-9rep3_Y3	T5-1rep1_Y3	T5-1rep2_Y3	T5-1rep3_Y3	T5-2rep1_Y3	T5-2rep2_Y3	T5-2rep3_Y3
ACTINIARIA												
<i>Actinaria</i> sp.												
<i>Halcampa duodecimcirrata</i>												
ARTHROPODA												
Amphipoda												
<i>Ampelisca vadorum</i>												
<i>Byblis serrata</i>												1
<i>Caprella linearis</i>												
<i>Corophium</i> sp.												
<i>Erichthonius brasiliensis</i>												
<i>Gammaropsis maculata</i>			3									
<i>Grandidierella</i> sp.												
<i>Hippomedon serratus</i>									1			
<i>Ischyrocerus anguipes</i>			9									
<i>Jassa marmorata</i>												
<i>Lysianopsis alba</i>												
<i>Microdeutopus anomalus</i>												1
<i>Monoculodes</i> sp.										2		3
<i>Parametopella cypris</i>			1									
<i>Phoxocephalus holbolli</i>												
<i>Pontogeneia inermis</i>			6									
<i>Protohaustorius wigleyi</i>												
<i>Wecomedon nobilis</i>												
<i>Pseudunciola obliqua</i>		1										
<i>Rhepoxynuis epistomus</i>												
<i>Siphonoecetes smithianus</i>												
<i>Stenopleustes inermis</i>												
<i>Unciola irrorata</i>		2	2	64	62	2		2	1			
Brachypoda												
<i>Hutchinsoniella macracantha</i>												
Cumacea												
<i>Diastylis</i> sp.												
<i>Pseudoleptocuma minus</i>	1		1		1				2			
Decapoda												
<i>Cancer borealis</i>												

SampleID	T3-8rep1_Y3	T3-8rep2_Y3	T3-8rep3_Y3	T3-9rep1_Y3	T3-9rep2_Y3	T3-9rep3_Y3	T5-1rep1_Y3	T5-1rep2_Y3	T5-1rep3_Y3	T5-2rep1_Y3	T5-2rep2_Y3	T5-2rep3_Y3
<i>Cancer irroratus</i>			2									
<i>Crangon septemspinosa</i>												
<i>Lebbeus zebra</i>												
<i>Pagurus acadianus</i>												
<i>Pagurus annulipes</i>												
<i>Pinnixa sayana</i>												
<i>Pinnotheres maculatus</i>			1									
Harpacticoida												
Harpacticoida						1		5		2	6	
Isopoda												
<i>Chiridotea caeca</i>		1	1			1			2	5		
<i>Chiridotea tuftsi</i>						1						
<i>Edotia triloba</i>			1									
<i>Politolana polita</i>												
<i>Ptilanthura tenuis</i>												
Mysidacea												
<i>Heteromysis formosa</i>												
Sessilia												
<i>Balanus</i> spp.				1								
Tanaidacea												
<i>Tanaissus psammophilus</i>			1				1					
Perciformes												
<i>Gobiosoma bosc</i>		2										
ECHINODERMATA												
<i>Asterias</i> spp.												
<i>Echinarachnius parma</i>						1					1	
<i>Leptosynapta</i> sp									1			
<i>Amphipholis squamata</i>												
MOLLUSCA												
Bivalvia												
<i>Anomia</i> spp (juveniles)												
<i>Astarte</i> spp.	3	2	1	1			8	4	2	3	4	
<i>Cerastoderma pinnulatum</i>												
<i>Crassinella</i> spp.												
<i>Crenella decussata</i>												
<i>Cyclocardia borealis</i>												
<i>Heteranomia squamula</i>												1

SampleID	T3-8rep1_Y3	T3-8rep2_Y3	T3-8rep3_Y3	T3-9rep1_Y3	T3-9rep2_Y3	T3-9rep3_Y3	T5-1rep1_Y3	T5-1rep2_Y3	T5-1rep3_Y3	T5-2rep1_Y3	T5-2rep2_Y3	T5-2rep3_Y3
<i>Hiatella arctica</i>												
<i>Lyonsia arenosa</i>												
<i>Mysella planulata</i>												
<i>Mytilus edulis</i>	1	2		1	5		40	16	14	10	116	
<i>Nucula proxima</i>												
<i>Nucula tenuis</i>												
<i>Pandora gouldiana</i>												
<i>Periploma leanum</i>		1										
<i>Psammotreta brevifrons</i>												
<i>Spisula solidissima</i>												
<i>Tellina agilis</i>					1							
Gastropoda												
<i>Boonea bisuturalis</i>												
<i>Caecum cooperi</i>								1				
<i>Costoanachis translirata</i>												
<i>Crepidula fornicata</i>												
<i>Crepidula plana</i>												
<i>Euspira heros</i>												
<i>Euspira triseriata</i>												
<i>Ilyanassa trivittata</i>												
<i>Polinices immaculatus</i>				1								
<i>Onoba</i> sp.							2		1			
<i>Testudinalia testudinalis</i>											1	
ANNELIDA												
Oligochaeta												
<i>Oligochaeta</i> spp.	4											
Polychaeta												
<i>Ampharete arctica</i>							1					
<i>Aricidea catherinae</i>	2	2	4	12	2	5	6	1		3	3	2
<i>Aricidea cerrutii</i>	2	2	5	10	19	6			1	3	8	5
<i>Aricidea wassi</i>				1								
<i>Asabellides oculata</i>												
<i>Capitella</i> sp.				1								
<i>Caulleriella venefica</i>				3								
<i>Cirratulidae</i>	2			2			2	1	2	2	4	
<i>Cirrophorus</i> spp.								1				
<i>Dipolydora</i> spp.												

SampleID	T3-8rep1_Y3	T3-8rep2_Y3	T3-8rep3_Y3	T3-9rep1_Y3	T3-9rep2_Y3	T3-9rep3_Y3	T5-1rep1_Y3	T5-1rep2_Y3	T5-1rep3_Y3	T5-2rep1_Y3	T5-2rep2_Y3	T5-2rep3_Y3
<i>Dorvilleidae</i>	3	14	7	9	7	9	24	43	12	18	41	19
<i>Drilonereis longa</i>					1							
<i>Ephesiella minuta</i>												
<i>Eteone longa</i>												
<i>Eumida sanguinea</i>		2	11	1	8			1			4	
<i>Exogone</i> spp.												
<i>Glycera americana</i>								1				
<i>Glycera dibranchiata</i>												
<i>Goniadella gracilis</i>		3	1	3	2	5	2	8	7	2	6	1
<i>Gyptis vittata</i>												
<i>Harmothoe</i> spp.												
<i>Lepidonotus squamatus</i>												
<i>Lumbrinereis acuta</i>	22		7	16	18		7	18	5	24	22	15
<i>Lumbrinereis fragilis</i>	1	4	1	2	1	1		4	1		2	6
Maldanidae spp.		1		2	1	3				1		
<i>Marenzelleria viridis</i>												
<i>Marphysa bellii</i>				1	1	2	1					
<i>Megalona</i> sp.												
<i>Microphthalmus sckelkowwi</i>												
<i>Nephtys</i> spp.							1		1			
<i>Neanthes arenaceodentata</i>												
<i>Notomastus</i> sp.				1								
<i>Ophelia denticulata</i>						1					1	1
<i>Ophioglycera gigantea</i>												
Orbinidae spp.												
<i>Orbinia swani</i>												
<i>Paranaitis speciosa</i>												
<i>Paraonis</i> spp.												
<i>Parapionosyllis longicirrata</i>	2	10	14	11	5	1	9	10	10	9	10	2
<i>Pherusa affinis</i>												
<i>Phyllodoce arenae</i>												
<i>Phyllodoce maculata</i>												
<i>Pisone</i> sp.	7	37	18	28	27	39	16	43	35	70	55	23
<i>Polycirrus eximius</i>	118	79	105	317	183	174	38	140	101	414	149	127
<i>Polygordius</i> spp.	71	12	24	32	10	23	8	14	9	41	48	34
<i>Potamilla reniformis</i>												
<i>Pseudomystides</i> sp.	1	2	5		5	5		3	5	3	10	

SampleID	T3-8rep1_Y3	T3-8rep2_Y3	T3-8rep3_Y3	T3-9rep1_Y3	T3-9rep2_Y3	T3-9rep3_Y3	T5-1rep1_Y3	T5-1rep2_Y3	T5-1rep3_Y3	T5-2rep1_Y3	T5-2rep2_Y3	T5-2rep3_Y3
<i>Sabellaria vulgaris</i>												
<i>Scalibregma inflatum</i>			2									
<i>Scolecopsis bousfieldi</i>												
<i>Sigalion arenicola</i>	1									1		
<i>Sphaerosyllis erinaceus</i>			3	6		1	4	14		10	7	
<i>Spio filicornis</i>	1		2									
<i>Spio setosa</i>								1	1			
<i>Spiochaetopterus oculatus</i>												
<i>Spiophanes bombyx</i>												
<i>Spirorbis</i> spp.												
<i>Syllides</i> spp.			1	5	1	1	2			1	5	1
<i>Travisia carnea</i>			1	21	11	9	2			2	2	
<i>Typosyllis (Syllis) cornuta</i>												
OTHER PHYLA												
NEMERTEA	2			3	2	1	1	4	4	4	1	252
<i>Cerebratulus lacteus</i>				1				1	1			
NEMATODA	116	108	74	280	153	86	52	105	60	22	170	96
SIPUNCULA												
<i>Phascolopsis gouldii</i>												

G.4 Species List Year 3 (Winter 2019) of Vessel-Based Grab Samples (continued)

SampleID	T5-3rep1_Y3	T5-3rep2_Y3	T5-3rep3_Y3	T5-4rep1_Y3	T5-4rep2_Y3	T5-4rep3_Y3	T5-5rep1_Y3	T5-5rep2_Y3	T5-5rep3_Y3	T5-6rep1_Y3	T5-6rep2_Y3	T5-6rep3_Y3
ACTINIARIA												
<i>Actinaria</i> sp.												
<i>Halcapa duodecimcirrata</i>										1		
ARTHROPODA												
Amphipoda												
<i>Ampelisca vadorum</i>												
<i>Byblis serrata</i>												
<i>Caprella linearis</i>				2							1	
<i>Corophium</i> sp.												
<i>Erichthonius brasiliensis</i>	1			1								
<i>Gammaropsis maculata</i>												
<i>Grandidierella</i> sp.												
<i>Hippomedon serratus</i>												
<i>Ischyrocerus anguipes</i>												
<i>Jassa marmorata</i>												
<i>Lysianopsis alba</i>												
<i>Microdeutopus anomalus</i>												
<i>Monoculodes</i> sp.	1							1	1		3	1
<i>Parametopella cypris</i>												
<i>Phoxocephalus holbolli</i>												
<i>Pontogeneia inermis</i>												
<i>Protohaustorius wigleyi</i>												
<i>Wecomedon nobilis</i>												
<i>Pseudunciola obliqua</i>												
<i>Rhepoxynuis epistomus</i>												
<i>Siphonoecetes smithianus</i>												
<i>Stenopleustes inermis</i>												
<i>Unciola irrorata</i>	8	4	10	7	1				2	1	1	
Brachypoda												
<i>Hutchinsoniella macracantha</i>												
Cumacea												
<i>Diastylis</i> sp.												
<i>Pseudoleptocuma minus</i>												
Decapoda												
<i>Cancer borealis</i>												

SampleID	T5-3rep1_Y3	T5-3rep2_Y3	T5-3rep3_Y3	T5-4rep1_Y3	T5-4rep2_Y3	T5-4rep3_Y3	T5-5rep1_Y3	T5-5rep2_Y3	T5-5rep3_Y3	T5-6rep1_Y3	T5-6rep2_Y3	T5-6rep3_Y3
<i>Cancer irroratus</i>												
<i>Crangon septemspinosa</i>												
<i>Lebbeus zebra</i>												
<i>Pagurus acadianus</i>												
<i>Pagurus annulipes</i>												
<i>Pinnixa sayana</i>												
<i>Pinnotheres maculatus</i>												
Harpacticoida												
Harpacticoida							1	4		2	1	
Isopoda												
<i>Chiridotea caeca</i>		5		1			2				1	
<i>Chiridotea tuftsi</i>												
<i>Edotia triloba</i>												
<i>Politolana polita</i>												
<i>Ptilanthura tenuis</i>												
Mysidacea												
<i>Heteromysis formosa</i>												
Sessilia												
<i>Balanus</i> spp.												
Tanaidacea												
<i>Tanaissus psammophilus</i>												
Perciformes												
<i>Gobiosoma bosc</i>							1	1				
ECHINODERMATA												
<i>Asterias</i> spp.												
<i>Echinarachnius parma</i>					1			1	1			1
<i>Leptosynapta</i> sp												
<i>Amphipholis squamata</i>												
MOLLUSCA												
Bivalvia												
<i>Anomia</i> spp (juveniles)												
<i>Astarte</i> spp.	1	1				1	3	5	6		6	2
<i>Cerastoderma pinnulatum</i>												
<i>Crassinella</i> spp.							1					
<i>Crenella decussata</i>			1		1							
<i>Cyclocardia borealis</i>												
<i>Heteranomia squamula</i>												

SampleID	T5-3rep1_Y3	T5-3rep2_Y3	T5-3rep3_Y3	T5-4rep1_Y3	T5-4rep2_Y3	T5-4rep3_Y3	T5-5rep1_Y3	T5-5rep2_Y3	T5-5rep3_Y3	T5-6rep1_Y3	T5-6rep2_Y3	T5-6rep3_Y3
<i>Hiatella arctica</i>												
<i>Lyonsia arenosa</i>								2			1	
<i>Mysella planulata</i>												
<i>Mytilus edulis</i>		5			22		7	50	1	14	7	10
<i>Nucula proxima</i>												
<i>Nucula tenuis</i>												
<i>Pandora gouldiana</i>												
<i>PPeriploma leanum</i>												
<i>Psammotreta brevifrons</i>												
<i>Spisula solidissima</i>								1	1			2
<i>Tellina agilis</i>												
Gastropoda												
<i>Boonea bisuturalis</i>												
<i>Caecum cooperi</i>		2	1		1							
<i>Costoanachis translirata</i>												
<i>Crepidula fornicata</i>	1											
<i>Crepidula plana</i>												
<i>Euspira heros</i>									2			
<i>Euspira triseriata</i>												
<i>Ilyanassa trivittata</i>												
<i>Polinices immaculatus</i>	1		1				1					
<i>Onoba</i> sp.					1							
<i>Testudinalia testudinalis</i>												
ANNELIDA												
Oligochaeta												
<i>Oligochaeta</i> spp.							1	5		1	1	
Polychaeta												
<i>Ampharete arctica</i>												
<i>Aricidea catherinae</i>	4	2	1	2	1					2		
<i>Aricidea cerrutii</i>	5	1			1		1	3		1	2	2
<i>Aricidea wassi</i>												
<i>Asabellides oculata</i>									1			
<i>Capitella</i> sp.								1				
<i>Caulleriella venefica</i>												
<i>Cirratulidae</i>		2									1	
<i>Cirrophorus</i> spp.												
<i>Dipolydora</i> spp.		70										

SampleID	T5-3rep1_Y3	T5-3rep2_Y3	T5-3rep3_Y3	T5-4rep1_Y3	T5-4rep2_Y3	T5-4rep3_Y3	T5-5rep1_Y3	T5-5rep2_Y3	T5-5rep3_Y3	T5-6rep1_Y3	T5-6rep2_Y3	T5-6rep3_Y3
<i>Dorvilleidae</i>	19	32	3	3	38	6	5	81		9	28	10
<i>Drilonereis longa</i>												
<i>Ephesiella minuta</i>												
<i>Eteone longa</i>												
<i>Eumida sanguinea</i>	13	6	2	2				3		1	1	1
<i>Exogone</i> spp.												
<i>Glycera americana</i>			1									
<i>Glycera dibranchiata</i>				2		1						
<i>Goniadella gracilis</i>	3	8		1		1	4	1	3	6	1	1
<i>Gyptis vittata</i>												
<i>Harmothoe</i> spp.	1							1				
<i>Lepidonotus squamatus</i>												
<i>Lumbrinereis acuta</i>	39	10		13	10	1		16	12	10	7	20
<i>Lumbrinereis fragilis</i>	13	3	10	8	11	6				2		
Maldanidae spp.												
<i>Marenzelleria viridis</i>												
<i>Marphysa bellii</i>	1											
<i>Megalona</i> sp.												
<i>Microphthalmus sckelkowwi</i>												
<i>Nephtys</i> spp.								1				
<i>Neanthes arenaceodentata</i>					1							
<i>Notomastus</i> sp.												
<i>Ophelia denticulata</i>		1										
<i>Ophioglycera gigantea</i>					1							
Orbinidae spp.												
<i>Orbinia swani</i>												
<i>Paranaitis speciosa</i>												
<i>Paraonis</i> spp.												
<i>Parapionosyllis longicirrata</i>	1	3		2	6	2	9	17	6	7	9	6
<i>Pherusa affinis</i>						1						
<i>Phyllodoce arenae</i>												
<i>Phyllodoce maculata</i>												
<i>Pisione</i> sp.	17	102	22	18	87	47	39	64	9	92	40	35
<i>Polycirrus eximius</i>	77	137	58	100	91	52	311	422	165	238	268	165
<i>Polygordius</i> spp.	8		10	6	28	2	19	12	7	3	1	15
<i>Potamilla reniformis</i>												
<i>Pseudomystides</i> sp.		2	4	2	9	6	9	12		5	6	11

SampleID	T5-3rep1_Y3	T5-3rep2_Y3	T5-3rep3_Y3	T5-4rep1_Y3	T5-4rep2_Y3	T5-4rep3_Y3	T5-5rep1_Y3	T5-5rep2_Y3	T5-5rep3_Y3	T5-6rep1_Y3	T5-6rep2_Y3	T5-6rep3_Y3
<i>Sabellaria vulgaris</i>												
<i>Scalibregma inflatum</i>	1											
<i>Scolecopsis bousfieldi</i>												
<i>Sigalion arenicola</i>							1			1	1	
<i>Sphaerosyllis erinaceus</i>		3		2	3		2	15		1	1	
<i>Spio filicornis</i>												
<i>Spio setosa</i>												
<i>Spiochaetopterus oculatus</i>												
<i>Spiophanes bombyx</i>												
<i>Spirorbis</i> spp												
<i>Syllides</i> spp.		1			3			5	1		3	3
<i>Travisia carnea</i>		12		1	1	1		1	15			
<i>Typosyllis (Syllis) cornuta</i>			1									
OTHER PHYLA												
NEMERTEA	3	5	3	1	3	5	2	4	4	1	2	3
<i>Cerebratulus lacteus</i>			1					1				
NEMATODA	45	28	16	25	30	50	144	186	13	62	71	46
SIPUNCULA												
<i>Phascolopsis gouldii</i>					1							

G.4 Species List Year 3 (Winter 2019) of Vessel-Based Grab Samples (continued)

SampleID	T5-7rep1_Y3	T5-7rep2_Y3	T5-7rep3_Y3	T5-8rep1_Y3	T5-8rep2_Y3	T5-8rep3_Y3	T5-9rep1_Y3	T5-9rep2_Y3	T5-9rep3_Y3	C1-1rep1_Y3	C1-1rep2_Y3	C1-1rep3_Y3
ACTINIARIA												
<i>Actinaria</i> sp.			1									
<i>Halcampa duodecimcirrata</i>												
ARTHROPODA												
Amphipoda												
<i>Ampelisca vadorum</i>										1		
<i>Byblis serrata</i>												
<i>Caprella linearis</i>				1							1	
<i>Corophium</i> sp.												
<i>Erichthonius brasiliensis</i>			1						1			
<i>Gammaropsis maculata</i>												
<i>Grandidierella</i> sp.												
<i>Hippomedon serratus</i>												
<i>Ischyrocerus anguipes</i>												
<i>Jassa marmorata</i>									2			
<i>Lysianopsis alba</i>												
<i>Microdeutopus anomalus</i>												
<i>Monoculodes</i> sp.		1		1	1					1		
<i>Parametopella cypris</i>												
<i>Phoxocephalus holbolli</i>												
<i>Pontogeneia inermis</i>												
<i>Protohaustorius wigleyi</i>												
<i>Wecomedon nobilis</i>												
<i>Pseudunciola obliqua</i>												
<i>Rhepoxynuis epistomus</i>												
<i>Siphonoecetes smithianus</i>												4
<i>Stenopleustes inermis</i>												
<i>Unciola irrorata</i>	1	9	4	2	3	3	14	14	2	34	37	13
Brachypoda												
<i>HHutchinsoniella macracantha</i>												
Cumacea												
<i>Diastylis</i> sp.												
<i>Pseudoleptocuma minus</i>		1		1			2					1
Decapoda												
<i>Cancer borealis</i>												

SampleID	T5-7rep1_Y3	T5-7rep2_Y3	T5-7rep3_Y3	T5-8rep1_Y3	T5-8rep2_Y3	T5-8rep3_Y3	T5-9rep1_Y3	T5-9rep2_Y3	T5-9rep3_Y3	C1-1rep1_Y3	C1-1rep2_Y3	C1-1rep3_Y3
<i>Cancer irroratus</i>												
<i>Crangon septemspinosa</i>												
<i>Lebbeus zebra</i>												
<i>Pagurus acadianus</i>												
<i>Pagurus annulipes</i>												
<i>Pinnixa sayana</i>												
<i>Pinnotheres maculatus</i>												
Harpacticoida												
Harpacticoida			3						2	16	17	11
Isopoda												
<i>Chiridotea caeca</i>				1		2	1		1	1		1
<i>Chiridotea tuftsi</i>												
<i>Edotia triloba</i>		1	1					1			2	1
<i>Politolana polita</i>												
<i>Ptilanthura tenuis</i>												
Mysidacea												
<i>Heteromysis formosa</i>		1										
Sessilia												
<i>Balanus</i> spp.											2	
Tanaidacea												
<i>Tanaissus psammophilus</i>					1							1
Perciformes												
<i>Gobiosoma bosc</i>												
ECHINODERMATA												
<i>Asterias</i> spp.												
<i>Echinarachnius parma</i>	1		1					2	1			
<i>Leptosynapta</i> sp							1					
<i>Amphipholis squamata</i>												
MOLLUSCA												
Bivalvia												
<i>Anomia</i> spp (juveniles)											1	
<i>Astarte</i> spp.	7	3	2		1	3	4	1	1			
<i>Cerastoderma pinnulatum</i>						1						
<i>Crassinella</i> spp.												
<i>Crenella decussata</i>			1				2		1	3		1
<i>Cyclocardia borealis</i>												
<i>Heteranomia squamula</i>												

SampleID	T5-7rep1_Y3	T5-7rep2_Y3	T5-7rep3_Y3	T5-8rep1_Y3	T5-8rep2_Y3	T5-8rep3_Y3	T5-9rep1_Y3	T5-9rep2_Y3	T5-9rep3_Y3	C1-1rep1_Y3	C1-1rep2_Y3	C1-1rep3_Y3
<i>Hiatella arctica</i>										2	1	
<i>Lyonsia arenosa</i>	1	1						1	2		1	2
<i>Mysella planulata</i>												
<i>Mytilus edulis</i>	18	2	5	1	2		5	8	30	2	2	2
<i>Nucula proxima</i>												
<i>Nucula tenuis</i>												
<i>Pandora gouldiana</i>					2	1						
<i>Periploma leanum</i>												
<i>Psammotreta brevifrons</i>												
<i>Spisula solidissima</i>	1					1					3	1
<i>Tellina agilis</i>					1						1	
Gastropoda												
<i>Boonea bisuturalis</i>												
<i>Caecum cooperi</i>			1									
<i>Costoanachis translirata</i>												
<i>Crepidula fornicata</i>												
<i>Crepidula plana</i>												
<i>Euspira heros</i>		1										
<i>Euspira triseriata</i>												
<i>Ilyanassa trivittata</i>										1		
<i>Polinices immaculatus</i>												
<i>Onoba</i> sp.	1	1										
<i>Testudinalia testudinalis</i>												
ANNELIDA												
Oligochaeta												
<i>Oligochaeta</i> spp.				1					6			
Polychaeta												
<i>Ampharete arctica</i>												
<i>Aricidea catherinae</i>	2		1	1	2	2	2	2	5	12	7	9
<i>Aricidea cerrutii</i>	2	1					6	2	9	2	2	1
<i>Aricidea wassi</i>												
<i>Asabellides oculata</i>												
<i>Capitella</i> sp.												
<i>Cautleriella venefica</i>										1		
<i>Cirratulidae</i>	1			1		2	2			13	21	9
<i>Cirrophorus</i> spp.	1				1					4	2	1
<i>Dipolydora</i> spp.									1	53	111	39

SampleID	T5-7rep1_Y3	T5-7rep2_Y3	T5-7rep3_Y3	T5-8rep1_Y3	T5-8rep2_Y3	T5-8rep3_Y3	T5-9rep1_Y3	T5-9rep2_Y3	T5-9rep3_Y3	C1-1rep1_Y3	C1-1rep2_Y3	C1-1rep3_Y3
<i>Dorvilleidae</i>	6	3	1	7	8	9	21	19	25	7	5	1
<i>Drilonereis longa</i>												
<i>Ephesiella minuta</i>												
<i>Eteone longa</i>												
<i>Eumida sanguinea</i>	1	4	1	2	8		6	1	11		1	
<i>Exogone</i> spp.										10	3	4
<i>Glycera americana</i>							1		1			
<i>Glycera dibranchiata</i>												
<i>Goniadella gracilis</i>		3	1		3	1			1	24	20	22
<i>Gyptis vittata</i>												
<i>Harmothoe</i> spp.												
<i>Lepidonotus squamatus</i>											1	
<i>Lumbrinereis acuta</i>	13	11	3	29	16	18	28	15	23	4	16	11
<i>Lumbrinereis fragilis</i>	1	1						3	1	3	6	4
Maldanidae spp.				1					1	5	5	2
<i>Marenzelleria viridis</i>												
<i>Marphysa bellii</i>		4					1		1		1	
<i>Megalona</i> sp.												1
<i>Microphthalmus sckelkowwi</i>												
<i>Nephtys</i> spp.										5	5	3
<i>Neanthes arenaceodentata</i>												
<i>Notomastus</i> sp.												
<i>Ophelia denticulata</i>												
<i>Ophioglycera gigantea</i>												
Orbinidae spp.												
<i>Orbinia swani</i>												
<i>Paranaitis speciosa</i>												
<i>Paraonis</i> spp.												
<i>Parapionosyllis longicirrata</i>	5	4	2	1	5	2	5	8	5	76	39	28
<i>Pherusa affinis</i>												
<i>Phyllodoce arenae</i>												
<i>Phyllodoce maculata</i>												
<i>Pisone</i> sp.	18	29	64	36	24	28	29	60	56	4	3	1
<i>Polycirrus eximius</i>	188	121	193	316	161	301	180	152	203			1
<i>Polygordius</i> spp.	2	8	3	2	1	3	7	4	6	51	132	55
<i>Potamilla reniformis</i>												
<i>Pseudomystides</i> sp.	2		5	5		1	2	13	4			

SampleID	T5-7rep1_Y3	T5-7rep2_Y3	T5-7rep3_Y3	T5-8rep1_Y3	T5-8rep2_Y3	T5-8rep3_Y3	T5-9rep1_Y3	T5-9rep2_Y3	T5-9rep3_Y3	C1-1rep1_Y3	C1-1rep2_Y3	C1-1rep3_Y3
<i>Sabellaria vulgaris</i>											1	2
<i>Scalibregma inflatum</i>											2	
<i>Scolecopsis bousfieldi</i>												
<i>Sigalion arenicola</i>			1									
<i>Sphaerosyllis erinaceus</i>	1		3	1	3	1	6	1	10	15	82	61
<i>Spio filicornis</i>												
<i>Spio setosa</i>												
<i>Spiochaetopterus oculatus</i>												
<i>Spiophanes bombyx</i>										2		
<i>Spirorbis</i> spp												
<i>Syllides</i> spp.	2					1		1		4	7	3
<i>Travisia camea</i>	1	1	3	22	22	1			1	4		2
<i>Typosyllis (Syllis) cornuta</i>				3	1							
OTHER PHYLA												
NEMERTEA	1	3	2	2	1			2	2	1	1	2
<i>Cerebratulus lacteus</i>												
NEMATODA	60	49	117	44		44	100	56	134	160	218	156
SIPUNCULA												
<i>Phascolopsis gouldii</i>												

G.4 Species List Year 3 (Winter 2019) of Vessel-Based Grab Samples (continued)

SampleID	C1- 2rep1_Y3	C1- 2rep2_Y3	C1- 2rep3_Y3	C1- 3rep1_Y3	C1- 3rep2_Y3	C1- 3rep3_Y3	C2- 1rep1_Y3	C2- 1rep2_Y3	C2- 1rep3_Y3	C2- 2rep1_Y3	C2- 2rep2_Y3	C2- 2rep3_Y3
ACTINIARIA												
<i>Actinaria</i> sp.												
<i>Halcapa duodecimcirrata</i>	1								2			
ARTHROPODA												
Amphipoda												
<i>Ampelisca vadorum</i>												1
<i>Byblis serrata</i>												
<i>Caprella linearis</i>												
<i>Corophium</i> sp.												
<i>Erichthonius brasiliensis</i>								2	2			
<i>Gammaropsis maculata</i>									2			
<i>Grandidierella</i> sp.												
<i>Hippomedon serratus</i>												
<i>Ischyrocerus anguipes</i>												
<i>Jassa marmorata</i>										1	1	
<i>Lysianopsis alba</i>												
<i>Microdeutopus anomalus</i>												
<i>Monoculodes</i> sp.				1			2				1	2
<i>Parametopella cypris</i>												
<i>Phoxocephalus holbolli</i>	1						1	2				
<i>Pontogeneia inermis</i>									1			
<i>Protohaustorius wigleyi</i>												
<i>Wecomedon nobilis</i>												
<i>Pseudunciola obliqua</i>												
<i>Rhepoxynuis epistomus</i>												
<i>Siphonoecetes smithianus</i>												
<i>Stenopleustes inermis</i>												
<i>Unciola irrorata</i>	9	24	25	38	45	21	13	68	48	4	8	10
Brachypoda												
<i>Hutchinsoniella macracantha</i>												
Cumacea												
<i>Diastylis</i> sp.												
<i>Pseudoleptocuma minus</i>			2	1			1	4		1		3
Decapoda												
<i>Cancer borealis</i>												

SampleID	C1- 2rep1_Y3	C1- 2rep2_Y3	C1- 2rep3_Y3	C1- 3rep1_Y3	C1- 3rep2_Y3	C1- 3rep3_Y3	C2- 1rep1_Y3	C2- 1rep2_Y3	C2- 1rep3_Y3	C2- 2rep1_Y3	C2- 2rep2_Y3	C2- 2rep3_Y3
<i>Cancer irroratus</i>												
<i>Crangon septemspinosa</i>												
<i>Lebbeus zebra</i>						1						
<i>Pagurus acadianus</i>												
<i>Pagurus annulipes</i>												
<i>Pinnixa sayana</i>												
<i>Pinnotheres maculatus</i>												
Harpacticoida												
Harpacticoida	7	3	17	10		12			12		9	14
Isopoda												
<i>Chiridotea caeca</i>							1		2		3	2
<i>Chiridotea tuftsi</i>												
<i>Edotia triloba</i>		1		1	1			4				
<i>Politolana polita</i>			1									
<i>Ptilanthura tenuis</i>												
Mysidacea												
<i>Heteromysis formosa</i>												
Sessilia												
<i>Balanus</i> spp.				25								
Tanaidacea												
<i>Tanaissus psammophilus</i>						1	3				1	
Perciformes												
<i>Gobiosoma bosc</i>												
ECHINODERMATA												
<i>Asterias</i> spp.												
<i>Echinarachnius parma</i>						2	1	1	1			
<i>Leptosynapta</i> sp												
<i>Amphipholis squamata</i>												
MOLLUSCA												
Bivalvia												
<i>Anomia</i> spp (juveniles)												
<i>Astarte</i> spp.	1		1	3		2	3			3	2	
<i>Cerastoderma pinnulatum</i>												
<i>Crassinella</i> spp.												
<i>Crenella decussata</i>			2								1	
<i>Cyclocardia borealis</i>												
<i>Heteranomia squamula</i>												

SampleID	C1- 2rep1_Y3	C1- 2rep2_Y3	C1- 2rep3_Y3	C1- 3rep1_Y3	C1- 3rep2_Y3	C1- 3rep3_Y3	C2- 1rep1_Y3	C2- 1rep2_Y3	C2- 1rep3_Y3	C2- 2rep1_Y3	C2- 2rep2_Y3	C2- 2rep3_Y3
<i>Hiatella arctica</i>					1				1			
<i>Lyonsia arenosa</i>		2			1		1				2	1
<i>Mysella planulata</i>				1							2	
<i>Mytilus edulis</i>				2		2	1		3		1	2
<i>Nucula proxima</i>												
<i>Nucula tenuis</i>		1	1	1		1						1
<i>Pandora gouldiana</i>												
<i>Periploma leanum</i>												
<i>Psammotreta brevisfrons</i>	1											
<i>Spisula solidissima</i>			1	2	1	5		1	1	2	2	3
<i>Tellina agilis</i>			1					2	1			
Gastropoda												
<i>Boonea bisuturalis</i>												
<i>Caecum cooperi</i>							1			1	1	
<i>Costoanachis translirata</i>												
<i>Crepidula fornicata</i>				8								
<i>Crepidula plana</i>												
<i>Euspira heros</i>												
<i>Euspira triseriata</i>												
<i>Ilyanassa trivittata</i>	1			1								
<i>Polinices immaculatus</i>												
<i>Onoba</i> sp.							2			1	1	
<i>Testudinalia testudinalis</i>												
ANNELIDA												
Oligochaeta												
<i>Oligochaeta</i> spp.								3	4	1	2	2
Polychaeta												
<i>Ampharete arctica</i>							1					1
<i>Aricidea catherinae</i>	7	6	7	4	2	3	3	21	39	5	8	29
<i>Aricidea cerrutii</i>	7		3	2	1	1	2	13	31		26	16
<i>Aricidea wassi</i>												
<i>Asabellides oculata</i>												
<i>Capitella</i> sp.												
<i>Cautleriella venefica</i>						2			1			
<i>Cirratulidae</i>	11	4	5	12	19	7	4	2	11		3	1
<i>Cirrophorus</i> spp.	1	1	2	2	1	3		7	5	1	1	1
<i>Dipolydora</i> spp.	24	14	5	6	2		1					

SampleID	C1- 2rep1_Y3	C1- 2rep2_Y3	C1- 2rep3_Y3	C1- 3rep1_Y3	C1- 3rep2_Y3	C1- 3rep3_Y3	C2- 1rep1_Y3	C2- 1rep2_Y3	C2- 1rep3_Y3	C2- 2rep1_Y3	C2- 2rep2_Y3	C2- 2rep3_Y3
<i>Dorvilleidae</i>	1		3	1	2	5	1	8	31		7	15
<i>Drilonereis longa</i>												
<i>Ephesiella minuta</i>												1
<i>Eteone longa</i>	1											
<i>Eumida sanguinea</i>								7	8			
<i>Exogone</i> spp.	4	1	10	2	2	4	1					
<i>Glycera americana</i>										1		
<i>Glycera dibranchiata</i>												
<i>Goniadella gracilis</i>	22	24	52	18	22	58	2	1	57	14	10	25
<i>Gyptis vittata</i>												
<i>Harmothoe</i> spp.							1		1		1	2
<i>Lepidonotus squamatus</i>												
<i>Lumbrinereis acuta</i>	4	7	10	8	29	17	5	24	59	9	9	64
<i>Lumbrinereis fragilis</i>	4	4	9	3	4	3		2	2	1	2	6
Maldanidae spp.		4	1	1					1			1
<i>Marenzelleria viridis</i>						1						
<i>Marphysa bellii</i>	1	6	2			1		1	1	5	3	2
<i>Megalona</i> sp.												
<i>Microphthalmus sckelkowwi</i>												
<i>Nephtys</i> spp.	4	14	7	6	2	4		1			1	
<i>Neanthes arenaceodentata</i>												
<i>Notomastus</i> sp.												
<i>Ophelia denticulata</i>						3		1				
<i>Ophioglycera gigantea</i>												
Orbinidae spp.												
<i>Orbinia swani</i>												
<i>Paranaitis speciosa</i>												
<i>Paraonis</i> spp.												
<i>Parapionosyllis longicirrata</i>	18	7	34	5	1	44	6	14	43	6	9	12
<i>Pherusa affinis</i>												
<i>Phyllodoce arenae</i>				1								
<i>Phyllodoce maculata</i>												
<i>Pisione</i> sp.			1			1	2	31	40	24	28	84
<i>Polycirrus eximius</i>	1						19	121	228	25	77	309
<i>Polygordius</i> spp.	22	7	41	73	82	26	33	25	41	42	19	44
<i>Potamilla reniformis</i>												
<i>Pseudomystides</i> sp.										1	1	

SampleID	C1- 2rep1_Y3	C1- 2rep2_Y3	C1- 2rep3_Y3	C1- 3rep1_Y3	C1- 3rep2_Y3	C1- 3rep3_Y3	C2- 1rep1_Y3	C2- 1rep2_Y3	C2- 1rep3_Y3	C2- 2rep1_Y3	C2- 2rep2_Y3	C2- 2rep3_Y3
<i>Sabellaria vulgaris</i>				2			1					
<i>Scalibregma inflatum</i>			1	1	1							
<i>Scolecopsis bousfieldi</i>				1								
<i>Sigalion arenicola</i>									1			1
<i>Sphaerosyllis erinaceus</i>	9	9	21	13		34	3	2	63	1	14	34
<i>Spio filicornis</i>												
<i>Spio setosa</i>												
<i>Spiochaetopterus oculatus</i>												
<i>Spiophanes bombyx</i>												
<i>Spirorbis</i> spp											1	
<i>Syllides</i> spp.	1		4	2	1	8		2	9	1		9
<i>Travisia camea</i>		1				2	3	14	11	13	64	16
<i>Typosyllis (Syllis) cornuta</i>											1	
OTHER PHYLA												
NEMERTEA	1	1	5	1		1		1	8	7	3	1
<i>Cerebratulus lacteus</i>				1					1			
NEMATODA	116	82	470	48	18	81	8	32	158	70	93	225
SIPUNCULA												
<i>Phascolopsis gouldii</i>												

G.4 Species List Year 3 (Winter 2019) of Vessel-Based Grab Samples (continued)

SampleID	C2-3rep1_Y3	C2-3rep2_Y3	C2-3rep3_Y3	C3-1rep1_Y3	C3-1rep2_Y3	C3-1rep3_Y3	C3-2rep1_Y3	C3-2rep2_Y3	C3-2rep3_Y3	C3-3rep1_Y3	C3-3rep2_Y3	C3-3rep3_Y3
ACTINIARIA												
<i>Actinaria</i> sp.												
<i>Halcampa duodecimcirrata</i>								2				
ARTHROPODA												
Amphipoda												
<i>Ampelisca vadorum</i>												
<i>Byblis serrata</i>	1											
<i>Caprella linearis</i>						1				1		
<i>Corophium</i> sp.				1								
<i>Erichthonius brasiliensis</i>			1							2	1	
<i>Gammaropsis maculata</i>												
<i>Grandidierella</i> sp.												
<i>Hippomedon serratus</i>												
<i>Ischyrocerus anguipes</i>												
<i>Jassa marmorata</i>						1						
<i>Lysianopsis alba</i>												
<i>Microdeutopus anomalus</i>												
<i>Monoculodes</i> sp.												
<i>Parametopella cypris</i>												
<i>Phoxocephalus holbolli</i>												
<i>Pontogeneia inermis</i>												
<i>Protohaustorius wigleyi</i>												
<i>Wecomedon nobilis</i>												
<i>Pseudunciola obliqua</i>												
<i>Rhepoxynuis epistomus</i>												
<i>Siphonoecetes smithianus</i>												
<i>Stenopleustes inermis</i>												
<i>Unciola irrorata</i>	13	45	24	27	2	1		42		2	17	1
Brachypoda												
<i>Hutchinsoniella macracantha</i>												
Cumacea												
<i>Diastylis</i> sp.												
<i>Pseudoleptocuma minus</i>	3	1	2	1	1							
Decapoda												
<i>Cancer borealis</i>												

SampleID	C2-3rep1_Y3	C2-3rep2_Y3	C2-3rep3_Y3	C3-1rep1_Y3	C3-1rep2_Y3	C3-1rep3_Y3	C3-2rep1_Y3	C3-2rep2_Y3	C3-2rep3_Y3	C3-3rep1_Y3	C3-3rep2_Y3	C3-3rep3_Y3
<i>Cancer irroratus</i>												
<i>Crangon septemspinosa</i>												
<i>Lebbeus zebra</i>												
<i>Pagurus acadianus</i>									1			
<i>Pagurus annulipes</i>												
<i>Pinnixa sayana</i>												
<i>Pinnotheres maculatus</i>												
Harpacticoida												
Harpacticoida		4	5	8	4	6	2	8		1		
Isopoda												
<i>Chiridotea caeca</i>			1				1	2	2	1		1
<i>Chiridotea tuftsi</i>												
<i>Edotia triloba</i>		2						3				
<i>Politolana polita</i>												
<i>Ptilanthura tenuis</i>												
Mysidacea												
<i>Heteromysis formosa</i>												
Sessilia												
<i>Balanus</i> spp.	1					1						
Tanaidacea												
<i>Tanaissus psammophilus</i>			1									
Perciformes												
<i>Gobiosoma bosc</i>												
ECHINODERMATA												
<i>Asterias</i> spp.												
<i>Echinarachnius parma</i>		1					2	1				1
<i>Leptosynapta</i> sp												
<i>Amphipholis squamata</i>												
MOLLUSCA												
Bivalvia												
<i>Anomia</i> spp (juveniles)												
<i>Astarte</i> spp.			1	1	4	8	30	4	1	10	1	15
<i>Cerastoderma pinnulatum</i>												
<i>Crassinella</i> spp.							1			1		
<i>Crenella decussata</i>		1	2	1	7	8	8	5		7		9
<i>Cyclocardia borealis</i>												
<i>Heteranomia squamula</i>												

SampleID	C2-3rep1_Y3	C2-3rep2_Y3	C2-3rep3_Y3	C3-1rep1_Y3	C3-1rep2_Y3	C3-1rep3_Y3	C3-2rep1_Y3	C3-2rep2_Y3	C3-2rep3_Y3	C3-3rep1_Y3	C3-3rep2_Y3	C3-3rep3_Y3
<i>Hiatella arctica</i>												
<i>Lyonsia arenosa</i>	1					1	7		1	1		1
<i>Mysella planulata</i>												
<i>Mytilus edulis</i>					3	5	6	2			2	1
<i>Nucula proxima</i>												
<i>Nucula tenuis</i>		1	1						1			
<i>Pandora gouldiana</i>												
<i>Periploma leanum</i>												
<i>Psammotreta brevifrons</i>								2		1		
<i>Spisula solidissima</i>					1		4			1		
<i>Tellina agilis</i>												
Gastropoda												
<i>Boonea bisuturalis</i>								1				
<i>Caecum cooperi</i>							8			2		1
<i>Costoanachis translirata</i>												
<i>Crepidula fornicata</i>									1			
<i>Crepidula plana</i>												
<i>Euspira heros</i>		1										
<i>Euspira triseriata</i>												
<i>Ilyanassa trivittata</i>												
<i>Polinices immaculatus</i>												
<i>Onoba</i> sp.							3					
<i>Testudinalia testudinalis</i>												
ANNELIDA												
Oligochaeta												
<i>Oligochaeta</i> spp.			1						1			
Polychaeta												
<i>Ampharete arctica</i>												
<i>Aricidea catherinae</i>	9	15	20	2		1	6				1	2
<i>Aricidea cerrutii</i>	16	9	11					6				
<i>Aricidea wassi</i>												
<i>Asabellides oculata</i>												
<i>Capitella</i> sp.												
<i>Caulleriella venefica</i>												
Cirratulidae	3	1	4	1								4
<i>Cirrophorus</i> spp.	1	5	2			1	2					
<i>Dipolydora</i> spp.		3										

SampleID	C2-3rep1_Y3	C2-3rep2_Y3	C2-3rep3_Y3	C3-1rep1_Y3	C3-1rep2_Y3	C3-1rep3_Y3	C3-2rep1_Y3	C3-2rep2_Y3	C3-2rep3_Y3	C3-3rep1_Y3	C3-3rep2_Y3	C3-3rep3_Y3
<i>Dorvilleidae</i>	2	2	13		3	4	1	7		11	5	6
<i>Drilonereis longa</i>												
<i>Ephesiella minuta</i>												
<i>Eteone longa</i>												
<i>Eumida sanguinea</i>		1	1	1	2	1				1	1	
<i>Exogone</i> spp.												
<i>Glycera americana</i>												
<i>Glycera dibranchiata</i>												
<i>Goniadella gracilis</i>	1	11	8			1	11	11	1	2	1	12
<i>Gyptis vittata</i>												
<i>Harmothoe</i> spp.			1			1						
<i>Lepidonotus squamatus</i>												
<i>Lumbrinereis acuta</i>	25	35	44	3	9	6	25	16	15	8	16	14
<i>Lumbrinereis fragilis</i>	1	3	3	2		1		5				
Maldanidae spp.	1	3	4	1			3		1	2	1	
<i>Marenzelleria viridis</i>												
<i>Marphysa bellii</i>	1	6	5			1	2	3	1	1	1	5
<i>Megalona</i> sp.												
<i>Microphthalmus sckelkowwi</i>												
<i>Nephtys</i> spp.		1										1
<i>Neanthes arenaceodentata</i>												
<i>Notomastus</i> sp.												
<i>Ophelia denticulata</i>												
<i>Ophioglycera gigantea</i>												
Orbinidae spp.												
<i>Orbinia swani</i>												
<i>Paranaitis speciosa</i>		1										
<i>Paraonis</i> spp.			1									
<i>Parapionosyllis longicirrata</i>	8	20	20			2	12	8	2	3	3	2
<i>Pherusa affinis</i>												
<i>Phyllodoce arenae</i>												
<i>Phyllodoce maculata</i>												
<i>Pisone</i> sp.	2	23	28	44	31	43	27	95	13	22	52	89
<i>Polycirrus eximius</i>	40	95	98	223	218	147	93	165	195	273	297	146
<i>Polygordius</i> spp.	36	19	54		3	2	2	9	5	2	3	2
<i>Potamilla reniformis</i>												
<i>Pseudomystides</i> sp.			2		3	1		3		4	10	1

SampleID	C2-3rep1_Y3	C2-3rep2_Y3	C2-3rep3_Y3	C3-1rep1_Y3	C3-1rep2_Y3	C3-1rep3_Y3	C3-2rep1_Y3	C3-2rep2_Y3	C3-2rep3_Y3	C3-3rep1_Y3	C3-3rep2_Y3	C3-3rep3_Y3
<i>Sabellaria vulgaris</i>						1						
<i>Scalibregma inflatum</i>									1			
<i>Scolecopsis bousfieldi</i>												
<i>Sigalion arenicola</i>		1	1									1
<i>Sphaerosyllis erinaceus</i>	4	6	18	22	1	4	12	11	2	1	9	1
<i>Spio filicornis</i>			1									
<i>Spio setosa</i>												
<i>Spiochaetopterus oculatus</i>												
<i>Spiophanes bombyx</i>												
<i>Spirorbis</i> spp	3					20						1
<i>Syllides</i> spp.	1	7	1	1	1		3	3	1	1		
<i>Travisia carnea</i>		3	8	3		6	36	29	33	16	12	36
<i>Typosyllis (Syllis) cornuta</i>				1	2							
OTHER PHYLA												
NEMERTEA	1	2	4	2			4	1	1	3	4	3
<i>Cerebratulus lacteus</i>						1						
NEMATODA	48	193	214	13	16	27	144	147	24	67	42	111
SIPUNCULA												
<i>Phascolopsis gouldii</i>												

G.5 Species List Year 3 (Winter 2019) for Diver-Based Grab Samples

Very Near Field

Sample ID	T1-VN-S1r1	T1-VN-S1r2	T1-VN-S1r3	T1-VN-S2r1	T1-VN-S2r2	T1-VN-S2r3	T1-VN-S3r1	T1-VN-S3r2	T1-VN-S3r3
CNIDARIA									
<i>Urticina felina</i>		2						1	
<i>Ceriantheopsis americana</i> (partial)			1						
ARTHROPODA									
Amphipoda									
<i>Ampelisca vadorum</i>									
<i>Byblis serrata</i>									
<i>Caprella linearis</i>			1					3	3
<i>Corophium</i> sp								4	3
<i>Elasmopus levis</i>								1	1
<i>Erichthonius brasiliensis</i>									
<i>Jassa marmorata</i>			1	1					
<i>Microdeutopus anomalus</i>									2
<i>Orchomenella minuta</i>									
<i>Parametopella cypris</i>									
<i>Phoxocephalus holbolli</i>									
<i>Pontogeneia inermis</i>									
<i>Stenothoe minuta</i>								1	
<i>Unciola irrorata</i>	1			2	2	4	20	15	32
Cumacea									
<i>Diastylis sculpta</i>			1	1					
<i>Oxyurostylis smithi</i>						1			
Decapoda									
<i>Calappa flammea</i>					1				
<i>Cancer borealis</i>	2	6	1					2	2
<i>Cancer irroratus</i>	4		2			2			
<i>Cancer</i> spp (juveniles)									
<i>Lebbeus zebra</i>	4	5	5						
<i>Pagurus acadianus</i>									
<i>Pagurus annulipes</i>					1				
<i>Pinnixa sayana</i>									
<i>Pinnotheres maculatus</i>		3	3						
Harpacticoida									
<i>Harpacticoida</i> spp									
Isopoda									
<i>Chiridotea caeca</i>						1	1		
<i>Edotea triloba</i>						1			
<i>Ianiropsis</i> sp									
<i>Idotea phosphorea</i>									
<i>Ptilanthura tenuis</i>								1	
<i>Politolana polita</i>									

Sample ID	T1-VN-S1r1	T1-VN-S1r2	T1-VN-S1r3	T1-VN-S2r1	T1-VN-S2r2	T1-VN-S2r3	T1-VN-S3r1	T1-VN-S3r2	T1-VN-S3r3
Mysidacea									
<i>Heteromysis formosa</i>	1	6	6						
Sessilia									
<i>Balanus</i> spp	252	148	20	96	64	23	353	338	583
Tanaidacea									
<i>Tanaissus psammophilus</i>									
CHORDATA									
<i>Gobiosoma bosc</i>	1	1							
ECHINODERMATA									
Asteroidea									
<i>Asterias forbesi</i>		1							
Echinoidea									
Echinoidea sp (juvenile)					1				
MOLLUSCA									
Bivalvia									
<i>Anomia simplex</i>	1	4					2	11	3
<i>Anomia squamula</i>								1	
<i>Astarte</i> spp (<i>A. castanea</i> , <i>A. undata</i>)									
<i>Cerastoderma pinnulatum</i>								1	
<i>Mytilus</i> sp ¹ .	10	6	27	0	1	0	0	6	0
<i>Nucula proxima</i>								1	
<i>Pandora gouldiana</i>							1		
<i>Spisula solidissima</i>						2			
<i>Tellina agilis</i>									
Gastropoda									
<i>Astyris lunata</i>									
<i>Cotonopsis lafresnayi</i> (= <i>Costoanachis translirata</i>)									1
<i>Crepidula fornicata</i>	4	9					1	7	
<i>Crepidula plana</i>				1					
<i>Euspira heros</i>									
<i>Polinices immaculatus</i>				1					
<i>Tritia</i> (= <i>Ilyanassa</i>) <i>trivittata</i>								1	
ANNELIDA									
Polychaeta									
<i>Aricidea catherinae</i>					1				
<i>Aricidea cerrutii</i>									
<i>Aricidea fragilis</i>									
<i>Asabellides oculata</i>							1		
<i>Capitella</i> sp.		1	1	1		1			
Capitellidae	1						1		
<i>Caulleriella venefica</i>				1	3	4		1	1
<i>Cirrophorus lyra</i>							1		1
<i>Dipolydora quadrilobata</i>								2	
<i>Drilonereis longa</i>									
<i>Eteone longa</i>									1

Sample ID	T1-VN-S1r1	T1-VN-S1r2	T1-VN-S1r3	T1-VN-S2r1	T1-VN-S2r2	T1-VN-S2r3	T1-VN-S3r1	T1-VN-S3r2	T1-VN-S3r3
<i>Eulalia bilineata</i>								1	1
<i>Eumida sanguinea</i>								4	3
<i>Exogone</i> spp (<i>E.dispar</i> , <i>E.hebes</i>)					2	2	7		
<i>Glycera americana</i>									
<i>Goniadella gracilis</i>	2			8	22	28	12	4	4
<i>Gyptis vittata</i>	4	2							
<i>Harmothoe extenuata</i>	6	16	4					2	
<i>Kirkegaardia baptisteeae</i>						1	2	2	7
<i>Leitoscoloplos robustus</i>					1				1
<i>Lepidonotus squamatus</i>	3	7	10					1	1
<i>Levinsenia gracilis</i>									
<i>Lumbrinereis acuta</i>				8	9	9	5		3
<i>Lumbrinereis fragilis</i>		1		4	3	2	4	1	2
Maldanidae spp	1	1						2	1
<i>Marphysa bellii</i>						1			
<i>Microphthalmus sckelkowwi</i>									
<i>Neanthes arenaceodentata</i>			1	2		2	5	3	
<i>Nephtys</i> spp (juveniles)				2	1	1			2
<i>Nereis zonata</i>			1						
<i>Ophelia denticulata</i>									
<i>Ophioglycera gigantea</i>	2						1	1	
<i>Ophryotrocha</i> sp									
<i>Paranaitis speciosa</i>									
<i>Parapionosyllis longicirrata</i>					2		1		
<i>Parougia caeca</i>									
<i>Pettiboneia</i> sp						1			
<i>Pherusa affinis</i>					1				
<i>Phyllodoce maculata</i>			2	5			5	11	11
<i>Pisione</i> sp									
<i>Polycirrus eximius</i>									
<i>Polygordius</i> spp				5	17	26	21	14	14
<i>Proceraea cornuta</i>									
<i>Pseudomystides</i> sp							1		
<i>Scalibregma inflatum</i>									
<i>Sigalion arenicola</i>									
<i>Sphaerosyllis erinaceus</i>									
<i>Spiochaetopterus oculatus</i>								1	
<i>Spio setosa</i>									
<i>Syllides longocirratus</i>									
<i>Travisia carnea</i>									
<i>Typosyllis (=Syllis) cornuta</i>									
OTHER PHYLA									
NEMATODA									
Nematoda spp	18	34	12	38	88	115	76	28	22
NEMERTEA									
<i>Cerebratulus lacteus</i>			1	1		1	2	1	1

Sample ID	T1-VN-S1r1	T1-VN-S1r2	T1-VN-S1r3	T1-VN-S2r1	T1-VN-S2r2	T1-VN-S2r3	T1-VN-S3r1	T1-VN-S3r2	T1-VN-S3r3
Nemertea spp (including juvenile <i>C. lacteus</i>)									
PLATYHELMINTHES									
<i>Coronadena mutabilis</i>				1					
<u>Note:</u>									
1. Sum of all size classes of <i>Mytilus</i> sp.									

Abundance of <i>Mytilus</i> sp. within select size classes as follows:									
Sample ID	T1-VN-S1r1	T1-VN-S1r2	T1-VN-S1r3	T1-VN-S2r1	T1-VN-S2r2	T1-VN-S2r3	T1-VN-S3r1	T1-VN-S3r2	T1-VN-S3r3
<i>Mytilus edulis</i> < 5 mm		3			1			3	
<i>Mytilus edulis</i> 5 - 30mm		3	1					1	
<i>Mytilus edulis</i> > 30mm	10		26					2	

Very Near Field (continued)

Sample ID	T3-VN-S1r1	T3-VN-S1r2	T3-VN-S1r3	T3-VN-S2r1	T3-VN-S2r2	T3-VN-S2r3	T3-VN-S3r1	T3-VN-S3r2	T3-VN-S3r3
CNIDARIA									
<i>Urticina felina</i>									
<i>Ceriantheopsis americana</i> (partial)									
ARTHROPODA									
Amphipoda									
<i>Ampelisca vadorum</i>			1						
<i>Byblis serrata</i>						4			
<i>Caprella linearis</i>			3						
<i>Corophium</i> sp									
<i>Elasmopus levis</i>									
<i>Erichthonius brasiliensis</i>							2		
<i>Jassa marmorata</i>	1		3		1	2			
<i>Microdeutopus anomalus</i>									
<i>Orchomenella minuta</i>									
<i>Parametopella cypris</i>			2						
<i>Phoxocephalus holbolli</i>							1		
<i>Pontogeneia inermis</i>					1				
<i>Stenothoe minuta</i>									
<i>Unciola irrorata</i>	1	2	2	8	17	7	7	4	9
Cumacea									
<i>Diastylis sculpta</i>									
<i>Oxyurostylis smithi</i>									
Decapoda									
<i>Calappa flammea</i>									
<i>Cancer borealis</i>			3		2		3		
<i>Cancer irroratus</i>			2				2	1	
<i>Cancer</i> spp (juveniles)									
<i>Lebbeus zebra</i>									
<i>Pagurus acadianus</i>			1						
<i>Pagurus annulipes</i>					1				
<i>Pinnixa sayana</i>									
<i>Pinnotheres maculatus</i>									
Harpacticoida									
<i>Harpacticoida</i> spp	11								4
Isopoda									
<i>Chiridotea caeca</i>									
<i>Edotea triloba</i>					1				
<i>Ianiropsis</i> sp									
<i>Idotea phosphorea</i>									
<i>Ptilanthura tenuis</i>									
<i>Politolana polita</i>			1						
Mysidacea									
<i>Heteromysis formosa</i>									

Sample ID	T3-VN-S1r1	T3-VN-S1r2	T3-VN-S1r3	T3-VN-S2r1	T3-VN-S2r2	T3-VN-S2r3	T3-VN-S3r1	T3-VN-S3r2	T3-VN-S3r3
Sessilia									
<i>Balanus</i> spp			4					3	6
Tanaidacea									
<i>Tanaissus psammophilus</i>		1							
CHORDATA									
<i>Gobiosoma bosc</i>									
ECHINODERMATA									
Asteroidea									
<i>Asterias forbesi</i>									
Echinoidea									
Echinoidea sp (juvenile)	6		1	7		4			
MOLLUSCA									
Bivalvia									
<i>Anomia simplex</i>									
<i>Anomia squamula</i>									
<i>Astarte</i> spp (<i>A. castanea</i> , <i>A. undata</i>)							1		
<i>Cerastoderma pinnulatum</i>									1
<i>Mytilus</i> sp ¹ .	2	3	3	2	6	2	5	12	17
<i>Nucula proxima</i>									
<i>Pandora gouldiana</i>									
<i>Spisula solidissima</i>	1		4	13	5	8	3		
<i>Tellina agilis</i>									
Gastropoda									
<i>Astyris lunata</i>									
<i>Cotonopsis lafresnayi</i> (= <i>Costoanachis translirata</i>)									1
<i>Crepidula fornicata</i>			9	1			5		
<i>Crepidula plana</i>									
<i>Euspira heros</i>	1			1		1	1		
<i>Polinices immaculatus</i>									
<i>Tritia</i> (= <i>Ilyanassa</i>) <i>trivittata</i>									1
ANNELIDA									
Polychaeta									
<i>Aricidea catherinae</i>	7	5	6		1	3	2		
<i>Aricidea cerrutii</i>	1	2	4		1	1			
<i>Aricidea fragilis</i>	2								
<i>Asabellides oculata</i>	1								
<i>Capitella</i> sp.	2		13				6	2	9
Capitellidae									
<i>Caulleriella venefica</i>									
<i>Cirrophorus lyra</i>	2		1	1		1			2
<i>Dipolydora quadrilobata</i>	1	1							
<i>Drilonereis longa</i>		1							
<i>Eteone longa</i>									
<i>Eulalia bilineata</i>					1				
<i>Eumida sanguinea</i>									

Sample ID	T3-VN-S1r1	T3-VN-S1r2	T3-VN-S1r3	T3-VN-S2r1	T3-VN-S2r2	T3-VN-S2r3	T3-VN-S3r1	T3-VN-S3r2	T3-VN-S3r3
<i>Exogone</i> spp (<i>E. dispar</i> , <i>E. hebes</i>)							1		
<i>Glycera americana</i>									
<i>Goniadella gracilis</i>	26	25	13	3	3	17	3	4	14
<i>Gyptis vittata</i>						1			
<i>Harmothoe extenuata</i>	1		1		1		2		
<i>Kirkegaardia baptisteeae</i>	2	4	1		1				
<i>Leitoscoloplos robustus</i>									
<i>Lepidonotus squamatus</i>			1				3	1	
<i>Levinsenia gracilis</i>			1						1
<i>Lumbrinereis acuta</i>	11	13	31	6	3	3	18	1	15
<i>Lumbrinereis fragilis</i>	8	3	3	3	5	1	3		5
Maldanidae spp		1	1				1		
<i>Marphysa bellii</i>				1					
<i>Microphthalmus sckelkowi</i>							1		
<i>Neanthes arenaceodentata</i>			1				2		
<i>Nephtys</i> spp (juveniles)									
<i>Nereis zonata</i>									
<i>Ophelia denticulata</i>					1				
<i>Ophioglycera gigantea</i>									
<i>Ophryotrocha</i> sp			2						
<i>Paranaitis speciosa</i>						1			
<i>Parapionosyllis longicirrata</i>	11	15	8	1		2		3	1
<i>Parougia caeca</i>		8	11	6	2	3	1		3
<i>Pettiboneia</i> sp									
<i>Pherusa affinis</i>									
<i>Phyllodoce maculata</i>	2		1				1		
<i>Pisone</i> sp	55	25	52	22	30	40	28	20	35
<i>Polycirrus eximius</i>	11	10	15	4	1	3	3	2	5
<i>Polygordius</i> spp	45	23	34	3	2	22	7	15	25
<i>Proceraea cornuta</i>	14								
<i>Pseudomystides</i> sp			1	1	1	2			
<i>Scalibregma inflatum</i>									
<i>Sigalion arenicola</i>									
<i>Sphaerosyllis erinaceus</i>	8	5	6				1	1	3
<i>Spiochaetopterus oculatus</i>									
<i>Spio setosa</i>			2			1			
<i>Syllides longocirratus</i>		1	2				1		1
<i>Travisia carnea</i>			1	1					
<i>Typosyllis</i> (= <i>Syllis</i>) <i>cornuta</i>					1				
OTHER PHYLA									
NEMATODA									
Nematoda spp	142	238	212	132	178	202	48	20	147
NEMERTEA									
<i>Cerebratulus lacteus</i>						1			
Nemertea spp (including juvenile <i>C. lacteus</i>)		1	1						

Sample ID	T3-VN-S1r1	T3-VN-S1r2	T3-VN-S1r3	T3-VN-S2r1	T3-VN-S2r2	T3-VN-S2r3	T3-VN-S3r1	T3-VN-S3r2	T3-VN-S3r3
PLATYHELMINTHES									
<i>Coronadena mutabilis</i>									

Note:

1. Sum of all size classes of *Mytilus* sp.

Abundance of *Mytilus* sp. within select size classes as follows:

Sample ID	T3-VN-S1r1	T3-VN-S1r2	T3-VN-S1r3	T3-VN-S2r1	T3-VN-S2r2	T3-VN-S2r3	T3-VN-S3r1	T3-VN-S3r2	T3-VN-S3r3
<i>Mytilus edulis</i> < 5 mm		3	1	2	3	2	2		2
<i>Mytilus edulis</i> 5 - 30mm	2		2		1		3		4
<i>Mytilus edulis</i> > 30mm					2			12	11

Very Near Field (continued)

Sample ID	T5-VN-S1r1	T5-VN-S1r2	T5-VN-S1r3	T5-VN-S2r1	T5-VN-S2r2	T5-VN-S2r3	T5-VN-S3r1	T5-VN-S3r2	T5-VN-S3r3
CNIDARIA									
<i>Urticina felina</i>		2							
<i>Ceriantheopsis americana</i> (partial)			1						
ARTHROPODA									
Amphipoda									
<i>Ampelisca vadorum</i>									
<i>Byblis serrata</i>		1							
<i>Caprella linearis</i>			1						
<i>Corophium</i> sp									
<i>Elasmopus levis</i>									
<i>Erichthonius brasiliensis</i>									
<i>Jassa marmorata</i>			1	2	2				1
<i>Microdeutopus anomalus</i>									
<i>Orchomenella minuta</i>						1			
<i>Parametopella cypris</i>									
<i>Phoxocephalus holbolli</i>									
<i>Pontogeneia inermis</i>									
<i>Stenothoe minuta</i>									
<i>Unciola irrorata</i>	1	2	6	2	2		1	2	1
Cumacea									
<i>Diastylis sculpta</i>			1	1					
<i>Oxyurostylis smithi</i>									
Decapoda									
<i>Calappa flammea</i>									
<i>Cancer borealis</i>									
<i>Cancer irroratus</i>									
<i>Cancer</i> spp (juveniles)									
<i>Lebbeus zebra</i>									
<i>Pagurus acadianus</i>									
<i>Pagurus annulipes</i>									
<i>Pinnixa sayana</i>									
<i>Pinnotheres maculatus</i>									
Harpacticoida									
<i>Harpacticoida</i> spp	5	8		6	15				
Isopoda									
<i>Chiridotea caeca</i>	1	1						1	1
<i>Edotea triloba</i>	1								
<i>Ianiropsis</i> sp									
<i>Idotea phosphorea</i>									
<i>Ptilanthura tenuis</i>									
<i>Politolana polita</i>		1							
Mysidacea									
<i>Heteromysis formosa</i>									

Sample ID	T5-VN-S1r1	T5-VN-S1r2	T5-VN-S1r3	T5-VN-S2r1	T5-VN-S2r2	T5-VN-S2r3	T5-VN-S3r1	T5-VN-S3r2	T5-VN-S3r3
Sessilia									
<i>Balanus</i> spp									1
Tanaidacea									
<i>Tanaissus psammophilus</i>						2	1		
CHORDATA									
<i>Gobiosoma bosc</i>									
ECHINODERMATA									
Asteroidea									
<i>Asterias forbesi</i>									
Echinoidea									
Echinoidea sp (juvenile)		1					10	6	7
MOLLUSCA									
Bivalvia									
<i>Anomia simplex</i>									
<i>Anomia squamula</i>									
<i>Astarte</i> spp (<i>A. castanea</i> , <i>A. undata</i>)	1	3	1	1		1		1	2
<i>Cerastoderma pinnulatum</i>									
<i>Mytilus</i> sp ¹ .	1	3	0	2	0	5	2	0	8
<i>Nucula proxima</i>		1							
<i>Pandora gouldiana</i>									
<i>Spisula solidissima</i>						1	1	2	1
<i>Tellina agilis</i>				2					
Gastropoda									
<i>Astyris lunata</i>									
<i>Cotonopsis lafresnayi</i> (= <i>Costoanachis translirata</i>)									
<i>Crepidula fornicata</i>									
<i>Crepidula plana</i>									
<i>Euspira heros</i>									
<i>Polinices immaculatus</i>									
<i>Tritia</i> (= <i>Ilyanassa</i>) <i>trivittata</i>									
ANNELIDA									
Polychaeta									
<i>Aricidea catherinae</i>	3		1				5	3	1
<i>Aricidea cerrutii</i>	1			1					1
<i>Aricidea fragilis</i>									
<i>Asabellides oculata</i>									
<i>Capitella</i> sp.	1								
Capitellidae									
<i>Caulleriella venefica</i>									
<i>Cirrophorus lyra</i>									
<i>Dipolydora quadrilobata</i>					1				
<i>Drilonereis longa</i>									
<i>Eteone longa</i>									
<i>Eulalia bilineata</i>									2
<i>Eumida sanguinea</i>							1		1

Sample ID	T5-VN-S1r1	T5-VN-S1r2	T5-VN-S1r3	T5-VN-S2r1	T5-VN-S2r2	T5-VN-S2r3	T5-VN-S3r1	T5-VN-S3r2	T5-VN-S3r3
<i>Exogone</i> spp (<i>E.dispar</i> , <i>E.hebes</i>)									
<i>Glycera americana</i>			1						
<i>Goniadella gracilis</i>	5	5		5	7	2	5	2	11
<i>Gyptis vittata</i>									
<i>Harmothoe extenuata</i>									1
<i>Kirkegaardia baptisteeae</i>	1				1		1	2	1
<i>Leitoscoloplos robustus</i>									
<i>Lepidonotus squamatus</i>									1
<i>Levinsenia gracilis</i>									
<i>Lumbrinereis acuta</i>	17	18	9	14	10	9	8	2	20
<i>Lumbrinereis fragilis</i>		3	1		1	3	2	1	
Maldanidae spp									
<i>Marphysa bellii</i>									
<i>Microphthalmus sckelkowi</i>						2			
<i>Neanthes arenaceodentata</i>	1		1		1				
<i>Nephtys</i> spp (juveniles)									
<i>Nereis zonata</i>									
<i>Ophelia denticulata</i>									
<i>Ophioglycera gigantea</i>									
<i>Ophryotrocha</i> sp				1	4		2	1	3
<i>Paranaitis speciosa</i>									
<i>Parapionosyllis longicirrata</i>	5	4	1	4	1		12	14	20
<i>Parougia caeca</i>	2	7	2	28	17	1	4	4	6
<i>Pettiboneia</i> sp									
<i>Pherusa affinis</i>									
<i>Phyllodoce maculata</i>									
<i>Pisone</i> sp	37	50	28	44	10	5	16	38	60
<i>Polycirrus eximius</i>	7	9	3	16	4	3	30	25	17
<i>Polygordius</i> spp	3	19	63	2	5	2	1	2	4
<i>Proceraea cornuta</i>									
<i>Pseudomystides</i> sp	2			1	4	1		1	
<i>Scalibregma inflatum</i>									1
<i>Sigalion arenicola</i>							1		
<i>Sphaerosyllis erinaceus</i>	6		3	7			7	8	13
<i>Spiochaetopterus oculatus</i>									
<i>Spio setosa</i>				1					
<i>Syllides longocirratus</i>	1			1		1		2	3
<i>Travisia carnea</i>	2	1	3		1	3	1	1	3
<i>Typosyllis</i> (= <i>Syllis</i>) <i>cornuta</i>									
OTHER PHYLA									
NEMATODA									
Nematoda spp	66	98	70	588	424	308	688	1450	958
NEMERTEA									
<i>Cerebratulus lacteus</i>				1					1
Nemertea spp (including juvenile <i>C. lacteus</i>)	1		1		1				

Sample ID	T5-VN-S1r1	T5-VN-S1r2	T5-VN-S1r3	T5-VN-S2r1	T5-VN-S2r2	T5-VN-S2r3	T5-VN-S3r1	T5-VN-S3r2	T5-VN-S3r3
PLATYHELMINTHES									
<i>Coronadena mutabilis</i>									
<u>Note:</u>									
1. Sum of all size classes of <i>Mytilus</i> sp.									

Abundance of <i>Mytilus</i> sp. within select size classes as follows:									
Sample ID	T5-VN-S1r1	T5-VN-S1r2	T5-VN-S1r3	T5-VN-S2r1	T5-VN-S2r2	T5-VN-S2r3	T5-VN-S3r1	T5-VN-S3r2	T5-VN-S3r3
<i>Mytilus edulis</i> < 5 mm	1	3		2		4	2		8
<i>Mytilus edulis</i> 5 - 30mm						1			
<i>Mytilus edulis</i> > 30mm									

Turbine Footprint

SampleID	T1-FP1	T1-FP2	T3-FP1	T3-FP2	T3-FP3	T3-FP4	T3-FP5	T5-FP1	T5-FP2	T5-FP3	T5-FP4	T5-FP5
CNIDARIA												
<i>Urticina felina</i>	11	13	2	5	8	6	4				1	
ARTHROPODA												
Amphipoda												
<i>Caprella linearis</i>	24	64	16	2	4	4	69	4		16		
<i>Corophium</i> sp	1	5								2	9	
<i>Erichthonius brasiliensis</i>											1	
<i>Jassa marmorata</i>	7	2	2	8	3	8	7	9	2	22	2	
<i>Leucothoe spinicarpa</i>	1											
<i>Microdeutopus anomalus</i>	1	2									2	
<i>Pleusymtes glaber</i>	1	13	1	3	9	1	6	1		6		
<i>Pontogeneia inermis</i>			5	3	4		1					
<i>Stenothoe minuta</i>	1	1	1									
<i>Unciola irrorata</i>								1	3		3	1
Decapoda												
<i>Cancer irroratus</i>	3	1	52		15	6	6			27		
<i>Cancer</i> spp (juveniles)		2	1	3	9	13	43			17	1	
<i>Eurypanopeus depressus</i>										1		
<i>Lebbeus zebra</i>			12	1	3	4	10			2		
<i>Pagurus annulipes</i>			1		1							
<i>Pinnixa sayana</i>	1											
<i>Pinnotheres maculatus</i>	2	1	2	1	1	3						
<i>Panopeus herbstii</i>										1		
Isopoda												
<i>Ianiropsis</i> sp			1	2	1	1						
<i>Idotea phosphorea</i>			3	1	2							
Mysidacea												
<i>Heteromysis formosa</i>			1		3		3					
Pycnogonida												
<i>Anoplodactylus lentus</i>										1		
Sessilia												
<i>Balanus</i> spp	105	23	101	12	63	54	205	14	2	28	1	
CHORDATA												
<i>Gobiosoma bosc</i>		1	1				1			1		
ECHINODERMATA												
Asteroidea												
<i>Asterias forbesi</i> ¹	1	3	1				1					
Ophiuroidea												
<i>Axiognathus squamatus</i>								1		2		
MOLLUSCA												
Bivalvia												
<i>Anomia simplex</i>			6	5	1		11	1				
<i>Astarte undata</i>								1			2	
<i>Hiatella arctica</i>										1		

SampleID	T1-FP1	T1-FP2	T3-FP1	T3-FP2	T3-FP3	T3-FP4	T3-FP5	T5-FP1	T5-FP2	T5-FP3	T5-FP4	T5-FP5
<i>Mytilus edulis</i> ²	2575	4470	458	141	184	365	566	119	1	126	39	68
<i>Nucula proxima</i>		1										
Gastropoda												
<i>Astyris lunata</i>	4	5	1	12	8		7			81		
<i>Cotonopsis lafresnayi</i> (= <i>Costoanachis translirata</i>)		1	5			44				56	1	
<i>Crepidula fornicata</i>	2	6	32	63	21	14	98	3		28	1	3
<i>Crepidula plana</i>			2							2		
Nudibranchia												
<i>Aeolidia papillosa</i>		7				1						
<i>Dendronotus frondosus</i>	2	1				1						
<i>Doridella obscura</i>					1		5					
ANNELIDA												
Polychaeta												
<i>Aricidea catherinae</i>									1	2	2	1
<i>Aricidea cerrutii</i>											1	
<i>Capitella</i> sp	99	42	17	11	1	20	3	22	14	4	2	
<i>Drilonereis longa</i>								1				
<i>Dipolydora socialis</i>											2	
<i>Eteone longa</i>	1	1										
<i>Eulalia viridis</i>	5	2	10	1	1					1		
<i>Eumida sanguinea</i>	3	9					1			1	1	
<i>Goniada maculata</i>		1				1						
<i>Goniadella gracilis</i>						8			5		2	2
<i>Gyptis vittata</i>	4	8	11	8	2	1	4	1		4	1	
<i>Harmothoe extenuata</i>	44	140	28	25	34	20	24			31	5	2
<i>Harmothoe imbricata</i>	4	6	3	2	1	1	5			1		
<i>Heteromastus filiformis</i>								1				
<i>Hydroides dianthus</i>			1									
<i>Kirkegaardia baptisteeae</i>				1	2		2	1	2	3		
<i>Leitoscoloplos robustus</i>												
<i>Lepidonotus squamatus</i>	17	14	97	33	15	25	44			26		
<i>Lumbrinereis acuta</i>											6	12
<i>Lumbrinereis fragilis</i>	2	2	2	6	4	10	15	1	3		3	2
Maldanidae spp.											1	
<i>Marphysa bellii</i>											1	1
<i>Neanthes arenaceodentata</i>			2	7		1		6	4	1	10	1
<i>Neoamphitrite figulus</i>			2									
<i>Nereis zonata</i>	1	2			2	1	2			1		
<i>Parougia caeca</i>					1				1	1	4	
<i>Phyllodoce maculata</i>	8	14	16	6	2	3	28	5		15	8	8
<i>Pisone</i> sp					1			3	5		44	23
<i>Polycirrus eximius</i>		3										
<i>Polygordius</i> spp						1		2	3	2	21	358
<i>Potamilla reniformis</i>		1										
<i>Proceratea cornuta</i>	2	8			2		1					

SampleID	T1-FP1	T1-FP2	T3-FP1	T3-FP2	T3-FP3	T3-FP4	T3-FP5	T5-FP1	T5-FP2	T5-FP3	T5-FP4	T5-FP5
<i>Sphaerosyllis erinaceus</i>									4			
<i>Syllides longocirratus</i>									1			
<i>Sigalion arenicola</i>	1						1					2
Terebellidae sp.								3	1			2
NEMATODA												
Nematoda	102	2	123	29	58	4	18	9	89	58	16	37
NEMERTEA												
<i>Cerebratulus lacteus</i>								1			1	
Nemertea spp.									1			1
PLATYHELMINTHES												
<i>Coronadena mutabilis</i>	1	2	1		1							

Notes:

1. T1-FP2 had one *A. forbesi* which was a partial organism
2. Sum of all size classes of *Mytilus* sp.

Abundance of *Mytilus* sp. within select size classes as follows:

SampleID	T1-FP1	T1-FP2	T3-FP1	T3-FP2	T3-FP3	T3-FP4	T3-FP5	T5-FP1	T5-FP2	T5-FP3	T5-FP4	T5-FP5
<i>Mytilus edulis</i> < 5 mm	2050	3823	60	18	21	31	278	63	1	51	17	24
<i>Mytilus edulis</i> 5 - 30mm	388	523	244	26	56	171	208	46		32	22	44
<i>Mytilus edulis</i> > 30mm	137	124	154	97	107	163	80	10		43		

Appendix H – Macrofaunal Species Statistics for Vessel-Based Data Collection and Diver-Based Data Collection

H.1 Year 1 Vessel-Based Results

Vessel-Based Samples Year 1						
Sample ID	No. Species (S)	No. individuals (N)	Richness (d)	Evenness (J')	Diversity (H'(loge))	Dominance (1-λ)'
T1-1_1	25	96	5.258	0.698	2.247	0.790
T1-1_2	6	7	2.569	0.976	1.748	0.952
T1-1_3	15	45	3.678	0.767	2.078	0.812
T1-2_1	18	40	4.608	0.870	2.516	0.910
T1-2_2	14	53	3.274	0.777	2.051	0.804
T1-2_3	23	122	4.579	0.734	2.303	0.860
T1-3_1	8	31	2.038	0.879	1.829	0.839
T1-3_2	16	74	3.485	0.801	2.220	0.864
T1-3_3	24	398	3.842	0.489	1.554	0.634
T1-4_1	26	128	5.152	0.831	2.706	0.913
T1-4_2	17	56	3.975	0.818	2.318	0.876
T1-4_3	11	44	2.643	0.847	2.030	0.845
T1-5_1	29	117	5.880	0.863	2.905	0.935
T1-5_2	16	54	3.760	0.783	2.171	0.845
T1-5_3	19	88	4.020	0.744	2.191	0.840
T1-6_1	27	45	6.830	0.929	3.063	0.958
T1-6_2	15	26	4.297	0.924	2.502	0.935
T1-6_3	9	14	3.031	0.931	2.045	0.912
T1-7_1	12	22	3.559	0.874	2.172	0.883
T1-7_2	6	14	1.895	0.754	1.352	0.681
T1-7_3	8	47	1.818	0.705	1.467	0.690
T1-8_1	13	44	3.171	0.833	2.136	0.867
T1-8_2	5	13	1.559	0.919	1.479	0.808
T1-8_3	17	64	3.847	0.863	2.444	0.904
T1-9_1	23	100	4.777	0.840	2.634	0.908
T1-9_2	25	106	5.146	0.788	2.536	0.882
T1-9_3	22	91	4.655	0.753	2.328	0.843
T3-1_1	22	172	4.080	0.776	2.398	0.873
T3-1_2	24	204	4.325	0.665	2.113	0.777
T3-1_3	19	274	3.207	0.625	1.841	0.756
T3-2_1	19	187	3.441	0.707	2.083	0.803
T3-2_2	23	224	4.065	0.804	2.522	0.885
T3-2_3	22	198	3.971	0.753	2.328	0.860
T3-3_1	23	212	4.107	0.669	2.098	0.810
T3-3_2	23	327	3.800	0.642	2.012	0.753
T3-3_3	19	139	3.648	0.782	2.303	0.861
T3-4_1	17	131	3.282	0.810	2.296	0.860

Vessel-Based Samples Year 1						
Sample ID	No. Species (S)	No. individuals (N)	Richness (d)	Evenness (J')	Diversity (H'(loge))	Dominance (1-λ)'
T3-4_2	16	110	3.191	0.787	2.181	0.849
T3-4_3	16	108	3.204	0.852	2.363	0.890
T3-5_1	20	120	3.969	0.655	1.963	0.745
T3-5_2	21	62	4.846	0.855	2.604	0.900
T3-5_3	19	147	3.607	0.795	2.342	0.877
T3-6_1	19	107	3.852	0.793	2.336	0.863
T3-6_2	28	271	4.820	0.808	2.693	0.901
T3-6_3	26	348	4.272	0.661	2.153	0.820
T3-7_1	14	192	2.473	0.456	1.203	0.462
T3-7_2	24	278	4.087	0.681	2.163	0.804
T3-7_3	25	221	4.446	0.781	2.514	0.894
T3-8_1	22	208	3.934	0.666	2.058	0.777
T3-8_2	23	361	3.736	0.682	2.137	0.820
T3-8_3	24	233	4.219	0.762	2.421	0.877
T3-9_1	12	86	2.469	0.868	2.156	0.872
T3-9_2	20	151	3.787	0.751	2.249	0.828
T3-9_3	18	111	3.610	0.765	2.211	0.841
T5-1_1	19	122	3.747	0.762	2.244	0.865
T5-1_2	17	213	2.984	0.614	1.741	0.715
T5-1_3	19	384	3.025	0.275	0.810	0.328
T5-2_1	18	161	3.346	0.703	2.032	0.805
T5-2_2	20	243	3.459	0.530	1.587	0.641
T5-2_3	15	159	2.762	0.583	1.578	0.664
T5-3_1	12	35	3.094	0.883	2.193	0.892
T5-3_2	12	102	2.378	0.721	1.793	0.783
T5-3_3	19	362	3.055	0.758	2.233	0.854
T5-4_1	26	177	4.830	0.601	1.957	0.689
T5-4_2	19	129	3.704	0.540	1.590	0.600
T5-4_3	13	61	2.919	0.799	2.050	0.846
T5-5_1	22	126	4.342	0.588	1.819	0.661
T5-5_2	21	67	4.757	0.659	2.006	0.707
T5-5_3	17	86	3.592	0.493	1.395	0.511
T5-6_1	16	234	2.750	0.690	1.914	0.817
T5-6_2	23	247	3.993	0.629	1.972	0.788
T5-6_3	16	250	2.717	0.656	1.817	0.787
T5-7_1	22	137	4.268	0.775	2.394	0.869
T5-7_2	17	227	2.949	0.712	2.016	0.818
T5-7_3	13	109	2.558	0.612	1.569	0.684
T5-8_1	17	215	2.979	0.675	1.913	0.800
T5-8_2	8	77	1.611	0.738	1.534	0.721
T5-8_3	9	56	1.987	0.787	1.730	0.785
T5-9_1	15	224	2.587	0.737	1.997	0.820
T5-9_2	23	411	3.655	0.621	1.948	0.794

Vessel-Based Samples Year 1						
Sample ID	No. Species (S)	No. individuals (N)	Richness (d)	Evenness (J')	Diversity (H'(loge))	Dominance (1-λ)'
T5-9_3	19	311	3.136	0.647	1.905	0.787
C1-1_1	28	143	5.440	0.773	2.575	0.887
C1-1_2	28	787	4.049	0.261	0.870	0.312
C1-1_3	26	112	5.298	0.790	2.574	0.889
C1-2_1	15	50	3.579	0.663	1.796	0.697
C1-2_2	5	38	1.100	0.478	0.770	0.371
C1-2_3	12	80	2.510	0.568	1.413	0.588
C1-3_1	13	122	2.498	0.698	1.791	0.770
C1-3_2	13	116	2.524	0.782	2.006	0.839
C1-3_3	17	118	3.354	0.721	2.042	0.808
C1-4_1	34	106	7.076	0.923	3.256	0.961
C1-4_2	31	230	5.517	0.757	2.600	0.870
C1-4_3	37	311	6.272	0.814	2.938	0.925
C2-1_1	34	399	5.510	0.727	2.563	0.863
C2-1_2	28	261	4.852	0.730	2.433	0.846
C2-1_3	19	107	3.852	0.872	2.567	0.908
C2-2_1	35	195	6.448	0.710	2.525	0.836
C2-2_2	27	343	4.454	0.714	2.354	0.827
C2-2_3	21	145	4.019	0.801	2.440	0.883
C2-3_1	34	180	6.355	0.769	2.712	0.886
C2-3_2	21	200	3.775	0.632	1.923	0.722
C2-3_3	18	119	3.557	0.777	2.245	0.826
C2-4_1	18	72	3.975	0.868	2.509	0.908
C2-4_2	14	30	3.822	0.818	2.159	0.834
C2-4_3	19	41	4.847	0.855	2.518	0.901
C3-1_1	27	163	5.104	0.779	2.568	0.883
C3-1_2	30	189	5.533	0.759	2.581	0.886
C3-1_3	25	103	5.178	0.821	2.642	0.903
C3-2_1	17	63	3.862	0.796	2.256	0.854
C3-2_2	11	36	2.791	0.875	2.099	0.871
C3-2_3	5	5	2.485	1.000	1.609	1.000
C3-3_1	31	135	6.116	0.819	2.813	0.915
C3-3_2	28	184	5.177	0.669	2.229	0.818
C3-3_3	20	117	3.990	0.705	2.112	0.803
C3-4_1	24	146	4.615	0.708	2.251	0.832
C3-4_2	25	232	4.406	0.639	2.055	0.769
C3-4_3	24	81	5.234	0.819	2.603	0.903
T1-QC	14	77	2.993	0.741	1.955	0.785
T3-QC	21	230	3.678	0.808	2.460	0.890
T5-QC	24	143	4.634	0.777	2.470	0.878
C3-QC	16	60	3.664	0.718	1.990	0.790

H.2 Year 2 Vessel-Based Results

Vessel-Based Samples Year 2						
Sample	No. Species	No. Individuals	Richness (d')	Evenness (J')	Diveristy (H')	Dominance (1-λ)
T1-1rep1	20	75	4.401	0.8454	2.533	0.898
T1-1rep2	20	98	4.144	0.807	2.418	0.8811
T1-1rep3	25	131	4.923	0.7531	2.424	0.8604
T1-2rep1	17	115	3.372	0.5466	1.549	0.6226
T1-2rep2	13	131	2.461	0.4785	1.227	0.511
T1-2rep3	18	124	3.527	0.6538	1.89	0.7671
T1-3rep1	18	156	3.366	0.5582	1.613	0.6426
T1-3rep2	12	91	2.439	0.5353	1.33	0.5499
T1-3rep3	18	110	3.617	0.6228	1.8	0.7351
T1-4rep1	15	70	3.295	0.7029	1.903	0.7764
T1-4rep2	25	193	4.56	0.6458	2.079	0.7623
T1-4rep3	19	126	3.722	0.7943	2.339	0.8632
T1-5rep1	16	101	3.25	0.7045	1.953	0.7804
T1-5rep2	22	195	3.983	0.5758	1.78	0.6643
T1-5rep3	18	263	3.051	0.3943	1.14	0.4401
T1-6rep1	24	216	4.279	0.5808	1.846	0.7076
T1-6rep2	19	90	4	0.7035	2.071	0.7825
T1-6rep3	27	174	5.04	0.6662	2.196	0.8035
T1-7rep1	25	110	5.106	0.6245	2.01	0.6941
T1-7rep2	27	168	5.074	0.6801	2.242	0.8159
T1-7rep3	24	1055	3.304	0.2264	0.7196	0.2529
T1-8rep1	10	32	2.597	0.8845	2.037	0.8629
T1-8rep2	27	529	4.146	0.4395	1.449	0.5265
T1-8rep3	17	83	3.621	0.6019	1.705	0.6309
T1-9rep1	19	198	3.404	0.5019	1.478	0.5563
T1-9rep2	16	110	3.191	0.7082	1.963	0.7838
T1-9rep3	22	152	4.18	0.5357	1.656	0.6252
T3-1rep1	26	882	3.686	0.3977	1.296	0.4664
T3-1rep2	23	587	3.451	0.5478	1.718	0.6451
T3-1rep3	19	387	3.021	0.6756	1.989	0.7548
T3-2rep1	24	778	3.455	0.3539	1.125	0.4003
T3-2rep2	18	964	2.474	0.3005	0.8686	0.3084
T3-2rep3	27	819	3.876	0.4943	1.629	0.599
T3-3rep1	24	1342	3.194	0.4171	1.325	0.4807
T3-3rep2	23	352	3.752	0.5283	1.656	0.5976
T3-3rep3	27	1085	3.72	0.348	1.147	0.4093

Vessel-Based Samples Year 2						
Sample	No. Species	No. Individuals	Richness (d')	Evenness (J')	Diveristy (H')	Dominance (1-λ)
T3-4rep1	28	1494	3.694	0.3004	1.001	0.351
T3-4rep2	23	230	4.046	0.7341	2.302	0.8483
T3-4rep3	24	1037	3.312	0.4817	1.531	0.5595
T3-5rep1	23	685	3.369	0.3936	1.234	0.4399
T3-5rep2	18	1206	2.396	0.2945	0.8513	0.3041
T3-5rep3	26	993	3.623	0.3925	1.279	0.4659
T3-6rep1	22	1020	3.031	0.2892	0.8938	0.3035
T3-6rep2	25	857	3.554	0.2655	0.8547	0.2917
T3-6rep3	24	909	3.376	0.2988	0.9497	0.3337
T3-7rep1	22	774	3.157	0.3868	1.196	0.4327
T3-7rep2	26	1190	3.53	0.2747	0.895	0.3055
T3-7rep3	20	591	2.977	0.3837	1.149	0.4153
T3-8rep1	25	895	3.531	0.3309	1.065	0.3831
T3-8rep2	23	700	3.358	0.4725	1.482	0.5559
T3-8rep3	28	1225	3.797	0.4513	1.504	0.5514
T3-9rep1	25	282	4.254	0.4049	1.303	0.4425
T3-9rep2	24	545	3.65	0.3602	1.145	0.4256
T3-9rep3	22	95	4.611	0.7139	2.207	0.7978
T5-1rep1	22	667	3.229	0.4239	1.31	0.4753
T5-1rep2	22	889	3.093	0.1889	0.5838	0.1894
T5-1rep3	20	205	3.569	0.7893	2.365	0.8849
T5-2rep1	25	1562	3.264	0.4021	1.294	0.4799
T5-2rep2	22	1085	3.005	0.392	1.212	0.4489
T5-2rep3	20	169	3.704	0.7742	2.319	0.8715
T5-3rep1	20	786	2.85	0.4617	1.383	0.518
T5-3rep2	24	441	3.777	0.657	2.088	0.7803
T5-3rep3	17	521	2.558	0.3577	1.014	0.3759
T5-4rep1	25	390	4.023	0.555	1.787	0.6443
T5-4rep2	26	1457	3.432	0.4343	1.415	0.5337
T5-4rep3	28	515	4.324	0.4854	1.618	0.5785
T5-5rep1	26	732	3.79	0.5047	1.644	0.6193
T5-5rep2	21	874	2.953	0.48	1.461	0.5481
T5-5rep3	19	325	3.112	0.4069	1.198	0.4468
T5-6rep1	21	295	3.517	0.515	1.568	0.6078
T5-6rep2	18	241	3.099	0.6885	1.99	0.7954
T5-6rep3	19	444	2.953	0.5209	1.534	0.5873
T5-7rep1	28	863	3.994	0.4698	1.565	0.6022

Vessel-Based Samples Year 2						
Sample	No. Species	No. Individuals	Richness (d')	Evenness (J')	Diveristy (H')	Dominance (1-λ)
T5-7rep2	17	946	2.335	0.3689	1.045	0.5055
T5-7rep3	25	871	3.545	0.4421	1.423	0.5423
T5-8rep1	25	445	3.936	0.5379	1.731	0.6599
T5-8rep2	31	800	4.488	0.3149	1.081	0.3747
T5-8rep3	23	330	3.794	0.5777	1.811	0.6976
T5-9rep1	15	108	2.99	0.7753	2.099	0.8394
T5-9rep2	32	337	5.326	0.6013	2.084	0.7271
T5-9rep3	24	451	3.763	0.4435	1.41	0.518
C1-1rep1	18	144	3.421	0.7653	2.212	0.8366
C1-1rep2	27	194	4.936	0.7256	2.391	0.8304
C1-1rep3	23	229	4.049	0.7183	2.252	0.811
C1-2rep1	19	148	3.602	0.3626	1.068	0.3827
C1-2rep2	29	1116	3.99	0.3364	1.133	0.401
C1-2rep3	15	123	2.909	0.6306	1.708	0.6855
C1-3rep1	34	349	5.636	0.5073	1.789	0.6247
C1-3rep2	28	558	4.269	0.6623	2.207	0.8078
C1-3rep3	27	443	4.267	0.6608	2.178	0.7988
C2-1rep1	29	1108	3.994	0.492	1.657	0.5979
C2-1rep2	25	696	3.667	0.5815	1.872	0.7057
C2-1rep3	29	1753	3.749	0.3946	1.329	0.4904
C2-2rep1	28	1471	3.702	0.4426	1.475	0.5366
C2-2rep2	30	1455	3.982	0.3252	1.106	0.3823
C2-2rep3	34	1334	4.586	0.5341	1.884	0.6855
C2-3rep1	28	1411	3.723	0.307	1.023	0.3651
C2-3rep2	21	779	3.004	0.2579	0.7851	0.2792
C2-3rep3	19	1206	2.537	0.3726	1.097	0.4216
C3-1rep1	21	127	4.129	0.6763	2.059	0.7808
C3-1rep2	25	689	3.672	0.5612	1.806	0.6929
C3-1rep3	25	680	3.68	0.4102	1.32	0.4901
C3-2rep1	27	329	4.486	0.6588	2.171	0.7946
C3-2rep2	24	279	4.084	0.4704	1.495	0.5208
C3-2rep3	28	579	4.244	0.5573	1.857	0.6994
C3-3rep1	24	120	4.804	0.8099	2.574	0.8877
C3-3rep2	23	517	3.521	0.44	1.38	0.5046
C3-3rep3	24	426	3.799	0.4855	1.543	0.5579

H.3 Year 2 Diver-Based Results

Diver-Based Samples Year 2						
Sample	No. Species (S)	No. Individuals (N)	Richness (d)	Eveness (J')	Diversity (H'(loge))	Dominance (1-λ)
Turbine Footprint						
T1-FP1	8	116	1.473	0.514	1.069	0.5081
T1-FP2	16	128	3.091	0.736	2.041	0.8157
T1-FP3	13	68	2.844	0.7217	1.851	0.7906
T1-FP4	12	72	2.572	0.8118	2.017	0.8482
T1-FP5	8	45	1.839	0.707	1.47	0.6929
T3-FP1	12	71	2.581	0.56	1.391	0.569
T3-FP2	14	29	3.861	0.9216	2.432	0.9286
T3-FP3	26	94	5.503	0.8332	2.715	0.9115
T3-FP4	14	45	3.415	0.8489	2.24	0.8778
T3-FP5	11	31	2.912	0.8053	1.931	0.8237
T5-FP1	19	486	2.91	0.388	1.143	0.4822
T5-FP2	32	714	4.718	0.4988	1.729	0.6758
T5-FP3	27	486	4.203	0.5176	1.706	0.6418
T5-FP4	17	420	2.649	0.3751	1.063	0.4123
T5-FP5	21	716	3.042	0.4692	1.428	0.647

H.4 Year 3 Vessel-Based Results

Vessel-Based Samples Year 3						
Sample ID	No. Species (S)	No. Individuals (N)	Richness (d)	Evenness (J')	Diversity (H'(loge))	Dominance (1-λ)
T1-1rep1_Y3	28	1486	3.697	0.278	0.925	0.414
T1-1rep2_Y3	26	175	4.840	0.712	2.321	0.840
T1-1rep3_Y3	27	630	4.034	0.406	1.339	0.602
T1-2rep1_Y3	19	173	3.493	0.644	1.895	0.700
T1-2rep2_Y3	26	513	4.006	0.568	1.850	0.770
T1-2rep3_Y3	28	435	4.444	0.561	1.871	0.684
T1-3rep1_Y3	18	600	2.658	0.459	1.325	0.635
T1-3rep2_Y3	21	209	3.744	0.738	2.247	0.818
T1-3rep3_Y3	29	400	4.673	0.555	1.869	0.667
T1-4rep1_Y3	21	235	3.663	0.440	1.339	0.473
T1-4rep2_Y3	23	104	4.737	0.763	2.392	0.858
T1-4rep3_Y3	20	97	4.153	0.688	2.060	0.761
T1-5rep1_Y3	29	830	4.166	0.362	1.219	0.593
T1-5rep2_Y3	19	112	3.815	0.840	2.474	0.896
T1-5rep3_Y3	15	99	3.047	0.778	2.107	0.811
T1-6rep1_Y3	22	154	4.169	0.789	2.440	0.885
T1-6rep2_Y3	23	253	3.976	0.525	1.645	0.605
T1-6rep3_Y3	32	2346	3.995	0.288	0.998	0.533
T1-7rep1_Y3	28	130	5.547	0.735	2.449	0.813
T1-7rep2_Y3	34	771	4.964	0.624	2.201	0.787
T1-7rep3_Y3	27	212	4.854	0.795	2.619	0.894
T1-8rep1_Y3	21	121	4.170	0.752	2.288	0.842
T1-8rep2_Y3	29	215	5.214	0.779	2.624	0.893
T1-8rep3_Y3	17	64	3.847	0.799	2.265	0.865
T1-9rep1_Y3	24	2322	2.968	0.397	1.261	0.641
T1-9rep2_Y3	26	913	3.667	0.385	1.255	0.504
T1-9rep3_Y3	33	3049	3.989	0.262	0.918	0.523
T3-1rep1_Y3	23	355	3.747	0.631	1.978	0.754
T3-1rep2_Y3	19	236	3.294	0.674	1.986	0.800
T3-1rep3_Y3	27	268	4.650	0.657	2.165	0.803
T3-2rep1_Y3	25	689	3.672	0.568	1.830	0.676
T3-2rep2_Y3	21	201	3.771	0.637	1.939	0.750
T3-2rep3_Y3	26	427	4.128	0.730	2.379	0.852
T3-3rep1_Y3	25	328	4.143	0.617	1.987	0.778
T3-3rep2_Y3	22	378	3.538	0.474	1.466	0.640
T3-3rep3_Y3	23	364	3.731	0.713	2.236	0.812
T3-4rep1_Y3	21	307	3.492	0.579	1.763	0.753
T3-4rep2_Y3	22	417	3.481	0.571	1.766	0.715
T3-4rep3_Y3	17	63	3.862	0.776	2.198	0.845

Vessel-Based Samples Year 3						
Sample ID	No. Species (S)	No. Individuals (N)	Richness (d)	Evenness (J')	Diversity (H'(loge))	Dominance (1- λ)
T3-5rep1_Y3	29	590	4.389	0.592	1.994	0.740
T3-5rep2_Y3	23	256	3.967	0.557	1.746	0.732
T3-5rep3_Y3	30	673	4.453	0.598	2.033	0.787
T3-6rep1_Y3	21	299	3.508	0.783	2.383	0.876
T3-6rep2_Y3	28	318	4.686	0.625	2.083	0.790
T3-6rep3_Y3	24	98	5.016	0.859	2.731	0.920
T3-7rep1_Y3	21	553	3.167	0.624	1.901	0.771
T3-7rep2_Y3	32	550	4.913	0.641	2.221	0.815
T3-7rep3_Y3	20	435	3.127	0.546	1.634	0.719
T3-8rep1_Y3	19	360	3.058	0.567	1.670	0.747
T3-8rep2_Y3	20	287	3.357	0.617	1.847	0.763
T3-8rep3_Y3	30	314	5.044	0.669	2.277	0.820
T3-9rep1_Y3	29	836	4.161	0.537	1.808	0.735
T3-9rep2_Y3	24	527	3.670	0.608	1.934	0.776
T3-9rep3_Y3	23	378	3.707	0.563	1.765	0.722
T5-1rep1_Y3	20	226	3.505	0.773	2.315	0.868
T5-1rep2_Y3	24	441	3.777	0.672	2.136	0.819
T5-1rep3_Y3	24	279	4.084	0.659	2.095	0.801
T5-2rep1_Y3	23	652	3.395	0.482	1.510	0.578
T5-2rep2_Y3	24	676	3.530	0.689	2.189	0.843
T5-2rep3_Y3	18	590	2.665	0.589	1.702	0.739
T5-3rep1_Y3	22	263	3.769	0.729	2.253	0.849
T5-3rep2_Y3	24	445	3.772	0.665	2.114	0.818
T5-3rep3_Y3	17	145	3.215	0.709	2.008	0.794
T5-4rep1_Y3	20	199	3.589	0.626	1.874	0.718
T5-4rep2_Y3	24	352	3.922	0.692	2.198	0.842
T5-4rep3_Y3	16	183	2.879	0.647	1.794	0.778
T5-5rep1_Y3	21	564	3.157	0.465	1.417	0.625
T5-5rep2_Y3	27	915	3.813	0.551	1.817	0.730
T5-5rep3_Y3	18	250	3.079	0.509	1.470	0.554
T5-6rep1_Y3	21	460	3.262	0.519	1.579	0.673
T5-6rep2_Y3	25	464	3.909	0.488	1.571	0.632
T5-6rep3_Y3	18	334	2.925	0.625	1.807	0.719
T5-7rep1_Y3	25	337	4.124	0.511	1.645	0.651
T5-7rep2_Y3	24	263	4.128	0.602	1.912	0.739
T5-7rep3_Y3	25	420	3.973	0.485	1.561	0.689
T5-8rep1_Y3	23	481	3.562	0.438	1.372	0.549
T5-8rep2_Y3	21	267	3.580	0.529	1.609	0.617
T5-8rep3_Y3	20	425	3.139	0.398	1.194	0.482
T5-9rep1_Y3	22	425	3.470	0.617	1.907	0.753

Vessel-Based Samples Year 3						
Sample ID	No. Species (S)	No. Individuals (N)	Richness (d)	Evenness (J')	Diversity (H'(loge))	Dominance (1- λ)
T5-9rep2_Y3	23	373	3.715	0.640	2.007	0.779
T5-9rep3_Y3	29	542	4.448	0.596	2.008	0.781
C1-1rep1_Y3	31	521	4.796	0.710	2.438	0.856
C1-1rep2_Y3	35	759	5.127	0.651	2.316	0.847
C1-1rep3_Y3	34	456	5.390	0.666	2.350	0.836
C1-2rep1_Y3	27	280	4.614	0.686	2.261	0.801
C1-2rep2_Y3	23	225	4.062	0.746	2.338	0.833
C1-2rep3_Y3	30	744	4.386	0.483	1.643	0.588
C1-3rep1_Y3	37	308	6.283	0.741	2.676	0.890
C1-3rep2_Y3	21	238	3.655	0.667	2.032	0.813
C1-3rep3_Y3	34	360	5.606	0.737	2.599	0.888
C2-1rep1_Y3	29	125	5.799	0.795	2.676	0.890
C2-1rep2_Y3	30	416	4.809	0.728	2.475	0.865
C2-1rep3_Y3	36	929	5.121	0.726	2.601	0.886
C2-2rep1_Y3	25	240	4.379	0.729	2.348	0.856
C2-2rep2_Y3	37	418	5.965	0.715	2.581	0.880
C2-2rep3_Y3	34	940	4.820	0.627	2.210	0.816
C2-3rep1_Y3	24	222	4.257	0.743	2.361	0.873
C2-3rep2_Y3	32	521	4.955	0.650	2.254	0.812
C2-3rep3_Y3	35	605	5.308	0.660	2.346	0.828
C3-1rep1_Y3	20	358	3.231	0.480	1.439	0.587
C3-1rep2_Y3	18	311	2.962	0.443	1.282	0.495
C3-1rep3_Y3	29	303	4.900	0.588	1.979	0.731
C3-2rep1_Y3	27	455	4.248	0.710	2.340	0.839
C3-2rep2_Y3	28	592	4.230	0.659	2.197	0.826
C3-2rep3_Y3	20	302	3.327	0.463	1.386	0.562
C3-3rep1_Y3	28	447	4.424	0.471	1.571	0.600
C3-3rep2_Y3	20	479	3.079	0.499	1.495	0.593
C3-3rep3_Y3	26	467	4.067	0.613	1.997	0.802

H.5 Year 3 Diver-Based Results

Diver-Based Samples Year 3						
Sample	No. Species (S)	No. Individuals (N)	Richness (d)	Evenness (J')	Diversity (H'(loge))	Dominance (1-λ)
Turbine Footprint						
T1-FP1	32	3036	3.866	0.2204	0.764	0.277
T1-FP2	37	4879	4.239	0.1371	0.495	0.1595
T3-FP1	36	1020	5.052	0.5716	2.048	0.7601
T3-FP2	26	391	4.189	0.7041	2.294	0.8245
T3-FP3	34	468	5.367	0.6354	2.241	0.8025
T3-FP4	28	621	4.198	0.5252	1.75	0.6374
T3-FP5	30	1191	4.095	0.5653	1.923	0.7306
T5-FP1	23	210	4.114	0.5681	1.781	0.6602
T5-FP2	18	142	3.43	0.5508	1.592	0.5953
T5-FP3	34	571	5.199	0.7433	2.621	0.8966
T5-FP4	31	194	5.695	0.7569	2.599	0.8841
T5-FP5	17	524	2.555	0.422	1.196	0.5096
Very Near Field Area						
T1-VN-S1r1	18	317	2.952	0.3457	0.9991	0.3637
T1-VN-S1r2	18	253	3.072	0.5618	1.624	0.6335
T1-VN-S1r3	19	100	3.909	0.7756	2.284	0.861
T1-VN-S2r1	18	178	3.281	0.5576	1.612	0.6605
T1-VN-S2r2	18	220	3.152	0.5972	1.726	0.7403
T1-VN-S2r3	21	228	3.684	0.5824	1.773	0.7077
T1-VN-S3r1	22	523	3.355	0.4161	1.286	0.5201
T1-VN-S3r2	33	473	5.196	0.4032	1.41	0.4831
T1-VN-S3r3	26	706	3.811	0.2761	0.8995	0.3146
T3-VN-S1r1	27	375	4.387	0.6748	2.224	0.8115
T3-VN-S1r2	21	387	3.357	0.5312	1.617	0.6071
T3-VN-S1r3	41	464	6.515	0.6085	2.26	0.7657
T3-VN-S2r1	19	216	3.349	0.545	1.605	0.6102
T3-VN-S2r2	24	266	4.119	0.4437	1.41	0.5356
T3-VN-S2r3	24	332	3.962	0.5035	1.6	0.6083
T3-VN-S3r1	29	162	5.504	0.7557	2.545	0.8651
T3-VN-S3r2	14	89	2.896	0.8037	2.121	0.8542
T3-VN-S3r3	21	305	3.496	0.6467	1.969	0.7395
T5-VN-S1r1	24	171	4.473	0.6655	2.115	0.7921
T5-VN-S1r2	20	237	3.475	0.6574	1.969	0.7707
T5-VN-S1r3	20	198	3.593	0.5961	1.786	0.7535

Diver-Based Samples Year 3						
Sample	No. Species (S)	No. Individuals (N)	Richness (d)	Eveness (J')	Diversity (H'(loge))	Dominance (1-λ)
T5-VN-S2r1	22	730	3.185	0.3002	0.9279	0.3454
T5-VN-S2r2	19	511	2.886	0.2963	0.8724	0.3089
T5-VN-S2r3	17	350	2.731	0.2361	0.6689	0.2248
T5-VN-S3r1	21	799	2.993	0.2423	0.7377	0.2564
T5-VN-S3r2	21	1568	2.718	0.1425	0.4337	0.144
T5-VN-S3r3	29	1150	3.973	0.2571	0.8657	0.3024

Appendix I – Summary of Species Biomass for Vessel-Based and Diver-Based Benthic Data Collection Conducted in Year 3 (Winter 2019)

I.1 Species Biomass for Vessel-Based Samples (Year 3)

SampleID	T1-1-R1	T1-1-R2	T1-1-R3	T1-2-R1	T1-2-R2	T1-2-R3	T1-3-R1	T1-3-R2	T1-3-R3
Biomass(g)									
CNIDARIA (principally ACTINIARIA)									
ARTHROPODA (dry)	0.002	0.006	0.003	0.001	<.001	0.002	0.001	0.006	0.006
CHORDATA (dry)									
ECHINODERMATA (dry)	0.074								
MOLLUSCA (wet)	0.329	14.432	0.055	<.001	0.002	0.122	0.003	<.001	10.658
ANNELIDA (dry)	0.159	0.102	0.084	0.024	0.353	0.236	0.062	0.202	0.161
NEMERTEA (dry)	0.001	0.006	<.001	0.001	0.001	<.001	0.001		0.001
SIPUNCULA (dry)									
Total (Phyla)	0.565	14.546	0.142	0.026	0.356	0.360	0.067	0.208	10.826
Weighed separate from Phylum:									
<i>Balanus</i> spp. (wet)	13.344	0.843	13.216	0.069	0.350	0.317	8.874	0.382	0.590
<i>Mytilus edulis</i> Juveniles (wet)	0.002		0.002				0.002		
<i>Mytilus edulis</i> (Large wet)									
<i>Mytilus edulis</i> (Large dry)									
<i>Cancer borealis</i> (wet wt)									
<i>Cancer borealis</i> (dry wt)									
Notes:									
1. All weights are dry weights (g) except the Phylum Mollusca because of shell weight and that some bivalves remain closed during to drying process.									
2. Species weighed separately are excluded from total weight for phyla.									

SampleID	T1-4-R1	T1-4-R2	T1-4-R3	T1-5-R1	T1-5-R2	T1-5-R3	T1-6-R1	T1-6-R2	T1-6-R3
Biomass(g)									
CNIDARIA (principally ACTINIARIA)									
ARTHROPODA (dry)	0.021	0.006	0.018	0.008	0.100	0.087	0.002	0.001	0.008
CHORDATA (dry)									
ECHINODERMATA (dry)		<.001			0.001				
MOLLUSCA (wet)	<.001	0.030	<.001	0.083	0.262	0.073	<.001	13.873	0.033
ANNELIDA (dry)	0.015	0.066	0.037	0.146	0.139	0.428	-0.289	0.042	0.086
NEMERTEA (dry)	0.001	0.002	0.001	0.001			0.000		
SIPUNCULA (dry)									
Total (Phyla)	0.037	0.104	0.056	0.238	0.502	0.588	-0.287	13.916	0.127
Weighed separate from Phylum:									
<i>Balanus</i> spp. (wet)				10.004	0.161	0.330		0.087	15.863
<i>Mytilus edulis</i> Juveniles (wet)				0.003					0.012
<i>Mytilus edulis</i> (Large wet)					331.957	358.900			
<i>Mytilus edulis</i> (Large dry)						198.370			
<i>Cancer borealis</i> (wet wt)					14.542	65.043			
<i>Cancer borealis</i> (dry wt)					4.116	31.900			
Notes:									
1. All weights are dry weights (g) except the Phylum Mollusca because of shell weight and that some bivalves remain closed during to drying process.									
2. Species weighed separately are excluded from total weight for phyla.									

SampleID	T1-7-R1	T1-7-R2	T1-7-R3	T1-8-R1	T1-8-R2	T1-8-R3	T1-9-R1	T1-9-R2	T1-9-R3
Biomass(g)									
CNIDARIA (principally ACTINIARIA)						0.001			
ARTHROPODA (dry)	0.003	0.009	0.001	0.003	0.013	0.003	<.001	0.002	0.009
CHORDATA (dry)									
ECHINODERMATA (dry)		0.001		<.001					
MOLLUSCA (wet)	0.020	2.429	0.055	0.003	0.017	0.019	0.015	0.110	13.181
ANNELIDA (dry)	0.080	0.120	0.116	0.041	0.070	0.166	0.205	0.059	0.085
NEMERTEA (dry)	0.001	0.005	0.005	<.001				0.004	
SIPUNCULA (dry)									
Total (Phyla)	0.104	2.564	0.177	0.047	0.100	0.189	0.220	0.175	13.275
Weighed separate from Phylum:									
<i>Balanus</i> spp. (wet)	0.648	0.030	0.160	0.279	0.714	0.983	4.899	1.815	24.990
<i>Mytilus edulis</i> Juveniles (wet)							0.007		0.014
<i>Mytilus edulis</i> (Large wet)									
<i>Mytilus edulis</i> (Large dry)									
<i>Cancer borealis</i> (wet wt)									
<i>Cancer borealis</i> (dry wt)									
Notes:									
1. All weights are dry weights (g) except the Phylum Mollusca because of shell weight and that some bivalves remain closed during to drying process.									
2. Species weighed separately are excluded from total weight for phyla.									

SampleID	T3-1-R1	T3-1-R2	T3-1-R3	T3-2-R1	T3-2-R2	T3-2-R3	T3-3-R1	T3-3-R2	T3-3-R3
Biomass(g)									
CNIDARIA (principally ACTINIARIA)									
ARTHROPODA (dry)	<.001		0.010	0.001	0.011	0.007	0.018	0.009	0.003
CHORDATA (dry)									
ECHINODERMATA (dry)		<.001							
MOLLUSCA (wet)	0.160	0.023	0.005			0.002	1.834		0.001
ANNELIDA (dry)	0.242	0.144	0.400	0.294	0.156	0.134	0.218	1.067	0.462
NEMERTEA (dry)	0.002		0.001	0.002	<.001	<.001	0.001	0.094	0.001
SIPUNCULA (dry)									
Total (Phyla)	0.404	0.167	0.416	0.297	0.167	0.143	2.071	1.170	0.467
Weighed separate from Phylum:									
<i>Balanus</i> spp. (wet)									
<i>Mytilus edulis</i> Juveniles (wet)									
<i>Mytilus edulis</i> (Large wet)									
<i>Mytilus edulis</i> (Large dry)									
<i>Cancer borealis</i> (wet wt)									
<i>Cancer borealis</i> (dry wt)									
Notes:									
1. All weights are dry weights (g) except the Phylum Mollusca because of shell weight and that some bivalves remain closed during to drying process.									
2. Species weighed separately are excluded from total weight for phyla.									

SampleID	T3-4-R1	T3-4-R2	T3-4-R3	T3-5-R1	T3-5-R2	T3-5-R3	T3-6-R1	T3-6-R2	T3-6-R3
Biomass(g)									
CNIDARIA (principally ACTINIARIA)									
ARTHROPODA (dry)	0.003	0.013	0.002	0.005	0.003	0.006	0.007	0.006	0.004
CHORDATA (dry)									
ECHINODERMATA (dry)									0.002
MOLLUSCA (wet)	14.282	3.944	0.001	0.003	12.402	0.007		38.983	
ANNELIDA (dry)	0.074	0.433	0.094	0.326	0.161	0.323	0.239	0.270	0.055
NEMERTEA (dry)	0.001	0.001	<.001	0.031	0.003	0.001	0.003	0.190	0.001
SIPUNCULA (dry)									
Total (Phyla)	14.360	4.391	0.097	0.365	12.569	0.337	0.249	39.449	0.062
Weighed separate from Phylum:									
<i>Balanus</i> spp. (wet)									
<i>Mytilus edulis</i> Juveniles (wet)									
<i>Mytilus edulis</i> (Large wet)									
<i>Mytilus edulis</i> (Large dry)									
<i>Cancer borealis</i> (wet wt)									
<i>Cancer borealis</i> (dry wt)									
Notes:									
1. All weights are dry weights (g) except the Phylum Mollusca because of shell weight and that some bivalves remain closed during to drying process.									
2. Species weighed separately are excluded from total weight for phyla.									

SampleID	T3-7-R1	T3-7-R2	T3-7-R3	T3-8-R1	T3-8-R2	T3-8-R3	T3-9-R1	T3-9-R2	T3-9-R3
Biomass(g)									
CNIDARIA (principally ACTINIARIA)									
ARTHROPODA (dry)	0.007	0.016	0.001	0.023	0.002	0.489	0.018	0.015	0.006
CHORDATA (dry)					4.002				
ECHINODERMATA (dry)		0.001							0.001
MOLLUSCA (wet)	11.007	9.775	2.346	24.586	0.009	0.029	0.180	0.007	
ANNELIDA (dry)	0.328	0.160	0.140	0.213	0.203	0.198	0.388	0.293	0.255
NEMERTEA (dry)	0.002	0.194	0.001	0.005			0.005	<.001	<.001
SIPUNCULA (dry)									
Total (Phyla)	11.344	10.146	2.488	24.827	4.216	0.716	0.591	0.315	0.262
Weighed separate from Phylum:									
<i>Balanus</i> spp. (wet)							0.215		
<i>Mytilus edulis</i> Juveniles (wet)									
<i>Mytilus edulis</i> (Large wet)									
<i>Mytilus edulis</i> (Large dry)									
<i>Cancer borealis</i> (wet wt)									
<i>Cancer borealis</i> (dry wt)									
Notes:									
1. All weights are dry weights (g) except the Phylum Mollusca because of shell weight and that some bivalves remain closed during to drying process.									
2. Species weighed separately are excluded from total weight for phyla.									

SampleID	T5-1-R1	T5-1-R2	T5-1-R3	T5-2-R1	T5-2-R2	T5-2-R3	T5-3-R1	T5-3-R2	T5-3-R3
Biomass(g)									
CNIDARIA (principally ACTINIARIA)									
ARTHROPODA (dry)	<.001	0.001	0.019	0.011	<.001	0.006	0.010	0.011	0.005
CHORDATA (dry)									
ECHINODERMATA (dry)			0.001		<.001				
MOLLUSCA (wet)	11.063	0.414	0.001	0.504	0.435	0.001	0.776	0.001	0.001
ANNELIDA (dry)	0.095	0.443	0.102	0.354	0.248	0.946	0.335	0.642	0.362
NEMERTEA (dry)	<.001	0.038	0.092	0.002	<.001	0.001	0.002	0.002	0.163
SIPUNCULA (dry)									
Total (Phyla)	11.158	0.896	0.215	0.871	0.683	0.954	1.123	0.656	0.531
Weighed separate from Phylum:									
<i>Balanus</i> spp. (wet)									
<i>Mytilus edulis</i> Juveniles (wet)									
<i>Mytilus edulis</i> (Large wet)									
<i>Mytilus edulis</i> (Large dry)									
<i>Cancer borealis</i> (wet wt)									
<i>Cancer borealis</i> (dry wt)									
Notes:									
1. All weights are dry weights (g) except the Phylum Mollusca because of shell weight and that some bivalves remain closed during to drying process.									
2. Species weighed separately are excluded from total weight for phyla.									

SampleID	T5-4-R1	T5-4-R2	T5-4-R3	T5-5-R1	T5-5-R2	T5-5-R3	T5-6-R1	T5-6-R2	T5-6-R3
Biomass(g)									
CNIDARIA (principally ACTINIARIA)							0.919		
ARTHROPODA (dry)	0.012	0.002		0.002	0.005	0.003	<.001	0.010	0.002
CHORDATA (dry)			1.868	0.500					
ECHINODERMATA (dry)		<.001			0.001	<.001			<.001
MOLLUSCA (wet)		0.002	0.256	0.435	2.217	10.050	<.001	19.966	0.375
ANNELIDA (dry)	0.333	0.520	0.368	0.135	0.287	0.182	0.269	0.269	0.157
NEMERTEA (dry)	<.001	0.001	0.001	0.002	0.056	<.001	<.001	0.002	0.005
SIPUNCULA (dry)		<.001							
Total (Phyla)	0.345	0.525	2.493	1.074	2.566	10.235	1.188	20.247	0.539
Weighed separate from Phylum:									
<i>Balanus</i> spp. (wet)									
<i>Mytilus edulis</i> Juveniles (wet)									
<i>Mytilus edulis</i> (Large wet)									
<i>Mytilus edulis</i> (Large dry)									
<i>Cancer borealis</i> (wet wt)									
<i>Cancer borealis</i> (dry wt)									
Notes:									
1. All weights are dry weights (g) except the Phylum Mollusca because of shell weight and that some bivalves remain closed during to drying process.									
2. Species weighed separately are excluded from total weight for phyla.									

SampleID	T5-7-R1	T5-7-R2	T5-7-R3	T5-8-R1	T5-8-R2	T5-8-R3	T5-9-R1	T5-9-R2	T5-9-R3
Biomass(g)									
CNIDARIA (principally ACTINIARIA)			0.001						
ARTHROPODA (dry)	0.002	0.007	0.004	0.007	0.002	0.008	0.010	0.011	0.008
CHORDATA (dry)									
ECHINODERMATA (dry)	<.001		0.001				0.001	0.001	0.003
MOLLUSCA (wet)	28.262	0.444	0.002	<.001	0.028	19.291	0.277	0.780	8.891
ANNELIDA (dry)	0.162	0.177	0.271	0.277	0.203	0.236	0.207	0.265	0.266
NEMERTEA (dry)	<.001	0.003	0.006	0.002	<.001			0.004	0.001
SIPUNCULA (dry)									
Total (Phyla)	28.426	0.631	0.285	0.286	0.233	19.535	0.495	1.061	9.169
Weighed separate from Phylum:									
<i>Balanus</i> spp. (wet)									
<i>Mytilus edulis</i> Juveniles (wet)									
<i>Mytilus edulis</i> (Large wet)									
<i>Mytilus edulis</i> (Large dry)									
<i>Cancer borealis</i> (wet wt)									
<i>Cancer borealis</i> (dry wt)									
Notes:									
1. All weights are dry weights (g) except the Phylum Mollusca because of shell weight and that some bivalves remain closed during to drying process.									
2. Species weighed separately are excluded from total weight for phyla.									

SampleID	C2-1-R1	C2-1-R2	C2-1-R3	C1-3-R1	C1-3-R2	C1-3-R3	C1-1-R1	C1-1-R2	C1-1-R3
Biomass(g)									
CNIDARIA (principally ACTINIARIA)			0.023						
ARTHROPODA (dry)	0.025	0.044	0.043	0.019	0.017	0.013	0.018	0.031	0.019
CHORDATA (dry)									
ECHINODERMATA (dry)	0.001	<.001	0.002			0.001			
MOLLUSCA (wet)	0.002	14.585	0.003	2.339	0.002	0.002	0.059	0.01	0.001
ANNELIDA (dry)	0.051	0.268	0.337	0.089	0.146	0.081	0.1	0.179	0.254
NEMERTEA (dry)		<.001	0.011	0.003		<.001	<.001	0.002	<.001
SIPUNCULA (dry)									
Total (Phyla)	0.079	14.897	0.419	2.450	0.165	0.097	0.177	0.222	0.274
Weighed separate from Phylum:									
<i>Balanus</i> spp. (wet)				0.590				0.095	
<i>Mytilus edulis</i> Juveniles (wet)									
<i>Mytilus edulis</i> (Large wet)									
<i>Mytilus edulis</i> (Large dry)									
<i>Cancer borealis</i> (wet wt)									
<i>Cancer borealis</i> (dry wt)									
Notes:									
1. All weights are dry weights (g) except the Phylum Mollusca because of shell weight and that some bivalves remain closed during to drying process.									
2. Species weighed separately are excluded from total weight for phyla.									

SampleID	C3-1-R1	C3-1-R2	C3-1-R3	C2-2-R1	C2-2-R2	C2-2-R3	C1-2-R1	C1-2-R2	C1-2-R3
Biomass(g)									
CNIDARIA (principally ACTINIARIA)							<.001		
ARTHROPODA (dry)	0.009	0.002	0.004	0.005	0.014	0.027	0.006	0.022	0.055
CHORDATA (dry)									
ECHINODERMATA (dry)									
MOLLUSCA (wet)	0.002	0.315	3.677	36.023	0.001	0.001	0.111	<.001	0.004
ANNELIDA (dry)	0.261	0.233	0.22	0.157	0.23	0.399	0.099	0.079	0.091
NEMERTEA (dry)	<.001		0.019	0.008	0.002	<.001	<.001	<.001	<.001
SIPUNCULA (dry)									
Total (Phyla)	0.272	0.550	3.920	36.193	0.247	0.427	0.216	0.101	0.150
Weighed separate from Phylum:									
<i>Balanus</i> spp. (wet)			0.006						
<i>Mytilus edulis</i> Juveniles (wet)									
<i>Mytilus edulis</i> (Large wet)									
<i>Mytilus edulis</i> (Large dry)									
<i>Cancer borealis</i> (wet wt)									
<i>Cancer borealis</i> (dry wt)									
Notes:									
1. All weights are dry weights (g) except the Phylum Mollusca because of shell weight and that some bivalves remain closed during to drying process.									
2. Species weighed separately are excluded from total weight for phyla.									

SampleID	C3-3-R1	C3-3-R2	C3-3-R3	C3-2-R1	C3-2-R2	C3-2-R3	C2-3-R1	C2-3-R2	C2-3-R3
Biomass(g)									
CNIDARIA (principally ACTINIARIA)					0.036				0.337
ARTHROPODA (dry)	0.005	0.007	0.001	0.001	0.02	0.026	0.017	0.025	0.013
CHORDATA (dry)									
ECHINODERMATA (dry)				0.001	<.001			0.001	
MOLLUSCA (wet)	0.003	<.001	0.002	0.005	2.423	3.1	<.001	0.138	0.002
ANNELIDA (dry)	0.276	0.261	0.307	0.202	0.361	0.194	0.148	0.286	0.261
NEMERTEA (dry)	0.001	0.001	0.004	<.001	<.001	<.001	<.001	<.001	0.001
SIPUNCULA (dry)									
Total (Phyla)	0.285	0.269	0.314	0.209	2.840	3.320	0.165	0.450	0.614
Weighed separate from Phylum:									
<i>Balanus</i> spp. (wet)							0.001		
<i>Mytilus edulis</i> Juveniles (wet)									
<i>Mytilus edulis</i> (Large wet)									
<i>Mytilus edulis</i> (Large dry)									
<i>Cancer borealis</i> (wet wt)									
<i>Cancer borealis</i> (dry wt)									
Notes:									
1. All weights are dry weights (g) except the Phylum Mollusca because of shell weight and that some bivalves remain closed during to drying process.									
2. Species weighed separately are excluded from total weight for phyla.									

I.2 Species Biomass for Diver-Based Samples Turbine Footprint (Year 3)

SampleID	T1-FP1	T1-FP2	T3-FP1	T3-FP2	T3-FP3	T3-FP4	T3-FP5	T5-FP1	T5-FP2	T5-FP3	T5-FP4	T5-FP5
Biomass (g)												
CNIDARIA (principally ACTINIARIA)	0.029	0.451	0.039	0.052	0.062	0.046	0.028				0.026	
ARTHROPODA	22.053	3.172	22.769	2.011	12.279	13.512	50.494	2.706	0.048	18.930	0.935	<.001
CHORDATA		0.015	0.034				0.023			0.033		
ECHINODERMATA	0.216	0.080	0.067				0.161	0.001		0.005		
MOLLUSCA	1844.270	2050.629	1762.888	1029.967	1694.579	2147.281	2015.439	137.201	0.011	568.804	2.765	6.038
<i>Mytilus edulis</i> (>5mm)	19.058	18.498	0.486	0.080	0.067	0.145	1.868	0.252		0.204	0.099	0.108
<i>Mytilus edulis</i> (5 - 30mm)	44.622	31.016	40.623	8.217	18.524	32.677	21.954	8.037		0.920	2.314	5.870
<i>Mytilus edulis</i> (>30mm)	1779.390	1996.569	1711.635	1007.764	1643.010	2090.889	1972.86	117.182		545.576		
ANNELIDA	0.552	1.537	1.861	0.733	0.430	0.882	1.283	0.086	0.373	0.300	0.215	0.548
NEMATODA												
NEMERTEA								0.5	<.001		0.003	<.001
PLATYHELMINTHES	0.001	0.016			0.004							
<u>Note:</u>												
1. Biomass for identified species is included within the phylum total biomass												

I.3 Species Biomass for Diver-Based Samples Very Near Field (Year 3)

Sample ID	T1-S1R1	T1-S1R2	T1-S1R3	VT1-S2R1	T1-S2R2	T1-S2R3	T1-S3R1	T1-S3R2	T1-S3R3
Biomass (g)									
CNIDARIA		0.002	0.018					0.002	
ARTHROPODA	25.524	4.225	2.911	6.175	3.753	2.102	11.056	21.635	25.509
CHORDATA	0.086	1.57							
ECHINODERMATA		0.002			<.001				
MOLLUSCA	160.713	2.352	391.692	0.096		<.001	0.07	61.764	0.028
<i>Mytilus edulis</i> (>5mm)		0.013			0.002			0.002	
<i>Mytilus edulis</i> (5 - 30mm)		1.029	0.018					0.023	
<i>Mytilus edulis</i> (>30mm)	158.825		391.674					60.368	
<i>Cotonopsis lafresnayi</i> (= <i>Costoanachis translirata</i>)									0.019
ANNELIDA	0.347	0.086	0.215	0.224	0.066	0.075	0.118	0.167	0.059
NEMERTEA			<.001	<.001		0.001	0.002	<.001	<.001
PLATYHELMINTHES				0.001					
Total									

Note:

1. Biomass for identified species is included within the phylum total biomass

Sample ID	T3-S1R1	T3-S1R2	T3-S1R3	T3-S2R1	T3-S2R2	T3-S2R3	T3-S3R1	T3-S3R2	T3-S3R3
Biomass (g)									
CNIDARIA									
ARTHROPODA	0.001	<.001	1.304	0.003	0.015	0.006	0.079	0.086	10.356
CHORDATA									
ECHINODERMATA	0.001		<.001	0.001		<.001			
MOLLUSCA	0.091	0.011	0.343	0.095	28.985	0.032	0.304	198.775	93.756
<i>Mytilus edulis</i> (>5mm)		0.011	0.002	0.001	<.001	<.001	0.016		0.003
<i>Mytilus edulis</i> (5 - 30mm)	0.055		0.045		1.221		0.112		6.869
<i>Mytilus edulis</i> (>30mm)					27.761			198.775	83.774
<i>Cotonopsis lafresnayi</i> (= <i>Costoanachis translirata</i>)									
ANNELIDA	0.243	0.065	0.228	0.058	0.181	0.133	0.054	0.035	0.081
NEMERTEA		0.001	<0.001			0.001			
PLATYHELMINTHES									
Total									
<u>Note:</u>									
1. Biomass for identified species is included within the phylum total biomass									

Sample ID	T5-S1R1	T5-S1R2	T5-S1R3	T5-S2R1	T5-S2R2	T5-S2R3	T5-S3R1	T5-S3R2	T5-S3R3
Biomass (g)									
CNIDARIA		0.002	0.018						
ARTHROPODA	0.002	0.018	<.001	0.002	0.002	0.001	<.001	0.001	0.128
CHORDATA									
ECHINODERMATA		<0.001					0.001	<.001	<.001
MOLLUSCA	0.036	0.035	0.431	0.05		0.039	0.009	0.521	0.606
<i>Mytilus edulis</i> (>5mm)	0.002	0.005		<.001			0.008		0.028
<i>Mytilus edulis</i> (5 - 30mm)						0.014			
<i>Mytilus edulis</i> (>30mm)									
<i>Cotonopsis lafresnayi</i> (= <i>Costoanachis translirata</i>)									
ANNELIDA	0.064	0.123	0.156	0.073	0.072	0.165	0.122	0.183	0.106
NEMERTEA	<.001		0.002	0.001	<.001				0.001
PLATYHELMINTHES									
Total									
<u>Note:</u>									
1. Biomass for identified species is included within the phylum total biomass									

Appendix J – Field Survey Records of Epifaunal Data Collection

J.1 Year 2 Video Transects

Video Transects of Epifauna on Southern Leg: Year 2				
Transect	Date	Turbine	Leg Location	Diver Ascent/Descent
Video 1	08/06/2018	1	Leeward	Descent
			Current	Ascent
Video 2	08/06/2018	3	Leeward	Descent
			Current	Ascent
Video 3	08/06/2018	5	Leeward	Descent
			Current	Ascent

J.2 Year 2 Scrape Samples

Scrape Samples of Epifauna on Southern Leg: Year 2				
Sample	Date	Turbine	Leg Location	Depth (m) / Location
1	16/08/2018	1	Leeward	Intertidal
2	16/08/2018	1	Leeward	Below water
3	16/08/2018	1	Leeward	3 m
4	16/08/2018	1	Leeward	8 m
5	16/08/2018	1	Leeward	13 m
6	16/08/2018	1	Leeward	18 m
7	16/08/2018	1	Leeward	23 m
8	16/08/2018	1	Leeward	28 m
9	16/08/2018	1	Leeward	Leg Base
10	16/08/2018	1	Leeward	Grate Base

J.3 Year 3 Video Transects

Video Transects of Epifauna on Southern Leg: Year 3				
Transect	Date	Turbine	Leg Location	Diver Ascent/Descent
Video 1	19/08/2019	1	Current	Descent
			Leeward	Ascent
Video 2	19/08/2019	3	Current	Descent
			Leeward	Ascent
Video 3	19/08/2019	5	Current	Descent
			Leeward	Ascent

J.4 Year 3 Scrape Samples

Scrape Samples of Epifauna on Southern Leg: Year 3					
Sample ID	Date	Turbine	Leg Location	Depth (ft)	Depth (m)
T1-C-4	27/09/2019	1	Current	0.0	0
T1-C-5	27/09/2019	1	Current	3.5	1.1
T1-C-6	27/09/2019	1	Current	7.0	2.1
T1-C-7	27/09/2019	1	Current	10.5	3.2
T1-C-8	27/09/2019	1	Current	14.0	4.3
T1-C-9	27/09/2019	1	Current	17.5	5.3
T1-C-10	27/09/2019	1	Current	21.0	6.4
T1-C-11	27/09/2019	1	Current	24.5	7.5
T1-C-12	27/09/2019	1	Current	28.0	8.5
T1-C-13	27/09/2019	1	Current	31.5	9.6
T1-C-14	27/09/2019	1	Current	35.0	10.7
T1-C-15	27/09/2019	1	Current	38.5	11.7
T1-C-16	27/09/2019	1	Current	42.0	12.8
T1-C-17	27/09/2019	1	Current	45.6	13.9
T1-C-18	27/09/2019	1	Current	49.1	15
T1-C-19	27/09/2019	1	Current	52.7	16.1
T1-C-20	27/09/2019	1	Current	56.3	17.2
T1-C-21	27/09/2019	1	Current	59.9	18.2
T1-C-22	27/09/2019	1	Current	63.4	19.3
T1-C-23	27/09/2019	1	Current	67.0	20.4
T1-C-24	27/09/2019	1	Current	70.6	21.5
T1-C-25	27/09/2019	1	Current	74.1	22.6
T1-C-26	27/09/2019	1	Current	77.7	23.7
T1-C-27	27/09/2019	1	Current	81.3	24.8
T1-C-28	27/09/2019	1	Current	84.9	25.9
T1-C-29	27/09/2019	1	Current	88.4	27.0
T1-C-30	27/09/2019	1	Current	92.0	28.0
T1-L-4	28/09/2019	1	Leeward	0.0	0.0
T1-L-5	28/09/2019	1	Leeward	3.82	1.16
T1-L-6	28/09/2019	1	Leeward	7.64	2.33
T1-L-7	28/09/2019	1	Leeward	11.45	3.49
T1-L-8	28/09/2019	1	Leeward	15.27	4.66
T1-L-9	28/09/2019	1	Leeward	19.09	5.82
T1-L-10	28/09/2019	1	Leeward	22.91	6.98
T1-L-11	28/09/2019	1	Leeward	26.73	8.15
T1-L-12	28/09/2019	1	Leeward	30.55	9.31
T1-L-13	28/09/2019	1	Leeward	34.36	10.47
T1-L-14	28/09/2019	1	Leeward	38.18	11.64

Scrape Samples of Epifauna on Southern Leg: Year 3					
Sample ID	Date	Turbine	Leg Location	Depth (ft)	Depth (m)
T1-L-15	28/09/2019	1	Leeward	42.0	12.8
T1-L-16	28/09/2019	1	Leeward	45.47	13.86
T1-L-17	28/09/2019	1	Leeward	48.93	14.91
T1-L-18	28/09/2019	1	Leeward	52.4	15.97
T1-L-19	28/09/2019	1	Leeward	55.87	17.03
T1-L-20	28/09/2019	1	Leeward	59.33	18.08
T1-L-21	28/09/2019	1	Leeward	62.8	19.14
T1-L-22	28/09/2019	1	Leeward	66.27	20.2
T1-L-23	28/09/2019	1	Leeward	69.73	21.25
T1-L-24	28/09/2019	1	Leeward	73.2	22.31
T1-L-25	28/09/2019	1	Leeward	76.67	23.37
T1-L-26	28/09/2019	1	Leeward	80.13	24.42
T1-L-27	28/09/2019	1	Leeward	83.6	25.48
T1-L-28	28/09/2019	1	Leeward	87.07	26.54
T1-L-29	28/09/2019	1	Leeward	90.53	27.59
T1-L-30	28/09/2019	1	Leeward	94.0	28.65

J.5 Observed Fish Species List

Species List of fish observed by scientific divers during surveys.

Species name	Common name
<i>Centropristis striata</i>	Black sea bass
<i>Morone saxatilis</i>	Atlantic striped bass
<i>Pomatomus saltatrix</i>	Bluefish
<i>Stenotomus chrysops</i>	Scup
<i>Squalus acanthias</i>	Dogfish
<i>Pholis gunnellus</i>	Rock gunnels
<i>Lophius americanus</i>	Monkfish
<i>Tautoglabrus adspersus</i>	Cunner

Appendix K – Epifaunal Sample Analyses Data and Results

K.1 Epifaunal Total Biomass Measurements (g) from Foundation Structure (Year 2)

Biomass data are reported as total biomass (g) per quantitative diver scrape sample at each depth collected in year 2.

Depth (m)	Total Biomass (g)
	2018
Intertidal	673.94
Waterline	550.18
3 m	476.22
8 m	400.43
13 m	471.88
18 m	443.77
23 m	793.26
28 m	481.21
Base	514.58
Grate base	732.44

K.2 Epifaunal Total Biomass Measurements (g) from Foundation Structure (Year 3)

Biomass data are reported as total biomass (g) per quantitative diver scrape sample at each depth collected in year 3.

Depth (m)	Total Biomass (g)	
	2019	
	Current	Leeward
Waterline	563.71	394.34
1 m	193.58	240.06
2 m	211.3	172.28
5 m	455.09	74.18
8 m	126.65	233.56
10 m	159.09	396.36
12 m	307.99	198.05
15 m	114.75	230.17
17 m	233.89	216.94
19 m	253.38	142.44
20 m	327.49	418.02
22 m	167.18	445.54
23 m	270.15	745.65
27 m	289.52	393.08
28 m	120.85	287.01

K.3 Summary Mussel Lengths (mm) on Foundation Structure (Year 2)

Mussel lengths are reported as the average length (mm) of all mussels collected in each quantitative diver scrape sample at each depth in year 2.

Mussel Lengths (mm)										
2018 (Year 2)										
	Intertidal Zone	1 m	3 m	8 m	13 m	18 m	23 m	28 m	Base	Grate
Mean	21.33	38.26	26.08	29.18	47.46	51.72	28.29	73.30	59.17	71.67
Standard Deviation	32.71	54.88	41.12	39.83	53.75	65.33	62.64	78.43	71.39	97.79
Sample Variance	1070.15	3011.50	1690.55	1586.53	2888.76	4268.64	3924.12	6151.98	5096.15	9563.14
Maximum	673.94	550.18	476.22	400.43	471.88	443.77	793.26	481.21	514.58	732.44
Minimum	3.23	3.68	3.50	3.10	8.96	13.04	4.71	32.04	12.12	34.46
Count	455	100	150	111	71	42	173	30	45	48

K.4 Summary Mussel Lengths (mm) on Foundation Structure (Year 3)

Mussel lengths are reported as the average length (mm) of all mussels collected in each quantitative diver scrape sample at each depth in year 3.

Mussel Lengths (mm)															
2019 (Year 3) (Current Facing Surface)															
	Waterline	1 m	2 m	5 m	8 m	10 m	12 m	15 m	17 m	19 m	20 m	22 m	25 m	27 m	28 m
Mean	19.95	21.09	18.44	19.92	22.12	11.45	14.78	16.86	29.74	42.38	22.16	75.85	72.77	48.18	20.35
Standard Deviation	15.34	14.64	14.02	14.60	17.50	12.24	20.20	24.06	33.24	35.35	31.69	7.52	17.03	30.79	21.63
Sample Variance	235.29	214.40	196.68	213.12	306.40	149.89	407.92	578.70	1105.17	1249.36	1004.22	56.61	289.87	948.05	467.93
Maximum	58.90	57.67	72.49	83.55	72.65	88.85	85.75	78.85	85.68	89.16	93.84	83.08	91.08	86.08	69.42
Minimum	2.03	4.78	4.89	2.13	5.07	2.85	3.51	3.25	3.55	2.29	3.55	61.34	28.35	8.27	2.08
Count	256	110	121	240	35	121	100	30	22	19	45	6	11	17	29

Mussel Lengths (mm)															
2019 (Year 3) (Leeward Surface)															
	Waterline	1 m	2 m	5 m	8 m	10 m	12 m	15 m	17 m	19 m	20 m	22 m	25 m	27 m	28 m
Mean	16.42	27.87	15.27	10.92	19.74	14.03	18.12	43.54	10.70	47.41	46.84	79.44	70.71	51.90	36.82
Standard Deviation	11.78	13.52	17.06	9.06	17.52	14.67	19.53	30.10	18.07	29.61	34.26	13.49	16.50	32.28	32.98
Sample Variance	138.68	182.66	291.01	82.05	307.13	215.18	381.30	905.76	326.59	876.77	1174.00	181.90	272.32	1042.10	1087.96
Maximum	54.23	61.24	68.86	57.68	78.86	86.87	75.78	90.43	88.83	83.05	92.82	97.22	98.86	85.88	79.26
Minimum	2.00	5.83	3.00	3.11	4.54	4.03	4.14	8.27	2.00	4.38	3.41	46.63	6.48	5.25	2.17
Count	331	89	88	155	91	259	74	20	104	13	27	15	28	21	21

K.5 Epifaunal Video Analysis Results (Year 2)

Data are collected from selected stills images of diver video taken in year 2 and show epifaunal coverage on a 1 - 10 scale representing 10% increments.

Turbine	Current / Leeward Surface	Time image taken	Image ID	Mytilus sp.	Hydroidea			Anthozoa		Didendum vexillum	Balanus sp.	Rhodophyta	Chlorophyta
					1	2	Small	Anemone	Coral				
1	Leeward	0:51	1	8	2								
1	Leeward	1:16	2	1	9								
1	Leeward	1:48	3	1		9							
1	Leeward	2:20	4	3		7							
1	Leeward	2:44	5	9		1							
1	Leeward	2:51	6	10									
1	Leeward	2:53	7	10									
1	Leeward	4:02	8	2					1	7			
1	Leeward	4:06	9	1					1	8			
1	Leeward	4:19	10	1			1		3	5			
1	Leeward	4:22	11	1		4	1	1	2	1			
1	Leeward	4:24	12			3		1	3	3			
1	Leeward	4:30	13	4		3			2	1			
1	Leeward	4:43	14	5		2	2	1					
1	Current	5:12	15	9				1					
1	Current	5:23	16	10									
1	Current	5:26	17	7	1	2							
1	Current	5:40	18	8				2					
1	Current	5:50	19	10									
1	Current	5:57	20	8				2					
1	Current	6:16	21	10									
1	Current	6:26	22	9		1							
1	Current	6:44	23	10									
1	Current	7:02	24	10									
1	Current	7:22	25	9				1					
1	Current	7:24	26	10									
1	Current	7:38	27	9		1							
1	Current	7:52	28	8		2							
1	Current	8:22	29	8	2								
1	Current	8:47	30	7	1	2							
1	Current	9:03	31	7	1	2							
1	Current	9:27	32	3	7								
1	Current	9:35	33	8	2								
1	Current	10:02	34	1	9								
1	Current	10:17	35	6	4								

Turbine	Current / Leeward Surface	Time image taken	Image ID	Mytilus sp.	Hydroidea			Anthozoa		<i>Didendum vexillum</i>	<i>Balanus</i> sp.	Rhodophyta	Chlorophyta
					1	2	Small	Anemone	Coral				
1	Current	10:59	36	5	2	2						1	
1	Current	11:01	37	6	1		1					2	
1	Current	11:05	38	6	1							2	1
1	Current	11:14	39	8	2								
1	Current	11:15	40	7	2							1	
1	Current	11:34	41	8	1							1	
1	Current	12:06	42	9								1	
1	Current	12:12	43	7	1							2	
1	Current	12:17	44	3	7								
1	Current	12:36	45	7	2							1	
1	Current	12:57	46	9	1								
1	Current	12:59	47	8								2	
1	Current	13:32	48	10									
1	Current	13:35	49	8								1	1
1	Current	14:21	50	10									

K.6 Epifaunal Video Analysis Results (Year 3)

Data are collected from selected stills images of diver video taken in year 3 and show epifaunal coverage on a 1 - 10 scale representing 10% increments.

Turbine	Current / Leeward Surface	Time image taken	Image ID	Mytilus sp.	Hydroidea			Anthozoa		Didendum vexillum	Balanus sp.	Rhodophyta	Chlorophyta
					1	2	Small	Anemone	Coral				
1	Current	0:50	1	5	2				1			3	
1	Current	1:05	2	1	3							5	1
1	Current	1:10	3	4	1							5	
1	Current	1:15	4	6	2							2	
1	Current	1:20	5	3	7								
1	Current	1:25	6	5	4							1	
1	Current	1:30	7	5	3	2							
1	Current	1:35	8	9		1							
1	Current	1:40	9	8						2			
1	Current	1:45	10	8	1			1					
1	Current	1:50	11	7	2			1					
1	Current	1:55	12	9						1			
1	Current	2:40	13	2	1	3				4			
1	Current	2:45	14	9		1							
1	Current	2:55	15	8						2			
1	Current	3:00	16	9				1					
1	Current	3:05	17	10									
1	Current	3:11	18	6	1			3					
1	Current	3:14	19	3	4			3					
1	Current	3:20	20	6	1			3					
1	Current	3:25	21	6				2					
1	Current	3:30	22	5				4		1			
1	Current	3:35	23	3				7					
1	Current	3:40	24	5	1			4					
1	Current	3:50	25	6				2		2			
1	Current	3:59	26	5				2		2	1		
1	Current	4:05	27	5				5					
1	Current	4:15	28	7				2		1			
1	Current	4:25	29	7				3					
1	Current	4:30	30	6				2		1			
1	Current	4:40	31	9				1					
1	Current	4:55	32	6	1			2		1			
1	Current	5:05	33	5				1		1	3		
1	Current	5:10	34	7				3					
1	Current	5:15	35	8				1			1		

Turbine	Current / Leeward Surface	Time image taken	Image ID	Mytilus sp.	Hydroidea			Anthozoa		Didendum vexillum	Balanus sp.	Rhodophyta	Chlorophyta
					1	2	Small	Anemone	Coral				
1	Current	5:25	36	5				4		1			
1	Current	5:30	37	8				2					
1	Current	5:35	38	5				3		1	1		
1	Current	5:40	39	6				3					
1	Current	5:45	40	9				1					
1	Current	5:50	41	10									
1	Current	6:00	42	10									
1	Current	6:05	43	9				1					
1	Current	6:20	44	9	1								
1	Current	6:30	45	9	1								
1	Current	6:35	46	10									
1	Current	6:41	47	9							1		
1	Current	6:43	48	6	1			1			2		
1	Current	6:55	49	5						3	2		
1	Current	7:00	50	8						2			
1	Leeward	9:00	1	3						4	2		
1	Leeward	9:20	2	10									
1	Leeward	9:25	3	8				1		1			
1	Leeward	9:35	4	7				3					
1	Leeward	9:40	5	9				1					
1	Leeward	9:45	6	6	1			1		2			
1	Leeward	10:00	7	6				4					
1	Leeward	10:05	8	8				2					
1	Leeward	10:10	9	10									
1	Leeward	10:20	10	8				2					
1	Leeward	10:25	11	8						2			
1	Leeward	10:30	12	8				2					
1	Leeward	10:45	13	8						2			
1	Leeward	10:55	14	10									
1	Leeward	11:20	15	8				1		1			
1	Leeward	11:35	16	6				2		2			
1	Leeward	11:50	17	7				3					
1	Leeward	11:55	18	6				2		1	1		
1	Leeward	12:00	19	3				7					
1	Leeward	12:05	20	2				6		2			
1	Leeward	12:15	21	9				1					
1	Leeward	12:20	22	5				4		1			
1	Leeward	12:30	23	2				3		5			
1	Leeward	12:45	24	8				1		1			

Turbine	Current / Leeward Surface	Time image taken	Image ID	Mytilus sp.	Hydroidea			Anthozoa		Didendum vexillum	Balanus sp.	Rhodophyta	Chlorophyta
					1	2	Small	Anemone	Coral				
1	Leeward	12:50	25	5				2		3			
1	Leeward	12:55	26	4				4		2			
1	Leeward	13:00	27	6				4					
1	Leeward	13:05	28	6				2		2			
1	Leeward	13:10	29	2				2		6			
1	Leeward	13:15	30	4	1			3		2			
1	Leeward	13:35	31	7	1					2			
1	Leeward	13:40	32	4	1			3		1			
1	Leeward	13:45	33	4				4		2			
1	Leeward	13:50	34	9				1					
1	Leeward	14:10	35	9							1		
1	Leeward	14:15	36	8							2		
1	Leeward	14:25	37	7				2			1		
1	Leeward	14:45	38	8				1			1		
1	Leeward	14:51	39		8			2			1		
1	Leeward	15:05	40		9			1					
1	Leeward	15:10	41	1	4	1		1		1	2		
1	Leeward	15:20	42	4	1	4		1					
1	Leeward	15:25	43	6	3						1		
1	Leeward	15:30	44		7	3							
1	Leeward	15:40	45	6	2	1					1		
1	Leeward	15:50	46		1						9		
1	Leeward	15:55	47	4	1	2					3		
1	Leeward	16:05	48								10		
1	Leeward	16:10	49	4							6		
1	Leeward	16:15	50	7							3		
3	Current	0:08	1	1	2						7		
3	Current	0:18	2	1	3						6		
3	Current	0:23	3	1	2						7		
3	Current	0:28	4	1	1						8		
3	Current	0:40	5	2	2						6		
3	Current	1:05	6	7	3								
3	Current	1:10	7	3		7							
3	Current	1:15	8	2	2	4					2		
3	Current	1:20	9	3		4				3			
3	Current	1:25	10	2		8							
3	Current	1:50	11	2	3	2				3			
3	Current	2:35	12	8				1		1			
3	Current	2:40	13	10									

Turbine	Current / Leeward Surface	Time image taken	Image ID	Mytilus sp.	Hydroidea			Anthozoa		Didendum vexillum	Balanus sp.	Rhodophyta	Chlorophyta
					1	2	Small	Anemone	Coral				
3	Current	2:45	14	10									
3	Current	2:55	15	10									
3	Current	3:00	16	10									
3	Current	3:05	17	9						1			
3	Current	3:11	18	7						1	2		
3	Current	3:14	19	9				1					
3	Current	3:20	20	7				1		2			
3	Current	3:25	21	10									
3	Current	3:30	22	5						5			
3	Current	3:35	23	9				1					
3	Current	3:40	24	10									
3	Current	3:50	25	8				1		1			
3	Current	3:59	26	5				1		2	2		
3	Current	4:05	27	6				2		1	1		
3	Current	4:15	28	8						1	1		
3	Current	4:30	29	9				1					
3	Current	4:35	30	10									
3	Current	4:40	31	9				1					
3	Current	4:55	32	10									
3	Current	5:05	33	8						2			
3	Current	5:10	34	10									
3	Current	5:15	35	8				2					
3	Current	5:25	36	10									
3	Current	5:30	37	10									
3	Current	5:35	38	8				2					
3	Current	5:40	39	9						1			
3	Current	5:45	40	10									
3	Current	6:00	41	10									
3	Current	6:11	42	9				1					
3	Current	6:15	43	9				1					
3	Current	6:20	44	7				3					
3	Current	6:25	45	10									
3	Current	6:30	46	10									
3	Current	6:34	47	7							3		
3	Current	6:36	48	10									
3	Current	6:33	49	8				1			1		
3	Current	7:28	50	8				2					
3	Leeward	9:00	1	10									
3	Leeward	9:20	2	8	1			1					

Turbine	Current / Leeward Surface	Time image taken	Image ID	Mytilus sp.	Hydroidea			Anthozoa		Didendum vexillum	Balanus sp.	Rhodophyta	Chlorophyta
					1	2	Small	Anemone	Coral				
3	Leeward	9:25	3	10									
3	Leeward	9:35	4	10									
3	Leeward	9:45	5	10									
3	Leeward	9:50	6	10									
3	Leeward	10:00	7	10									
3	Leeward	10:05	8	9						1			
3	Leeward	10:10	9	8						1	1		
3	Leeward	10:20	10	9	1								
3	Leeward	10:25	11	8	1			1					
3	Leeward	10:30	12	10									
3	Leeward	10:45	13	9							1		
3	Leeward	10:55	14	9				1					
3	Leeward	11:20	15	9							1		
3	Leeward	11:35	16	9				1					
3	Leeward	11:50	17	4				2		4			
3	Leeward	11:55	18	8				2					
3	Leeward	12:00	19	7						3			
3	Leeward	12:05	20	10									
3	Leeward	12:15	21	10									
3	Leeward	12:20	22	9	1								
3	Leeward	12:30	23	6	2					2			
3	Leeward	12:45	24	8	1			1					
3	Leeward	12:50	25	7						3			
3	Leeward	12:55	26	7						3			
3	Leeward	13:00	27	3						7			
3	Leeward	13:05	28	4				2		3	1		
3	Leeward	13:10	29	7						2	1		
3	Leeward	13:16	30	9						1			
3	Leeward	13:35	31	9						1			
3	Leeward	13:40	32	7				3					
3	Leeward	13:45	33	9						1			
3	Leeward	13:50	34	8	1					1			
3	Leeward	14:10	35	4		1				5			
3	Leeward	14:15	36	2	2	4				2			
3	Leeward	14:25	37	1		8				1			
3	Leeward	14:45	38	1	2	7							
3	Leeward	14:50	39	5		5							
3	Leeward	15:05	40	3		7							
3	Leeward	15:15	41	3								7	

Turbine	Current / Leeward Surface	Time image taken	Image ID	Mytilus sp.	Hydroidea			Anthozoa		Didendum vexillum	Balanus sp.	Rhodophyta	Chlorophyta
					1	2	Small	Anemone	Coral				
3	Leeward	15:25	42	2	1					3	3	1	
3	Leeward	15:35	43						1	9	1		
3	Leeward	15:50	44		8				2	2			
3	Leeward	15:55	45		10								
3	Leeward	15:59	46		7					3			
3	Leeward	16:05	47		10								
3	Leeward	16:07	48		10								
3	Leeward	16:10	49		10								
3	Leeward	16:20	50		6				1			4	
5	Current	0:15	1	3								7	
5	Current	0:25	2	8								2	
5	Current	0:40	3	10									
5	Current	0:50	4	10									
5	Current	0:55	5	8						1		1	
5	Current	1:10	6	2						3		5	
5	Current	1:20	7									10	
5	Current	1:30	8	2						1	2	5	
5	Current	1:40	9	3	3							4	
5	Current	2:15	10	2		5				3			
5	Current	2:20	11	3		3				2		2	
5	Current	2:35	12	6						4			
5	Current	2:40	13	10									
5	Current	2:45	14	9	1								
5	Current	2:55	15	5	2	1				2			
5	Current	3:00	16	10									
5	Current	3:05	17	9						1			
5	Current	3:11	18	9						1			
5	Current	3:14	19	10									
5	Current	3:20	20	10									
5	Current	3:25	21	10									
5	Current	3:30	22	10									
5	Current	3:35	23	10									
5	Current	3:40	24	10									
5	Current	3:50	25	9				1					
5	Current	3:59	26	10									
5	Current	4:05	27	10									
5	Current	4:15	28	10									
5	Current	4:25	29	9						1			
5	Current	4:30	30	10									

Turbine	Current / Leeward Surface	Time image taken	Image ID	Mytilus sp.	Hydroidea			Anthozoa		Didendum vexillum	Balanus sp.	Rhodophyta	Chlorophyta
					1	2	Small	Anemone	Coral				
5	Current	4:40	31	10									
5	Current	4:55	32	10									
5	Current	5:05	33	9				1					
5	Current	5:10	34	10									
5	Current	5:15	35	9				1					
5	Current	5:25	36	10									
5	Current	5:30	37	10									
5	Current	5:35	38	10									
5	Current	5:40	39	10									
5	Current	5:45	40	10									
5	Current	5:50	41	10									
5	Current	6:00	42	10									
5	Current	6:05	43								9		
5	Current	6:10	44								8		
5	Current	6:20	45	10									
5	Current	6:25	46	1	1			3			5		
5	Current	6:32	47	9				1					
5	Current	6:36	48	10									
5	Current	6:40	49	10									
5	Current	7:00	50	9									
5	Leeward	9:25	1	10									
5	Leeward	10:13	2	10									
5	Leeward	10:21	3	10									
5	Leeward	10:25	4	10									
5	Leeward	10:35	5	9						1			
5	Leeward	10:50	6	10									
5	Leeward	11:00	7	9						1			
5	Leeward	11:10	8	10									
5	Leeward	11:15	9	10									
5	Leeward	11:20	10	10									
5	Leeward	11:25	11	10									
5	Leeward	11:35	12	10									
5	Leeward	11:43	13	8						2			
5	Leeward	11:50	14	8						2			
5	Leeward	11:55	15	10									
5	Leeward	12:00	16	7				1		2			
5	Leeward	12:08	17	10									
5	Leeward	12:13	18	8				1		1			
5	Leeward	12:20	19	10									

Turbine	Current / Leeward Surface	Time image taken	Image ID	Mytilus sp.	Hydroidea			Anthozoa		Didendum vexillum	Balanus sp.	Rhodophyta	Chlorophyta
					1	2	Small	Anemone	Coral				
5	Leeward	12:27	20	10									
5	Leeward	12:33	21	9						1			
5	Leeward	12:38	22	10									
5	Leeward	12:42	23	10									
5	Leeward	12:50	24	8						2			
5	Leeward	12:55	25	8				2					
5	Leeward	12:59	26	10									
5	Leeward	13:05	27	10									
5	Leeward	13:09	28	10									
5	Leeward	12:13	29	10									
5	Leeward	13:16	30	10									
5	Leeward	13:25	31	7				1		2			
5	Leeward	13:35	32	10									
5	Leeward	13:42	33	8	2								
5	Leeward	13:47	34	10									
5	Leeward	13:58	35	10									
5	Leeward	14:05	36	10									
5	Leeward	14:10	37	10									
5	Leeward	14:21	38	7	1					2			
5	Leeward	14:31	39	7				1		2			
5	Leeward	14:41	40	8						2			
5	Leeward	14:53	41	9						1			
5	Leeward	14:59	42	5	1			1		3			
5	Leeward	15:43	43	5	1					4			
5	Leeward	15:57	44	7						3			
5	Leeward	16:13	45	5						5			
5	Leeward	16:20	46	6						2	1	1	
5	Leeward	16:24	47	6						1		3	
5	Leeward	16:33	48	5	1							4	
5	Leeward	16:42	49	6		2				2			
5	Leeward	17:36	50	10									

Appendix L – Epifaunal Example Sample Images and Specimens Identified from Video Footage

L.1 Photo-Log of Biota Samples Collected at Different Depths in Year 2



Figure L-1-1. Sample from 3 m depth.



Figure L-1-2. Sample from 8 m depth.



Figure L-1-3. Sample from 13 m depth.



Figure L-1-4. Sample from 18 m depth.



Figure L-1-5. Sample from 23 m depth.



Figure L-1-6 Sample from base of grate at 18 m depth.



Figure L-1-7. Sample from base of leg at 31 m depth.



Figure L-1-8. Intertidal sample.

L.2 Specimens identified from the Scraping Samples in Year 2, images from video transects



Figure L-2-1. Blue Mussel *M. edulis*.

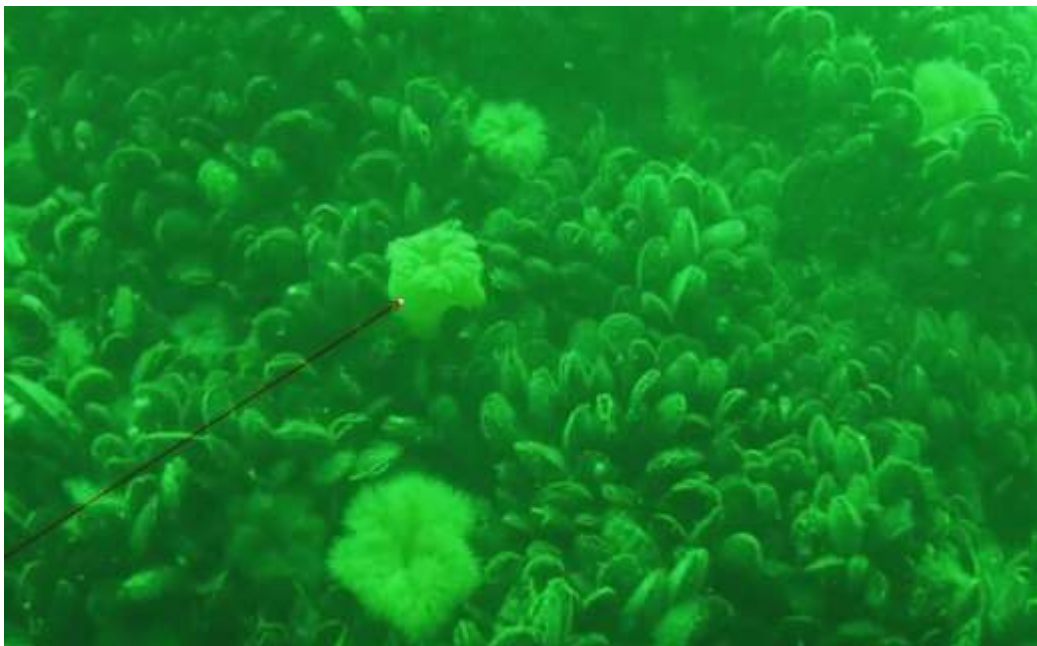


Figure L-2-2. Anemone Anthozoa *Metridium senile* on *M. edulis*.



Figure L-2-3. Anemone Anthozoa *Metridium senile* open on *M. edulis*.

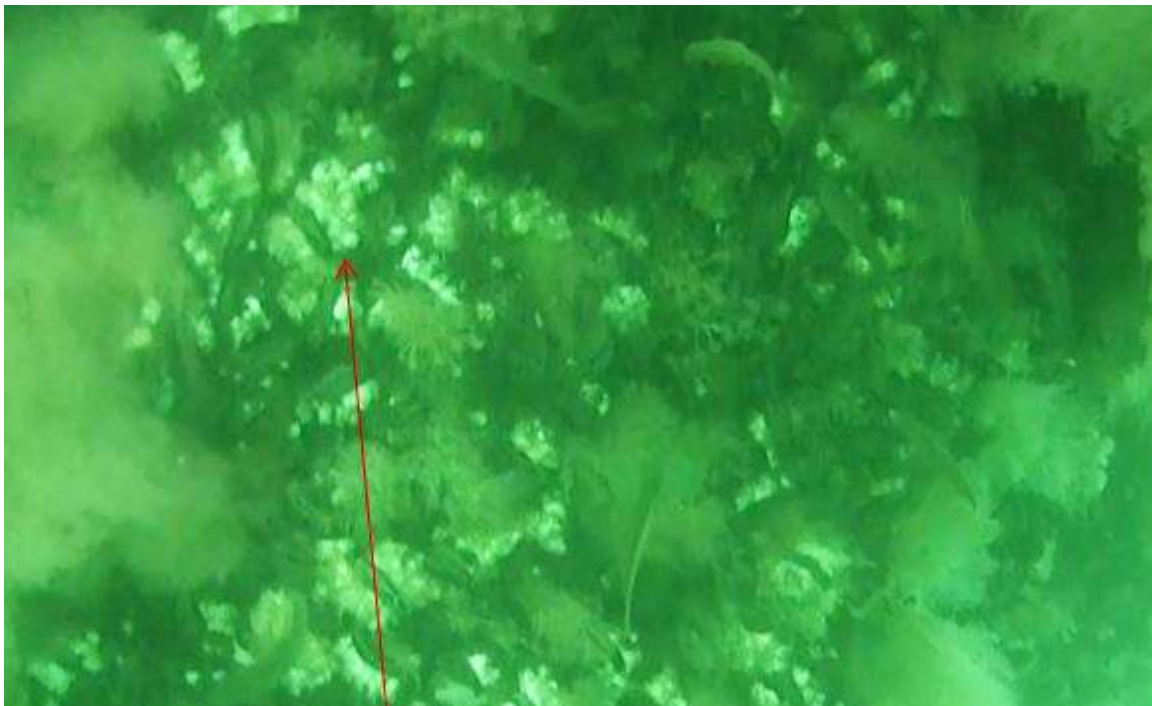


Figure L-2-4. Barnacles *Balanus* sp.



Figure L-2-5. Brown Algae *Scytosiphon lomentaria* on *M. edulis*.



Figure L-2-6. Hydroid *Obelia geniculata* on *M. edulis*.



Figure L-2-7. Hydroid Tubularia on *M. edulis*.



Figure L-2-8. Hydroids on *M. edulis*.



Figure L-2-9. Porifera *Haliclona loosanoffi* with Barnacles.



Figure L-2-10. Porifera *Microciona prolifera* with Barnacles.



Figure L-2-11. Red Algae *Spyridia filamentosa* on *M. edulis*.



Figure L-2-12. Sea star *Asterias forbesi*.

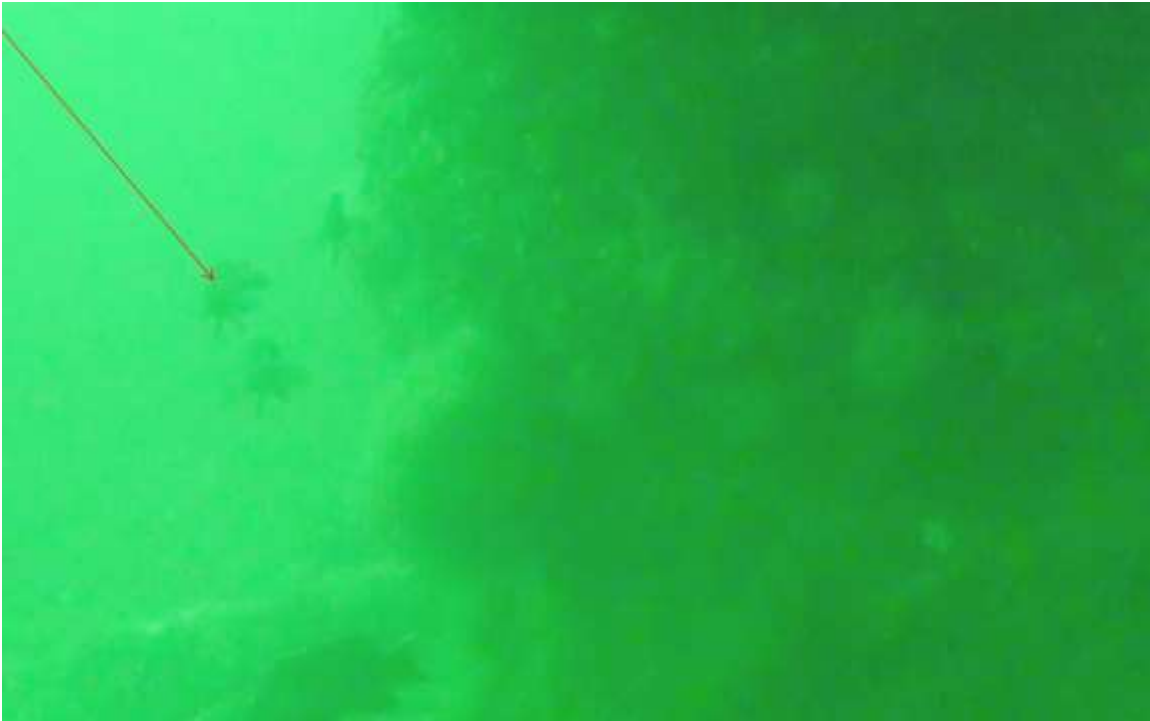


Figure L-2-13. Black sea bass *Centropristis striata*.



Figure L-2-14. Black sea bass *Centropristis striata*.



Figure L-2-15. Cunner fish *Tautoglabrus adspersus*.

L.3 Example Images from Year 3 Video Transects of the Southern Leg



Figure L-3-1. Intertidal zone of the BIWF jacket foundation showing barnacle (*Balanus* sp.), mussel (*Mytilus edulis*) and green algae.



Figure L-3-2. Red algae and mussels (*Mytilus edulis*).



Figure L-3-3. Dense small mussels with some large specimens (*Mytilus edulis*), red algae, and sea star (*Asteria forbesi*).



Figure L-3-4. Large mussels (*Mytilus edulis*), with epiphytes and a large anemone (*Metridium senile*).



Figure L-3-5. Large mussels (*Mytilus edulis*), with red algae, dense hydroids and anemones (*Metridium senile*).



Figure L-3-6. A mat of the invasive capret sea squirt (*Didemnum vexillum*) growing directly on the foundation structure (top) and growing on live mussels (bottom).



Figure L-3-7. Predators such as crabs (*Cancer* sp.) and sea stars (*Asteria forbesi*) were found on the leg of the BWIF foundation, shown here on top of large mussels (*M. edulis*) with epiphytes.



Figure L-3-8. Many black sea bass (*Centropristis striata*) estimated to be in the hundreds, were found at the base of the jacket foundation structure and were observed midwater (top inset).



Figure L-3-9. Blue fish (*Pomatomus saltatrix*) observed schooling around the jacket structure.



Figure L-3-10. A resident monkfish (*Lophius americanus*) rests on the dense mussel aggregations around the structures.

Appendix M – Summary of Epifaunal Data used in Estimates of Drag Force

Sample ID	Water depth (ft)	Water depth (m)	Epifaunal thickness (cm), t_b	Submerged mass (grams), m_b	Submerged density (gr/cm ³), ρ_b	Leg Transect Position
30	92.0	28.0	3.00	44.00	0.15	Outside
29	88.4	27.0	5.00	108.50	0.22	Outside
28	84.9	25.9	8.00	96.50	0.12	Outside
27	81.3	24.8	8.50	91.00	0.11	Outside
26	77.7	23.7	5.00	82.50	0.17	Outside
25	74.1	22.6	8.00	64.00	0.08	Outside
24	70.6	21.5	6.00	112.50	0.19	Outside
23	67.0	20.4	6.00	101.00	0.17	Outside
22	63.4	19.3	9.00	74.00	0.08	Outside
21	59.9	18.2	8.00	92.50	0.12	Outside
20	56.3	17.2	7.00	172.00	0.25	Outside
19	52.7	16.1	6.00	77.50	0.13	Outside
18	49.1	15.0	7.00	102.00	0.15	Outside
17	45.6	13.9	7.00	55.50	0.08	Outside
16	42.0	12.8	8.00	69.00	0.09	Outside
15	38.5	11.7	5.00	100.00	0.20	Outside
14	35.0	10.7	6.00	34.00	0.06	Outside
13	31.5	9.6	3.00	53.00	0.18	Outside
12	28.0	8.5	4.00	62.50	0.16	Outside
11	24.5	7.5	4.00	27.00	0.07	Outside
10	21.0	6.4	5.00	71.50	0.14	Outside
9	17.5	5.3	6.00	125.00	0.21	Outside
8	14.0	4.3	2.00	6.50	0.03	Outside
7	10.5	3.2	3.00	53.00	0.18	Outside
6	7.0	2.1	6.00	36.00	0.06	Outside
5	3.5	1.1	5.00	49.00	0.10	Outside
4	0.0	0.0	10.00	129.50	0.13	Outside
Mean			5.94	77.39	0.13	
Min			2.00	6.50	0.03	
Max			10.00	172.00	0.25	

Sample ID	Water depth (ft)	Water depth (m)	Epifouling thickness (cm), t_b	Submerged mass (grams), m_b	Submerged density (gr/cm ³), ρ_b	Leg Transect Position
30.00	94.00	28.65	4.00	86.50	0.22	Inside
29.00	90.53	27.59	7.00	133.00	0.19	Inside
28.00	87.07	26.54	4.00	64.50	0.16	Inside
27.00	83.60	25.48	3.00	210.00	0.70	Inside
26.00	80.13	24.42	9.00	136.00	0.15	Inside
25.00	76.67	23.37	10.00	145.00	0.15	Inside
24.00	73.20	22.31	7.00	51.50	0.07	Inside
23.00	69.73	21.25	15.00	119.50	0.08	Inside
22.00	66.27	20.20	10.00	156.00	0.16	Inside
21.00	62.80	19.14	9.00	57.00	0.06	Inside
20.00	59.33	18.08	3.00	47.50	0.16	Inside
19.00	55.87	17.03	10.00	63.50	0.06	Inside
18.00	52.40	15.97	8.00	81.50	0.10	Inside
17.00	48.93	14.91	5.00	73.00	0.15	Inside
16.00	45.47	13.86	6.00	48.50	0.08	Inside
15.00	42.00	12.80	8.00	57.00	0.07	Inside
14.00	38.18	11.64	3.00	49.50	0.17	Inside
13.00	34.36	10.47	2.00	104.00	0.52	Inside
12.00	30.55	9.31	3.00	40.50	0.14	Inside
11.00	26.73	8.15	7.00	65.50	0.09	Inside
10.00	22.91	6.98	5.00	41.50	0.08	Inside
9.00	19.09	5.82	3.00	24.00	0.08	Inside
8.00	15.27	4.66	3.00	41.00	0.14	Inside
7.00	11.45	3.49	5.00	32.50	0.07	Inside
6.00	7.64	2.33	6.00	49.50	0.08	Inside
5.00	3.82	1.16	6.00	71.50	0.12	Inside
4.00	0.00	0.00	10.00	65.00	0.07	Inside
Mean			6.33	78.31	0.15	
Min			2.00	24.00	0.06	
Max			15.00	210.00	0.70	



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The mission of the Environmental Studies Program is to provide the information needed to predict, assess, and manage impacts from offshore energy and marine mineral exploration, development, and production activities on human, marine, and coastal environments. The proposal, selection, research, review, collaboration, production, and dissemination of each of BOEM's Environmental Studies follows the DOI Code of Scientific and Scholarly Conduct, in support of a culture of scientific and professional integrity, as set out in the DOI Departmental Manual (305 DM 3).